University of Tennessee, Knoxville
Trace: Tennessee Research and Creative Exchange

Doctoral Dissertations   Graduate School

12-2008

Mindfulness: Mediating the Relationship between Attachment Security and Parenting Style

Ian P. Haag
University of Tennessee - Knoxville

To the Graduate Council:

I am submitting herewith a dissertation written by Ian P. Haag entitled "Mindfulness: Mediating the Relationship between Attachment Security and Parenting Style." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

<div align="right">Robert G. Wahler, Major Professor</div>

We have read this dissertation and recommend its acceptance:

Jack M. Barlow, Jenny Macfie, Vey M. Nordquist

<div align="right">Accepted for the Council:
Carolyn R. Hodges</div>

<div align="right">Vice Provost and Dean of the Graduate School</div>

(Original signatures are on file with official student records.)

To the Graduate Council:

I am submitting herewith a dissertation written by Ian P. Haag entitled "Mindfulness: Mediating the Relationship between Attachment Security and Parenting Style?" I have examined the final paper copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Robert G. Wahler, Major Professor

We have read this dissertation and recommend its acceptance:

Jack M. Barlow

Jenny Macfie

Vey M. Nordquist

Acceptance for the Council:

Carolyn R. Hodges
Vice Provost and Dean of the
Graduate School

MINDFULNESS: MEDIATING THE RELATIONSHIP BETWEEN

ATTACHMENT SECURITY AND PARENTING STYLE?

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Ian P. Haag

December 2008

DEDICATION

This dissertation is dedicated to my sister, who I know will be a wonderful mother.

ACKNOWLEDGEMENTS

ABSTRACT

The current project examines the relationships between attachment security, parenting style, and mindfulness. The level of mindfulness an individual demonstrates is argued to mediate the relationship between an individual's attachment security and her respective parenting style. The population is composed of 35 mothers who were drawn from a university clinic setting. Measures utilized included: the Relationship Questionnaire (RQ), which measures adult attachment security, the Mindful Attention Awareness Scale (MAAS), which measures the level of mindfulness an individual demonstrates, and the Parental Authority Questionnaire – Revised (PAQ-R), which measures parenting style attitudes. Results demonstrated no significant relationships between attachment security and parenting style. In examining the relationship between attachment security and mindfulness, individuals designated securely attached demonstrated higher levels of mindfulness than their insecure counterparts. With respect to mindfulness and its relationship with parenting style, mindfulness was positively correlated with an authoritative parenting style but did not demonstrate a significant relationship with either an authoritarian or a permissive parenting style. A test of mediation was conducted to examine the relationship between attachment security and parenting style, with mindfulness as the mediator. The model evidenced a significant reduction in the relationship between attachment security and an authoritative parenting style, suggesting that mindfulness successfully mediated this relationship. Mediation was not found in the case of the permissive and authoritarian styles. Discussions of the methodological approach, the implications of these findings, and future directions for research are presented.

TABLE OF CONTENTS

Chapter   Page

Chapter I

INTRODUCTION

The immense number of topics that have been investigated within the socialization domain in general, and the parenting arena in particular, attests to the central nature of this subject in human life (for a recent review of the parenting literature, see Maccoby, 2007). One could argue that the extensiveness of the parenting literature is a reflection of the import of this area of study. As every individual is affected by this process, whether through the presence or absence of one's parents, it is of little surprise that the interest in this subject is so widespread.

The purpose of this project is to develop a more thorough understanding of what factors contribute to the defining characteristics of a parent, those being the values and beliefs parents hold about the parenting process, and the attitudes and behaviors through which parents express these beliefs. As such, the person of interest in this project is the adult parent. Although some discussion will be given to the developmental processes that lead to parenthood, the area of import in this project is the adult parent as she functions in the here and now.

This paper will focus on two particular paths forged within parenting research, the first of which is parenting style. As will be discussed, the concept of parenting style has been variously understood, conceptualized, and investigated through a number of different theoretical models. Over the years, researchers have disagreed on how to operationalize parenting style and at times have presented discrepant views on the

particular means through which parenting style impacts child development. This disparity, rather than reducing parenting style to a disjointed, meaningless label, has helped to guide researchers toward a more unified understanding of the concept. It has provided a rich body of research capable of offering a more fully considered and specified conceptualization of the complexities of parenting style. Current understandings of parenting style and the implications of such a conceptualization will be addressed in full in the next section.

The second area of parenting research that will be addressed in this paper is Bowlby's (1969) attachment theory. Although this review will focus a great deal on the development of attachment security in early infancy and childhood, the intended goal is to understand attachment-security as it exists in adulthood. Like parenting style, a significant amount of research has been undertaken to investigate the specifics of attachment theory. Though this work began as a model for understanding the complexities of the development of the infant-parent bond, it has grown into a theory that encapsulates much more. It now provides an explanatory model for the cognitive, behavioral, and emotional components of the relational process, extending from infancy through adulthood. The development of attachment theory, as well as a more thorough examination of the concept of attachment security, will be presented later in the paper.

The initial purpose of this project is to examine the nature of the relationship that exists between adult attachment security and parenting style. Specifically, the question of whether particular classifications of attachment security in adulthood are linked to particular parenting styles will be addressed. Will certain aspects of a parent's model of relating, as defined by attachment classification, necessarily predispose the parent toward

a particular style of parenting? As will be discussed, there is a considerable amount of theoretical evidence to suggest this possibility, but few empirical examples.

The remainder of this paper will be dedicated to the expanded exploration of this relationship. A case will be made that, although evidence does support the notion of a direct relationship between attachment security and parenting style, it is likely an oversimplified model that is unable to account for the complexity of the parent-child relationship and the parenting process. As a means of accounting for a portion of this complexity, the concept of mindfulness will be discussed as a possible mediator of the relationship. As such, the literature pertaining to the theoretical development and empirical findings related to mindfulness will be reviewed as well. It will be proposed that the link between attachment security and parenting style is mediated by the level of mindfulness a parent demonstrates. The justification for this proposition, as well as a more thorough discussion of its particulars, will be addressed following the review of these three topics: parenting style, attachment security, and mindfulness.

Chapter II

PARENTING STYLE

Early Conceptualizations: Diana Baumrind

Diana Baumrind's (1971, 1989) work on parenting represents a significant contribution to the investigations into the parenting process within the social sciences. At a time when there was little theoretical convergence with regard to what aspects of parenting were of import, and how they should be measured (Darling & Steinberg, 1993), Baumrind emphasized a focus on the *belief systems* that seemed to underlie parent's behaviors. In particular, she was concerned with the amount of control that parents demonstrated in their actions toward their child.

Originally interested in the "familial antecedents" (Baumrind, 1989, p. 349) of child and adolescent competence, Baumrind began a series of longitudinal studies of parent-child dyads (Baumrind, 1967, 1971, 1989). Utilizing multi-method approaches, Baumrind collected extensive data on both parenting attributes and child competence. In her investigations, three distinct parenting patterns emerged; she labeled these parenting styles *authoritarian*, *permissive*, and *authoritative*.

Baumrind (1989) noted that the *authoritarian* parent attempts to "shape, control, and evaluate the behavior and attitudes of the child in accordance with a set standard of conduct – usually an absolute standard" (p. 353). She believes that the position she holds as a parent indicates that she is better suited for distinguishing what are the appropriate values, beliefs, and behaviors for her child. Authoritarian parents "value obedience as a

virtue" and limit "verbal give and take, believing that children should accept parents' word for what is right" (1989, p. 353). Parents of this sort often manage disagreements over these issues with disciplinary actions that restrict and limit the child's autonomy and consequently assert their position as the dominant figure in the parent-child dyad. Authoritarian parents are not only highly controlling, but also express minimal responsiveness and warmth toward their child (Baumrind, 1971, 1989). Early findings (Baumrind, 1967, 1971) indicated that preschoolers of authoritarian parents were "discontented, withdrawn, and distrustful" (Baumrind, 1989, p.351). Additionally, when compared to the children of authoritative parents, boys were more oppositional and girls were more dependent and passive.

Permissive parents approached the socialization process with an exceedingly different mindset, believing that, if left to his or her own devices, a child will naturally develop the appropriate and necessary attributes that will be beneficial in society (Baumrind, 1978). Thus, these parents "attempt to behave in a nonpunitive, accepting, and affirmative manner toward their children's impulses, desires, and actions" (Baumrind, 1989, p. 354). Permissive parents regard themselves as resources for their child. They are affectionate, supportive, and seek to foster a sense of freedom in the child. These parents are generally warm and responsive and demonstrate very little control over their child's behaviors (Baumrind, 1978, 1989). Early findings (Baumrind, 1967, 1971) indicated that preschoolers of permissive parents were the "least self-reliant, explorative, and self-controlled" (Baumrind, 1989, p. 352) of the three groups of children. When compared to children of authoritative parents, girls were less confident and both sexes were "less achievement oriented" (p. 354).

The *authoritative* parent is guided by a rational mentality that is issue-focused and seeks to maintain a balance between parental authority and the child's personal autonomy (Baumrind, 1978, 1989). This mindset is based on the parent's recognition of the importance of both the child's expression of his or her idiosyncratic qualities as well as the need for growth according to socially guided ideals. This attitude is expressed through the parent's open and direct communication about parenting issues with the child. It is the promotion of a balance between autonomy and duty and enjoyment and responsibility. Although authoritative parents "willingly confront their children in order to obtain conformity," they also are "affectively responsive in the sense of being loving, supportive, and committed" (Baumrind, 1989, p. 354) to their child. This style represents a balance between warmth and control. Early findings showed the preschool children of authoritative parents to be the "most self reliant, self-controlled, explorative, and content" (Baumrind, 1989, p. 351) of the three groups (Baumrind, 1967, 1971). As a whole, these children were the most competent, with boys demonstrating more affiliative behaviors and girls more purposive and achievement oriented behaviors, when compared to their same sex groups of authoritarian and permissive parents.

In summarizing much of her early findings, Baumrind (1989) stated, "Authoritative child rearing was the only pattern that consistently produced optimally competent children and failed to produce incompetent children in the preschool years and in middle childhood, and this was true for both boys and girls" (p. 364). Darling and Steinberg (1993) noted that Baumrind seemed to emphasize one particular factor that accounted for the advantages that were seen in the children of authoritative parents. She felt that the authoritative parent's presentation of reasoning behind her rules allowed her

child to better understand what was, and was not, appropriate behavior. This allowed for the child to internalize the rules and values of the parent and helped to make the child more compliant to parental demands in the future.

While this intuitively seemed a likely hypothesis, Lewis (1981) disagreed and offered a different viewpoint for the active mechanism in this process. She argued that the open and *bi-directional* dialogue that characterizes authoritative parenting was the essential component that led to higher competence in the children of these parents. She suggested that the ability to take part in the parenting process, and to learn to speak for oneself, opened the door for greater reciprocity and healthier functioning between parent and child.

In essence, Baumrind had highlighted two components that seemed to differentiate parenting styles: control and warmth. Authoritative parents demonstrated a balance between high levels of both control and warmth. Authoritarian parents exhibited high levels of control, but low levels of warmth. And permissive parents, though displaying high levels of warmth, exerted minimal control. Darling and Steinberg (1993) noted that one of the limitations of Baumrind's work was that her studies were primarily restricted to well-functioning, middle-class families. Although her three-part categorical system had produced important findings and spawned a great deal of research, the results could not be expanded to other demographic groups. Maccoby and Martin (1983) addressed this restriction and expanded upon Baumrind's original theory.

Demandingness and Responsiveness: Maccoby and Martin

While Baumrind had essentially reduced her parenting style categories to a combination of the somewhat restrictive categories of warmth and control, Maccoby and Martin (1983) expanded and redefined her classification system. Utilizing the concepts of demandingness and responsiveness, they devised a two-dimensional system that could account for varying levels among these constructs. They described demandingness as various forms of control, including "discipline, maturity demands, restrictiveness, and encouragement of independent contracts" (Maccoby & Martin, 1983, p. 39). Responsiveness was loosely defined as reinforcement and was used in the ethological sense, unlike warmth, which is more contingent on the child's behavior. In this respect, responsiveness reflects differential reinforcement of child behaviors and parental sensitivity (Maccoby & Martin, 1983). Using these two orthogonal dimensions, Maccoby and Martin devised a two-dimensional parenting style classification system. Varying interactions between high or low demandingness and high or low responsiveness resulted in four potential parenting styles. Although Maccoby and Martin retained some of Baumrind's terminology, the styles in their typology are only rough estimates of her categories. The four classifications generated by their system were authoritative-reciprocal, authoritarian-autocratic, indulgent-permissive, and indifferent-uninvolved.

The *authoritative-reciprocal* parent is both demanding and responsive while the *authoritarian-autocratic* is demanding but unresponsive. These two typologies roughly equate to Baumrind's authoritative and authoritarian classifications, respectively. Where Baumrind generated one style that reflected the undemanding parent, i.e. permissive (Baumrind, 1971), Maccoby and Martin (1983) proposed two categories: indulgent-

permissive, and indifferent-uninvolved. The *indulgent-permissive* parent, which is similar to Baumrind's permissive classification, is responsive to her child's needs, but places few demands on him or her. The *indifferent-uninvolved* parent also demands little from her child, but unlike the indulgent parent, is unresponsive to her child's needs. Similar to Baumrind's findings, the authoritative-reciprocal parenting style tended to generate the most socially competent children, the authoritarian-autocratic parent less so, and the indifferent-uninvolved parent the least competent children (Maccoby & Martin, 1983).

Since taking up this newer terminology, Baumrind further differentiated between various types of demandingness and responsiveness and noted that these various forms affect children in very different ways. Healthier forms of parental demandingness that tend to benefit a child's development include confrontation and monitoring (Baumrind, 1989). Confrontation is open and direct opposition of a child's behavior and generally is facilitated through direct discussions. She noted that this type of interaction can benefit the child through enhanced self-assertiveness and improved communication skills. Parental monitoring is important because it helps to provide a predictable, well organized, and safer environment for the child (Baumrind, 1989). These healthier forms of demandingness are contrasted with coerciveness and intrusive-directness. Baumrind (1989) noted that parents are coercive when they "use power without reason" (p. 361). This can undermine the ability of the child to learn from the situation, but instead, often communicates only the disproportionate power that the parent holds (Baumrind, 1989). Intrusive-directness refers to extent to which parent's restrict their child's ability to take

part in age-appropriate activities. This form of demandingness was found to detrimentally affect social-confidence (Baumrind, 1989).

Responsiveness also carries a multitude of meanings and includes affective warmth, cognitive responsiveness, and low involvement or neglect. Affective warmth refers to the amount of love and emotional expressiveness a parent demonstrates toward her child and has been shown to be directly related to social responsibility (Baumrind, 1989). Cognitive responsiveness refers to the parent's encouragement of self-expression and intellectual stimulation. Baumrind found that it was correlated with social assertiveness and social competence. These healthier forms of responsiveness are contrasted with low involvement, or "emotional detachment, withdrawal, or indifference" (Baumrind, 1989, p. 369). This form of responsiveness was shown to have serious negative consequences, including cognitive and personality deficits across childhood and adolescence (1989).

Lewis (1981) noted the importance of reciprocity in the authoritative parent's repertoire, as did Maccoby and Martin (1983) in their formulation of the authoritative-reciprocal parent. Baumrind (1989) emphasized this form of reciprocity as the hallmark of healthy parent-child functioning. In particular, she noted that reciprocity represents a balance between *agency* (the drive for individuality) and *communion* (the drive to engage and work with others). An overemphasis on either of the attributes would lead to an imbalance between the recognition of one's rights as an individual and one's obligations as a member of a family (Baumrind, 1989). Effectively balancing these two attributes is what distinguishes authoritative parents and competent children from their less healthy counterparts. Baumrind (1989) noted:

The optimal parent child relationship at any stage of development can be recognized by its balance between parent's acknowledgement of the child's immaturity – shown by providing structure, control, and regimen (demandingness) – and the parents' acknowledgement of the child's emergence as a confident, competent person – shown by providing stimulation, warmth, and respect for individuality (responsiveness). (p. 370-371)

By and large, many of the early findings regarding parenting styles seemed to support this assertion for the benefits of authoritative parenting for children and adolescents (Baumrind, 1967, 1971, 1989, 1991; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Maccoby & Martin, 1983; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). Even so, some contradictory findings began to emerge along the way. In particular, variable findings in relation to ethnicity began to show that while this hypothesis generally held true for middle-class Caucasian parents and their children, it did not for African-American, Asian, and Hispanic parents and their children. Findings demonstrated that authoritarian parenting was beneficially related to school competence and self-assertiveness and that authoritative parenting did not produce the same benefits as seen in the samples of Caucasian children (Baumrind, 1972; Dornbusch, Ritter, Leiderman, & Roberts, 1987; Steinberg, Lamborn, Dornbusch, & Darling, 1992; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). These discrepant findings raised the question as to why particular parenting styles were related to variable outcomes when considered across varying ethnicities.

Reconceptualizing Parenting Style: Darling and Steinberg

Darling and Steinberg (1993) addressed this very question with a cogent argument that emphasized an important facet of the parenting process that had heretofore been largely ignored: context. They noted that the impact and meaning of particular parenting behaviors could only be understood when the context in which the behaviors originated was taken into account. Darling and Steinberg argued that a reinterpretation of the meaning of "parenting style" that considered the contextual nature of the construct would help to unify prior discrepant research and theory. They noted that the term "parenting style" had been applied to the beliefs and values a parent holds about the socialization process, the attitudes she expresses toward her child, and to the behaviors that make up this process. The authors suggested that these three components (beliefs, attitudes, and behaviors) though related, are not the same and actually represent separate aspects of the parenting process (1993). As such, parenting style cannot refer to all three constructs, but should be simplified and recognized as a single variable that stands alone.

Darling and Steinberg (1993) stated that to understand this distinction one must begin with the parent's overarching beliefs about parenting. These beliefs represent the general goals, values, and ideals that a parent holds with respect to the socialization process. Spera noted that, "Parental goals and aspirations are best described as internal representations of desired states or outcomes that parents hold for their children" (2005, p. 131). These beliefs (or internal representations) set the stage for two forms of expression: behaviors and attitudes. The behavioral expression of the parent's goals and values is evidenced directly in "parenting practices" (Darling & Steinberg, 1993, p. 492). These practices represent the everyday parenting behaviors that are enacted in an attempt to

move the child toward the parent's socialization goals. Darling and Steinberg (1993) noted, for instance, that, if a parent has a goal of academic achievement, she may help her child with his homework, or meet with his teacher as a means toward helping him meet this goal.

"Parenting style," which also develops naturally out of the goals and values the parent holds, refers to the attitudes the parent demonstrates to their child through this process. These attitudes are expressed in two ways. First, because children infer emotional attitudes from parenting behaviors, parenting style is apparent as an inherent part of goal-directed parenting practices. Second, parenting style is expressed through emotional communication that is non-goal directed; this includes such things as "tone of voice, body language, inattention, (or) bursts of temper" (Darling & Steinberg, 1993, p. 493)

There are two important differences between parenting practices and parenting style. First, while practices are much more domain specific, parenting style functions independently of content and thus, is expressed across a wide range of parent-child interactions (Darling & Steinberg, 1993). "For example, one authoritative parent might have a policy stating that homework must be finished before the child engages in any other activity, whereas another might require outdoor exercise before homework is tackled" (Darling & Steinberg, 1993, p. 493). Although the actual practices are different, the goals and emotional attitudes that are expressed can be quite similar. Second, because parenting style is not domain specific, the attitudes the parent expresses are conveyed toward the child, not the child's behavior (Darling & Steinberg, 1993). Thus,

the authoritative mother communicates her authority to the child through her comfort in asserting her influence; she communicates her recognition of the child's separateness and capacity to understand through her explanations; and she communicates her respect for the child through her reluctance to assert her will superfluously. (p. 493)

While parenting practices exert a direct effect on the development of the child's behaviors and personality characteristics, this is not so with parenting style. Parenting style affects the child's development indirectly through two mechanisms that moderate the effectiveness of the parenting practice (Darling & Steinberg, 1993). The first means through which parenting style indirectly affects the child's development is by facilitating, or impeding, the effectiveness of a parenting practice (1993). For instance, research has shown that dialogue about drug use between a parent and her child can help to lower the risk that the child may eventually use drugs (Kerr & Stattin, 2000). In this case, a parenting style that incorporates an attitude that fosters open communication would, as opposed to one that does not hold this value, prove to be more effective in an intervention aimed at preventing drug use. Authoritative parenting, which is characterized by an openness to reciprocal dialogue and a responsiveness to the child's cues, should prove to be effective in this situation. A discussion of this sort would allow the child to ask questions, offer his own viewpoints, and develop a more comprehensive understanding of the dangers of drug use; ultimately this process should help to reduce the likelihood of drug use (Baumrind, 1991). Conversely, directing an authoritarian parent into a discussion about drugs with her child would probably not prove to be as effective. This parent's tendency is to limit open discussion and to minimize the relevancy of her child's

14

point of view. It would likely deter the child from inquiring about information that was personally relevant, and therefore useful. In this case, a discussion about drug use would be hindered by the parent's style and would prove to be ineffective.

A second proposition is that parenting style creates a particular emotional climate that affects the child's willingness to be socialized by his parents and consequently, moderates the effectiveness of their parenting practices (Darling & Steinberg, 1993). This is a two-step process: (1) The parent fosters an emotional environment which affects the willingness of the child to meet particular socialization demands. (2) The child's willingness to be socialized then moderates the effectiveness of the parenting practices with respect to the child's development. For instance, an authoritative parent whose style promotes a generally warm, open, and supportive setting may find that she has fostered an environment of reciprocity in the home. When she directs her child to complete some task, for instance cleaning his room, she may find him more open to following her orders. This is contrasted with an authoritarian parent who is at times harsh and unsupportive and has fostered an environment where the child expects little in return for the following of parental decrees. When the child is asked to clean his room, the parent may be met with more resistance than would the warm, supportive parent.

Summary

In this brief overview of the development of the "parenting style" construct, one can observe the gradual transformation of how researchers have conceptualized and classified issues associated with parenting style. Much of the early work focused primarily on parenting behaviors with little attempt at distinguishing the practices from

15

attitudes or values related to parenting. Only more recently has the importance of attitudes as distinct from parenting behaviors been recognized and included in theoretical models. Darling and Steinberg's (1993) model represents a logical extension of the early research and provides a distinct understanding of parenting style. The authors define it as "a constellation of attitudes toward the child that are communicated to the child and that, taken together, create a climate in which the parent's behaviors are expressed" (p. 488).

Of particular interest in the present discussion is the origin of parenting styles. As Darling and Steinberg (1993) noted, these styles develop out of the goals and values that the parent brings to the parenting process. They state,

> These socialization goals include both the child's acquisition of specific
> skills and behaviors (e.g., appropriate manners, social skills, and academic
> ability) and the child's development of more global qualities (e.g.,
> curiosity, critical thinking, independence, spirituality, and the capacity to
> experience joy or love). (p. 492)

What a parent values, and why she values such things, are complicated but important questions that need to be addressed. When considering the values that a parent hopes to instill in her child, one could argue that they should in some ways mirror the parent's own model of how one should function in the world. This likely represents a complicated combination of both conscious and unconscious beliefs, emotions, and fantasies that have developed across the lifetime. The following section will address this issue with the hope of developing a better understanding of the parent's mental world. It is with this purpose that the topics of attachment security and the internal working model will now be discussed.

Chapter III

ATTACHMENT SECURITY AND THE INTERNAL WORKING MODEL

The field of attachment theory represents a broad spectrum of research, beginning with the earliest moments of life and extending throughout adulthood (Bowlby, 1969). As was noted above, the primary focus of this project is to develop a specific understanding of the factors that contribute to the defining characteristics of the parent. As such, the purpose of this section is to examine attachment security as it pertains to adult functioning. This section begins with a review of the early conceptualizations of attachment theory as they relate to the initial development and functioning of the internal working model, an area of research that originally focused primarily on infant behavior and mental processes. This is followed by a discussion of the conceptualizations of attachment security and the internal working model as they have been investigated and understood in adults.

The literature on attachment security in adulthood presents two directions toward investigating the internal working model: the developmental perspective and the social-psychological perspective. The methodologies of these two perspectives are important in that the findings and implications of this work offer slightly different viewpoints on attachment security and the internal working model. The implications of these differences will be discussed later as it pertains to the methodology of the current project.

Infant Theory and Research

Early Conceptualizations: John Bowlby

Prior to John Bowlby's (1969) conceptualization of "attachment," there had been little structured, scientific study of the nature of the bond that exists between a parent and child. Psychoanalytic theorists had offered a great deal of insight and understanding into this topic, but their methods were being cited more and more as lacking the scientific exactitude that was being demanded of laboratory research. Studies were often retrospective and concerned with pathogenicity, wherein an adult patient's relational problems were traced back in time to an earlier age where a specific cause could be deciphered. While there was undoubtedly significant merit to this work, it was difficult to test its validity. Coming from a psychoanalytic background himself, Bowlby sought to utilize the theoretical underpinnings of this body of work in conjunction with the latest findings that ethology and control theory had to offer. In doing so, he hoped to formulate a theory of attachment that would prove to be more comprehensive and informative.

Bowlby's (1969) decision to make the methodological shift to a prospective approach probably represents one of the most significant changes he made in differentiating his work from the earlier attempts at understanding the parent-child bond. At that time, very little developmental research was actually utilizing methods that involved direct observation of infants or children. Bowlby suggested that one could gain important insight into developmental issues by observing a child's behavior and extrapolating forward. The basis for this proposition grew largely from his beliefs about the psychological development of a child. Bowlby proposed that, for an infant, there

existed a direct congruence between his behaviors and his psychological processes. This was true, he suggested, because there is no distinction or separation between the external behavior and the inner mental processes in infants – they are one and the same (1969). Only with age and experience does the child begin to transform external behavior into a separate thing we call inner mental states. One could therefore study the objective behaviors of an infant and confidently translate them into the language of the mental processes.

Bowlby (1969) made an additional break from much of the early theoretical positions when he sought to formulate elements of his theory on tenets from the field of ethology. Utilizing the findings of various research projects performed with primates (Harlow & Zimmerman, 1958), he espoused the importance of the need for security and touch as a precedent for the development of an attachment bond. Bowlby noted that human attachment should not be considered a secondary drive linked to the need for nourishment or reproduction, but rather, a primary need in and of itself (1969). He suggested that the primary role of attachment was to maintain proximity to an attachment figure and therefore gain protection and security from various forms of danger. Attachment behavior was therefore considered to be any behavior that was aimed toward the maintenance of this proximity.

Drawing on concepts derived from control theory, Bowlby (1969) proposed that human attachment systems developed in much the same way as other subhuman primates. Briefly stated, Bowlby utilized the notions of set-goals and feedback systems to provide the underlying mechanics of the attachment behavior. He suggested that initially, the infant orients her social responses, such as crying or smiling, toward others without any

significant discrimination. This orientation becomes more specified over time as the infant begins to distinguish between familiar and foreign others. Bowlby noted that familiar individuals tend to stimulate an approach response in the infant, while strangers elicit withdrawal or aggressive behaviors. Further focusing of these discriminating behaviors results in heightened recognition of, and preference for, a particular attachment figure. Bowlby (1969) stated that at this point, the infant has developed a "primitive cognitive map (p. 267)" for set behaviors in terms of her environment. He considers the map "primitive" because of the limited level of development; the infant has yet to acquire the capacity to generate insight into the attachment figure's intentions. She is presently only aware of her own aims and desires.

At around one year of age, through repeated and prolonged experience with the attachment figure, the child is able to develop a set of beliefs about the potential behaviors of the parent across situations (Bowlby, 1969). This ability to utilize insight into the parent's mental state allows for a reciprocal relationship to develop between the attachment figure and the child. Bowlby noted that a relationship built upon consistent interactions between parent and child that are sensitive and responsive to the child's needs are likely to be marked by pleasing interchanges. He defined this as a *secure attachment* (Bowlby, 1969). Conversely, when these terms are not met, the child experiences the interchanges as unpleasant and intolerable. This he classified as an *insecure attachment* (Bowlby, 1969). Bowlby noted that these labels refer to the fact that the child has developed an "internal working model." This is a model that is comprised of two components: a model of the self and a model of the other (Bowlby, 1969). The model of the self corresponds to the expectancies the child holds of his own abilities and

potentialities in relation to others. The model of the other refers to what the child can expect from the environment, or his caretaker. Bowlby's use of the term "working" was intentional and important in that it indicated the continuous updating and revising that was necessary if such a model was going to be useful (1969). The internal working model is the child's framework for understanding "how the physical world may be expected to behave, how his mother and other significant persons may be expected to behave, how he himself may be expected to behave, and how each interacts with all the others" (Bowlby, 1969, p. 354). As such, it functions as a guide for obtaining security within attachment relationships.

The Contributions of Mary Ainsworth

Although Bowlby's contributions to the field of attachment were significant, they would not have been nearly so without the work of Mary Ainsworth. Her direct observations of mother-infant dyads in the home (Ainsworth, 1967, cited in Bretherton, 1992) and in the laboratory (Ainsworth, 1970, 1978) were dually important: (1) as an outgrowth of Bowlby's early thoughts on attachment, and (2) as a contributor to the sharpening of this theory as it continued to develop. Her home observations of Ugandan mother-infant dyads were the first to examine individual differences in parent-child pairs. Ainsworth's (1967, cited in Bretherton, 1992) findings suggested three categories of infant attachment status: (1) secure infants, who seemed generally content and exhibited comfort in exploring a room in the presence of their mother, (2) insecurely attached infants, who cried a great deal and rarely explored their surroundings, and (3) infants who appeared wholly unattached. Arguably more important than her classifications, was the

21

finding that maternal sensitivity correlated with infant attachment security; sensitive mothers were more likely to have securely attached infants, while less sensitive mothers tended to raise infants that were less secure in their own attachments.

These observations were replicated and extended in a later study that employed the more controlled environment of the laboratory (Ainsworth, 1970). Ainsworth developed the now widely utilized Strange Situation Procedure (1967), which assesses infant behavioral responses to two separations and two reunions between mother and infant over eight interpersonal scenarios. The researchers found there to be three consistent patterns of attachment. *Secure infants* exhibited comfort in exploring an unfamiliar room while in the presence of their mother, showed signs of distress upon her exit, and actively reengaged her upon her return, seeming to regain comfort from her presence (Ainsworth, 1970). *Insecure-avoidant infants* also exhibited comfort in exploring the unfamiliar room while in the presence of their mother, but showed little or no outward concern over her departure. These infants continued to remain outwardly unresponsive upon the return of their mother, appearing to avoid or ignore her (Ainsworth, 1970). *Insecure-resistant infants* appeared distressed throughout the entire procedure, rarely explored, and exhibited an extreme preoccupation with their mother across scenarios. These infants displayed considerable distress upon separation and an ambivalence upon their mother's return, mixing approach and retreat behaviors (Ainsworth, 1970). More recently, it has been recognized that there exists a fourth classification that identifies infants whose behaviors don't seem to fit into any of the above-mentioned categories. Labeled as *disorganized*, these infants demonstrate inconsistent attachment behavior, often appearing dazed and confused and at times

22

displaying a mix of both avoidant and resistant behaviors (Main & Solomon, 1986). It

has been suggested that the inconsistent actions of these infant's parents induce both fear

and comfort in the child; the variability of this process contributes to the disorganized

quality of the infant's attachment behaviors (Main & Hesse, 1990).

  These attachment classifications, arising out of the concurrent work of Bowlby

and Ainsworth, represented the internal working model, the blueprint for the infant's

expectations about relationships. This research, and the understanding that arose from it,

was based on a model that examined nonverbal infant behaviors as the object of

importance. As was noted above, Bowlby proposed that as the child progresses in age, a

distinction develops between external behaviors and inner mental states. He suggested

that, as children get older, a goal-directed partnership develops in which language can be

used to maintain the attachment relationship (Bowlby, 1969). This transformation and its

implications are discussed below in the review of attachment security in adulthood.

<center>**Adult Theory and Research**</center>

The Adult Attachment Interview and Related Findings

  Main, Kaplan, and Cassidy (1985) expanded the notion of what constituted the

internal working model and in particular emphasized the organization of information as it

related to an individual's security. They described the internal working model as a "set

of conscious and/or unconscious rules for the organization of information relevant to

attachment and for obtaining or limiting access to that information, that is, information

regarding attachment-related experiences, feelings, and ideations" (Main, et al., 1985, p.

<center>23</center>

67). The authors note that this is a move from the behavioral to the representational level.

The internal working model is the individual's mental construction of "the self in relation

to attachment" (1985, p. 67). This means that the model not only guides the feelings and

behaviors of the individual, but also affects how information related to attachment is

assessed, if at all. When one discusses attachment classification he is not just considering

the individual's behavior in particular situations, but also to what information she attends,

and how she attends to it. One of the larger ramifications of this reconceptualization was

that language and its organization became just as pertinent to understanding attachment

security as other attachment behaviors.

A direct outgrowth of this new direction in attachment research was the

development of the Adult Attachment Interview (George, Kaplan, & Main, 1985) or AAI.

The AAI is a clinical interview that requires participants to provide a narrative on a

number of issues relating to their interpersonal history in response to a series of questions.

In addition to discussing relationships in general, participants are asked to recall

autobiographical memories that relate to the discussion and to talk about their current

relationship with their parents. Participants also are asked to provide attachment-related

memories from their own childhood, reflect upon these memories, and offer any new

insights into the recalled experiences (1985). These transcripts are then coded, partially

for content but primarily for the manner in which the participant structures her language

and reflects upon her memories. Of particular importance is the coherence of the

narrative. George et al. (1985) suggested that these markers of the narrative would help

to identify the attachment security of the participant. Expanding upon early

conceptualizations of the internal working model (Main et al., 1985), it was proposed that

an individual's attachment-related narrative would reflect the idiosyncratic manner in which she structured the conceptualization of her childhood relationship with her parents. In other words, particular features and qualities of the narrative would offer insight into the individual's internal working model.

George et al. (1985) found four consistent narrative patterns. *Autonomous* (or secure) adults tend to present narratives that are coherent, clear, supported by concordant memories, and of an appropriate length. *Dismissing* (insecure) participants tend to contradict themselves in their narratives and often claim to be unable to recall attachment-related experiences. Adults classified as *preoccupied* (insecure) tend to provide rather confusing and lengthy narratives that reflect a negative affective preoccupation with their parents. Finally, participants classified as *disorganized* or *unresolved* usually have a traumatic experience in their past that they have been unable to resolve and which tends to interfere with their narrative (George et al., 1985). This is usually exhibited in their inability to produce a structured and cohesive discussion of their past experiences. Research has shown that autonomous mothers tend to be more maternally sensitive and provide their child with greater structure, while preoccupied and dismissive mothers measured significantly lower on these variables (Biringen et al., 2000).

One of the major theoretical investigations that subsequently arose from this research (as well as Ainsworth, 1970) considered the relationship between a parent's attachment status (as measured by the AAI) and their infant's attachment classification (as measured by the Strange Situation). This relationship has been addressed by a large number of studies. In a meta-analysis of these projects van IJzendoorn (1995) found the

results to be consistent and strong. For the secure/insecure split, the correlation between parent and child attachment status was $r = .47$, with a large effect size of 1.06. Van IJzedoorn noted that it would take 1,087 studies showing a null effect to reduce this to an insignificant finding. This systematic consistency remained even across the three-way classifications. If a parent was deemed autonomous, it was highly likely that their child would be classified secure. Parents categorized preoccupied before the birth of their child had children who were observed to be insecure-resistant, and parents classified dismissive had children observed to be insecure-avoidant (van IJzendoorn, 1995). This is an astonishing result when one considers the two seemingly dissimilar domains that are being analyzed: verbal discourse about attachment related issues in the case of the AAI, and infant behavioral responses to distress upon the separation from and reunion with a parent in the Strange Situation.

Similar findings were noted in three longitudinal studies that examined the consistency between one individual's attachment security classification as measured by the Strange Situation in infancy and the AAI in adolescence or early adulthood (Hamilton, 1995; Jones, 1996; Watters, Merrick, Albersheim, & Treboux, 1995; cited in Main, 1996). These studies found similar rates of consistency, with a 77% correspondence in the secure/insecure split (Hamilton, 1995), and 78% (Jones, 1996) and 77% (Watters et al., 1995) correspondence rates across the three main attachment classifications. In other words, individuals identified as secure infants through the strange situation were consistently identified as secure through later measurement on the AAI in adolescence and young-adulthood; this consistency was noted for the insecure classifications as well. These studies investigating the relationship between parent-child attachment

classifications, as well as the intra-individual longitudinal correlations of attachment status, provide support for a developmental theory of attachment functioning. Bowlby's (1969) initial suggestion that early external behaviors are transformed into inner mental states is supported by the consistency of the attachment status across measures (infant Strange Situation and AAI).

In the time that has passed since Bowlby (1969) introduced the concept of the internal working model, it has been explored, modified, and refined a great deal. As such, it represents a complicated and multifaceted construct. With the hopes of illuminating the important distinctions relevant to the internal working model, the current understanding of this concept as well as its implications for research will now be addressed.

Revisiting the Concept of the Internal Working Model

In a recent chapter, Mayseless (2006) summarized the current understandings of the various core concepts that underlie the internal working model. First, internal working models are based on lived experiences with important caregivers. As was noted above, in his earliest propositions Bowlby (1969) emphasized the experiential component of the development of the internal working model as central to the attachment system. This was subsequently supported by Ainsworth's (1967, 1970, 1978) work with mother and infant dyads.

Second, the internal working model works to "regulate, interpret, and predict" (Mayseless, 2006, p. 6) the individual's *and* the caregiver's thoughts, feelings, and behaviors in attachment related situations. Although addressed by Bowlby, this idea was

expanded and by Main, Kaplan, and Cassidy's (1985) reformulation of the internal

working model. As was noted above, they highlighted the informational component of

the attachment system and noted that it helps to organize attachment-related information,

systemizing what information is attended to and what is excluded. This in turn further

specifies the possible range of cognitive, affective, and behavioral responses. As such,

the internal working model functions as an interpersonal map that guides an individual in

her interpersonal experiences.

Third, internal working models are adaptive and can be updated and modified

based on new experiences with the caregiver and in other relationships (Mayseless, 2006).

Collins and Read (1994) noted that preexisting expectations based on early relationships

are brought into every new relationship and shape them in characteristic ways. However,

contradicting experiences within these new relationships can in turn modify the prior

expectations and beliefs about relationships. Therefore, although early experiences

provide a framework through which future interpersonal experiences are understood, the

internal working model is adaptable enough to incorporate these newer, more recent

experiences into a revised edition of the model.

Fourth, mental representations of self and others are composed of various memory

systems, including both conscious and unconscious processes (Mayseless, 2006).

Crittenden (1990) utilized the findings related to episodic, procedural, and semantic

memories to suggest that conflicting models could coexist because they are stored in

different areas of memory. For instance, procedural memories, though influential in

guiding behavior, often remain unconscious (1990). Bowlby (1973) suggested that

discrepancies in these memory systems may account for insecure attachments. The

inconsistencies, for example, that may exist between what a child experiences and what he is told by his parent may never be resolved, an experience that leads to an incoherent understanding of both self and other; if this is the case, there is little opportunity for understanding and clarification of attachment experiences. In addition, Collins and Read (1994) suggested that mental representations extend beyond the memory of the specific, concrete past experiences. They also include the appraisals the individual may have made about the experience and the explanations the individual may have made for the behaviors of both self and others. The authors also highlight the affective quality of these memory systems (1994). It is likely that the emotionality characteristic of close relationships would be incorporated as a central element of these memories as well.

Finally, the internal working model reflects a diversity of defensive processes that protect the individual from overwhelming negative affect (Mayseless, 2006). The defensive aspect of the internal working model was partially addressed above in the discussion of Main, Kaplan, and Cassidy's (1985) focus on informational processes. In particular, they noted that the internal working model is in part composed of rules "limiting access" (p. 67) to attachment-related information. Bowlby (1988) described this process as "defensive exclusion" (p. 35) and noted that it reflects an attempt on the part of the individual to prevent the activation of the attachment system, likely due to negative emotional experiences related to this process. Bretherton (2005) noted that defensive exclusion has "the effect of shutting available, but potentially anxiety-provoking, information out of awareness" (p. 18).

The complexity apparent in this analysis of the varying components of the internal working model should not be surprising when one considers the extensive nature of

attachment-related thoughts, feelings, and behaviors. A system that is to account for the myriad of processes involved in human interaction is necessarily complicated by the wide-ranging possibilities that can arise when two individuals come together. Up to this point, for that sake of simplicity, the attachment system has been described along the lines of *one* internal working model. As will be discussed below, this represents a gross simplification of a rather dynamic and complex system.

Shaver, Collins, and Clark (1996) note that research often erroneously describes an individual's internal working model in the singular, when in actuality there are a number of arguments to suggest 'internal working *models*' would be more appropriate. First, it has been shown that individuals maintain a number of models that can function somewhat independently of each other (1996). This is well represented in research showing that infants can demonstrate differing types of attachment security between parents (e.g. secure attachment to mother and insecure attachment to father) (see Fox, Kimmerly, & Schafer, 1991, for a review). Second, as an individual ages it is likely that they develop a complex framework for a number of relationships that extend beyond the child-parent dyad (e.g. student, friend, romantic partner, parent) (Shaver, Collins, & Clark, 1996). And third, it seems that a single model would be unfit for navigating the complexity of these many relationships and would only crudely correspond to the varying relationships in their life (1996).

As such, Shaver, Collins, and Clark (1996) argue that the individual's internal world of attachment representations is likely varied, interconnected, and hierarchically arranged (see also Collins & Read, 1994). Shaver and Mikulincer (2002b) suggest that,

working models can be conceptualized as hierarchically arranged, running, at the bottom, from episodic memories of interactions with particular partners, through representations of kinds of attachment relationships (e.g. child-parent, romantic, close friendship, client-therapist) to generic representations of attachment relationships. (p. 243)

As was noted above, the more general representations higher in the hierarchy would fit a number of situations, but would likely miss out on the specificity required of close, intimate interactions. Representations lower in the hierarchy, though capable of more appropriately and accurately matching particular relationships, would prove to be too specific to generalize to many relationships beyond the specific attachment-relationship from which it developed (Shaver, Collins, & Clark, 1996). As these discussions drew attention to the fact that attachment relationships could extend beyond the parent-child dyad, researchers began to exam attachment processes as they operated in other relationships as well.

Measuring Attachment in Peer and Romantic Relationships

Hazan and Shaver (1987) were interested in how attachment theory could inform adult romantic love. As a means for examining this process in adult romantic relationships they developed a self-report measure that translated the three primary infant attachment classifications (secure, insecure-avoidant, and anxious-ambivalent) into terms that reflected adult romantic relationships.

Hazan and Shaver (1987) found that secure adults, when compared to insecure adults, described their love experiences in more positive terms, were more supportive of

their partner's faults, reported longer duration of relationships, and demonstrated lower divorce rates. Avoidant adults reported fears of intimacy, high emotional volatility and jealousy, and were the least accepting of the three groups. Anxious-ambivalent adults reported obsessive qualities that were characterized by the desire for closeness, emotional volatility, and extreme sexual desire; they differed significantly from the other two groups on each of these attributes (Hazan & Shaver, 1987). In addition, secure adults reported balanced expectations about love relationships, while avoidant adults denied that romantic love really exists. Although both avoidant and anxious-ambivalent adults lacked faith in the fact that they would find "real love," anxious-ambivalent adults reported easily falling in love and often finding themselves doing so (unlike avoidant adults) (Hazan & Shaver, 1987). With regard to self and other perceptions, secure adults described themselves in positive ways and felt that others were generally well-intentioned. Anxious-ambivalent adults reported greater self-doubts and felt that others were not as committed in relationships as were they. Avoidant adults fell in between these two groups in terms of perceptions of self and others (Hazan & Shaver, 1987).

Hazan and Shaver (1987) reported as well that the percentages of secure, anxious-ambivalent, and avoidant adults in their populations closely mirrored those that have been noted in the mother-infant dyad literature (56% secure, 24% avoidant, and 20% anxious-ambivalent). Although tentative in their assertion, the authors suggested that the above noted findings indicated a reliable association between romantic love and the underlying operations of the internal working model as defined in their measure. Additionally, their findings tended to reflect those found in the attachment literature and seemed to support

the assertions that attachment theory had made about the varying effects of the internal working model.

While Hazan and Shaver's (1987) measure was aimed at adult romantic relationships in particular, Bartholomew (1990; Bartholomew & Horowitz, 1991) devised a measure for adult attachment of close relationships in general. She returned to Bowlby's (1973) early proposition about the importance of self and other appraisals for the attachment system and the internal working model:

> Confidence that an attachment figure is, apart from being accessible, likely to be responsive can be seen to turn on at least two variables: (a) whether or not the attachment figure is judged to be the sort of person who in general responds to calls for support and protection; (b) whether or not the self is judged to be the sort of person whom anyone, and the attachment figure in particular, is likely to respond in a helpful way. Logically these variables are independent. In practice they are apt to be confounded. As a result, the model of the attachment figure and the model of the self are likely to develop so as to be complementary and mutually confirming. (p. 204)

From this statement, Bartholomew (1990) posited an interactive two-dimensional system comprised of (1) a model of self and (2) a model of other. She noted that models of self and other could either be positive or negative. A positive view of self suggests one who feels deserving of care and consideration, while a negative view of self reflects one who feels unworthy of affection. A positive view of others indicates that others are seen as

dependable and caring, while a negative view of others implies that others are seen as cold or rejecting (1990).

When these models of self and other are arranged into a two-by-two cell, four attachment styles are proposed: (1) positive self/positive other, (2) negative self/positive other, (3) positive self/negative other, and (4) negative self/negative other (see Figure 1; note: all figures and tables are located in Appendices.). Bartholomew (1990) noted that "Secure" individuals, who have been the beneficiaries of affectionate and responsive parenting, should demonstrate high self-esteem and positive views of others in adulthood; these individuals would fit into the positive self/positive other cell (1).

Individuals who have been raised in inconsistent and uncaring homes, but with parents who proclaim their dedication to their child, would be prone to developing the notion that the lack of love they have experienced is due to their own shortcomings rather than their parents'. In adulthood, these individuals would demonstrate dependent and needy strivings built upon feelings of low self-worth. Bartholomew stated that these individuals correspond to those who are labeled "preoccupied" in adult attachment research, and noted that they would fit into the negative self/positive other cell (2). The two above-mentioned attachment classifications (secure and preoccupied) share the similar attribute of being desirous of relationships, or as Bartholomew describes, low on avoidance. They differ in the fact that secure individuals are more autonomous while preoccupied individuals demonstrate dependent characteristics that prove to be unhealthy.

Whereas most attachment research has described one attachment classification indicative of avoidant cognitive, emotional, and behavioral tendencies, Bartholomew's model allows for two types of avoidant insecurity. She suggests that these internal

working models develop out of a rejecting and distant caretaking experience. One means for managing inadequate care is to distance oneself from the attachment figure and develop an independent and self-sufficient image. By denying dependency needs, one is able to in essence, deactivate the attachment system (Bowlby, 1988). Bartholomew labeled these individuals as "dismissive" in correspondence with the attachment literature and noted that they deny the importance of close relationships, avoid intimacy, and overemphasize the value of independence. These individuals fit into the positive self/negative other cell (3).

Other individuals who experience a rejecting attachment relationship may in addition to deciding that others are unavailable and insensitive, also develop a self-image of being unwanted and undesirable. These individuals are desirous of close relationships but fear their needs will go unmet if relationships are sought out. To avoid the foreseen environmental failure, these individuals avoid entering relationships and are thus unable to modify their internal working model. Bartholomew labeled these individuals "fearful" and noted that they fit into the negative self/negative other cell (4). The two above-mentioned attachment classifications (dismissive and fearful) share the similar attribute of avoiding relationships, and as Bartholomew describes, rank high on avoidance. They differ in the fact that dismissive individuals (like secure) are more autonomous, while Fearful individuals (like preoccupied) demonstrate dependent characteristics that prove to be unhealthy.

Bartholomew and her collaborators' work (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994) supported her propositions about the interaction of self and other models in the structuring of and individual's internal working model for

general relationships (Bartholomew, 1990). These studies utilized multiple methods, including self-report, interview, friend and romantic-partner reports, and trained judge's ratings. Across methods, it was consistently found that measures of self-concept differentiated the attachment styles for the models of self only, while measures of sociability differentiated the attachment styles for models of other only. Only when both models were incorporated was it possible to reliably identify an individual's attachment style. They suggested that these findings supported the notion of the independent effects of these two models and highlighted the problem of differentiating attachment simply as a function of overdependence or avoidance. The findings indicated four distinct attachment styles: secure individuals who measure low on dependence and low on avoidance, preoccupied individuals who measure high on dependence and low on avoidance, dismissive individuals who measure low on dependence and high on avoidance, and fearful individuals who measure high on dependence and high on avoidance.

Before moving on to discuss the relationship between attachment security (or the internal working model) and parenting styles, it is necessary to first address a methodological issue that exists with respect to the varying means through which an individual's internal working model is assessed. As will be discussed below, certain assumptions are made by the varying methodologies that have implications for interpreting the meaning of particular findings. These implications are important in clarifying what can be asserted when a study discusses attachment security and the internal working model.

The Developmental versus Social Psychological Perspective

Belsky (2002) argued that, when considering individual differences in attachment security, there are two theoretical tenets that are at the center of research on attachment theory. The first major point is that attachment security and insecurity are a function of the individual's internal working model; as such, attachment security shapes, and is shaped by, the internal working model (2002). In this sense, the internal working model functions as a cognitive and emotional appraisal system, filtering particular experiences, including some and excluding others, and thereby affecting how the individual experiences the social world. The second major point is that variability in an individual's internal working model is a direct result of lived experiences, is shaped and modified by these experiences, and is particularly affected by the early years of development (1-5 years of age) (2002). In this respect, the study of attachment security implies a developmental aspect to the process.

These two tenets of attachment theory become paramount when considering the applicability of the methods that are utilized in much of the attachment research. In general, much of the adult developmental research has utilized interview type assessment measures that allow for a thorough investigation of an individual's underlying attachment-related attributes (e.g. the AAI). Though providing a great deal of information, these measures are often time-consuming and require an extensive amount of training. Social psychological measures are generally self-reports that require an individual to choose among a list of varying attachment styles and indicate the one that

best fits the individual's perception of their interpersonal style (see above Hazan &

Shaver, 1987; Bartholomew, 1990). Though much easier to administer and score, there is

some question as to the validity of these measures (Belsky, 2002).

In some respects, there seems to be a disagreement among researchers as to

whether this latter self-report method (social psychological) is capable of tapping into all

of an individual's attachment related features (e.g. conscious and unconscious processes).

This is in contrast to developmental measures such as the AAI, which are believed to

more accurately reflect the underlying and unconscious attachment related attributes

(2002). Shaver and Mikulincer (2002a) noted,

> This understandable impression is misleading. 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)

Shaver and Mikulincer (2002a) provided a thorough review of the research from

the self-report literature and attested that these findings in many ways support Bowlby's

assertions about the cognitive and emotion-regulating strategies of the internal working

model. For example, secure individuals can more easily access painful memories without

becoming overwhelmed by them, are more likely to disclose personal thoughts and

feelings to important others, openly approach and resolve conflict, and can acknowledge

and express anger in a productive manner (summarized in Belsky, 2002; see Shaver &

Mikulincer, 2002a for full review). Preoccupied individuals are overly focused on their own distress, are ruminative, tend to react to stress in ways that exacerbate their emotional state, and are susceptible to ever-increasing escalations of negative emotions with minimal ability to manage their affect (Belsky, 2002). Dismissive individuals attempt to avoid unwanted thoughts and emotions through distancing themselves from stressful experiences, demonstrate the least amount of access to negative emotion-laden memories, and are largely unaware of their anger (Belsky, 2002).

Belsky (2002) argued that in many respects these findings make a strong argument for self-report measures and their ability to function as "a powerful 'window' on the IWM (internal working model)" (Belsky, 2002, p. 168). As such, self-report measures can be said to have addressed the first tenet of individual differences in attachment security by providing an inroad to investigating and measuring attributes of an individual's internal working model. Where these measures seem inadequate is in providing information relative to the second tenet of attachment theory, the developmental processes. Belsky suggested that social psychological measures cannot make reference to developmental aspects of attachment security, because there exists no evidence at this time to support this claim (but see Shaver & Mikulincer, 2002a, for a review of similarities with AAI). This does not imply that these self-report measures are ineffective in the investigation of attachment security; rather, the findings developed within this body of research need to be understood from within the context of what they can adequately measure and attest to. Belsky noted, "For social psychologists, then, attachment theory seems to be more a theory of personality and close relationships than a *developmental* theory of personality and close relationships (p. 169)." In this respect

39

self-report measures are less about the past and the developmental antecedents of an individual's attachment security; rather, they better reflect the individual's internal working model as it functions in the here and now.

Summary

As was described above, research has in large part supported Bowlby's (1969) early propositions about the nature of the attachment system. The central thrust of much of this more recent work has been the development and refinement of the concept of the internal working model. At the present time, the internal working model is recognized as a system for organizing cognitions, emotions, and behaviors relevant to an individual's attachment experiences; a system that acts as a conscious and/or unconscious guide to navigate the interpersonal world. It has been suggested that an individual's attachment system is composed of a hierarchical network of multiple working models that reflect both general and specific attachment relationships. The specific nature of these models, reflected in the cognitive and emotional coherence of the individual's experiences, both reflects, and helps to shape, attachment and personality characteristics. Research has addressed these issues at both behavioral levels in infancy and in verbal discourse and self-reports in adolescence and adulthood. Methodological arguments aside, this body of research has proven to be considerably informative with respect to attachment theory. In the following section the importance of these findings will be discussed and it will be argued that there is considerable evidence to suggest a predictable relationship between attachment theory and parenting style.

Chapter IV

ATTACHMENT SECURITY AND PARENTING STYLE

A Direct Connection

Bowlby (1988) has noted, "There is, of course, much clinical evidence that a mother's feeling for and behavior towards her baby are deeply influenced also by her previous experiences, especially those she has had and may still be having with her own parents… (p. 15)." Though clinical evidence points in this direction, there is little research addressing the relationship that may exist between a parent's attachment security and their parenting style. A recent study (Haag, 2005) lends some support to this argument. Utilizing self-report measures for both attachment security (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994) and parenting style (Buri, 1991), Haag found that secure parents were significantly more likely to report an authoritative parenting style while insecure parents were more likely to report a non-authoritative parenting style (χ^2 (1, $N = 13$) = 6.20, $p = .03$). In line with this finding, there are both broad, and specific, theoretical justifications for suggesting that these two relational attributes would be associated.

The "broad" argument refers to the underlying justifications for suggesting an overarching relationship between attachment security and parenting style in general. For instance, contemporary understandings locate each concept at the level of mental representations. In this sense, attachment security and parenting style are not descriptors of behaviors per se, but rather belief systems organized around the perceived viability of

particular interpersonal behaviors. Parenting style reflects the *attitudes* a parent holds about the parenting process. Likewise, the internal working model represents an organized set of conscious and unconscious *beliefs* about the expected security of relationships. Thus, each is noted to function at the conceptual level.

In addition, an individual's internal working models provide the framework in each relationship in her life. As such, the parent-child relationship should be incorporated within one of the individual's models. In support of this, Shaver, Collins, and Clark (1996) noted,

> Central, or core (internal working) models are probably the most elaborated and densely connected to other knowledge structures. For example, given their primacy and extended history, models of parent-child relationships are likely to be central and deeply embedded in the network structure. (pp. 42-43)

Collins and Read (1994) state that goals and values based on satisfying attachment needs are central components of an individual's internal working model. As it is likely that the parenting-process involves some of these similar attachment needs, parenting style, which develops out the parent's socialization goals and values, should be highly related.

The "specific" argument refers to the underlying justifications for suggesting a systematic relationship between attachment security and parenting style. In this case, the argument is made that the attachment and parenting attributes noted as generally healthy or beneficial (i.e. secure attachment and authoritative parenting) would be related, while those indicated as unhealthy or detrimental would be related (i.e. insecure attachment and non-authoritative parenting). The converse of this should hold true as well, meaning

secure adults should not demonstrate a non-authoritative parenting style and insecure adults should not demonstrate an authoritative parenting style.

With respect to findings in the attachment and parenting style literatures, there are particular correspondences that support this "specific" argument. For instance, propensity for dialogue has been noted as a strong indicator for both attachment security and parenting style. As was noted above, much of the work done by Baumrind and others has indicated that reciprocal dialogue is an important component of authoritative parenting and is linked to beneficial effects with respect to child development. Likewise, the attachment literature has also noted the importance of open dialogue in secure parent-child relationships, particularly in the child's formation of a coherent (or secure) internal working model (Bretherton, 2005). In each case, the healthier or more effective parent classification (secure in the attachment literature and authoritative in the parenting style literature) has been linked to more successful child development (Baumrind, 1989; van IJzendoorn, 1995).

Responsiveness has also been indicated as an important component of the parenting process and is related to both parenting style and the parent's attachment security. In a meta-analysis of 10 studies involving 389 dyads, a modest effect size of 0.72 ($r = .34$) was found for the relationship between a parent's internal working model of attachment and her corresponding responsiveness toward her child (van IJzendoorn, 1995). Secure mothers tended to demonstrate greater levels of responsiveness toward their children, which is also associated with a greater likelihood of a secure attachment style in the child. As was mentioned above, responsiveness is an important component of

parenting style as well. Baumrind (1989) links responsiveness with attachment security and noted,

> Prior proclivities of the caretaker are crucial determinants of the quality of attachment. These prior proclivities include warmth, sensitivity, and willingness to become involved in caregiving activities – all of which are aspects of what we now include in the meaning of responsiveness. (p. 366)

Similar to the effects of a secure parent's increased responsiveness, a responsive parenting style (when balanced with demandingness) has been linked to positive outcomes in child development as well; this balance reflects an authoritative parenting style.

It should be noted that the above mentioned "specific" effects can be equated with parenting *practices* rather than *styles.* Though Darling and Steinberg (1993) note that parenting practices such as responsiveness are considered to be distinctly separate from parenting styles, they maintain that they arise from the same set of values and goals that a parent holds. As was noted above, an individual's attachment related goals and values represent a core component of their internal working model. It can be argued these goals and values are, if not the same, then related to, the same goals and values from which parenting styles and practices develop.

These broad and specific justifications for arguing the relationship between attachment security and parenting style provide a good basis from which to begin considering this issue. Nonetheless, there are reasons to suggest that there is more to consider in this argument. For one, there are only minimal data that support this assertion and more studies need to replicate this finding (Haag, 2005) before any significant

44

conclusions can be made. Additionally, these constructs represent complex and likely interconnected representational networks and as such, the relationship is most certainly not as straightforward as what has been proposed. The following section will discuss the rationale for examining theoretical alternatives in addition to the direct relationship between attachment security and parenting that was just proposed.

An Indirect Connection

Why would a securely organized internal working model *not* lead directly to an authoritative parenting style? There are a number of reasons to suspect that the relationship between an individual's internal working model and their parenting style is indirect.

First and foremost, the parenting process is very much a product of the here-and-now. This proves to be problematic when introducing the concept of attachment security to the equation, because core elements of an individual's internal working model are strongly grounded in the early developmental experiences of their life. Developmental measures of attachment security (for instance, the AAI) are primarily based on the individual's early attachment experiences with their caretakers. Extrapolating this process forward into their life as an adult, while surely related, introduces the possibility of a great deal of variability. One would expect then, that these measures of attachment security, though related, would only be moderately so. More recent measures of adult attachment that focus on relationships in the here-and-now (Bartholomew, 1990; Hazan & Shaver, 1987) are also problematic in that the relationships of interest are peer and romantic. Again, though likely related to the adult's working model as parent in the

45

parent-child dyad, their relatedness should be moderate at best. It stands to reason, then, that current measures of adult attachment, though related to a parent's attitudes about the parenting process in the here-and-now, are focused on relationships external to their current functioning as a parent in the parent-child dyad.

The second issue that needs to be addressed is related to the process of parenting itself. While parenting undoubtedly introduces a great deal of joy and satisfaction to the parent's life, it also presents a considerable amount of stress, as well as novel problems that have heretofore never been experienced by the parent. While it is likely that attachment security does impact this process in significant ways, it certainly does not represent the full picture. The complexity of the parenting process, and the stresses involved, suggests that other factors in addition to attachment security also impact the parenting process in meaningful ways. As such, while attachment security should demonstrate a reliable relationship with parenting style, it is likely that other variables important in the development of parenting style should diminish the strength of this impact.

Summary

As was noted above, there are a number of reasons to suspect a relationship between attachment security and parenting style. Broad arguments locate each concept at the representational level and note that internal working models dictate the characteristics of all relationships, including the parent-child bond. Specific arguments suggest similarities between secure adults and authoritative parents, including the propensity for dialogue and the heightened levels of responsiveness to their child. Nonetheless, it has

46

been suggested that this relationship, while consistent, does not represent the full picture. Attachment measures do not adequately reflect the here-and-now quality of the parent child relationship. Further, the complexity of the parenting process suggests that a direct correspondence between attachment security and parenting style is likely oversimplified. As such, it more likely represents an indirect process.

One might question, then how would an individual's attachment security impact her parenting style and thus, the parenting process? Undoubtedly, a secure internal working model, as opposed to an insecure model, should provide the parent with particular capacities that help her to work through these difficult moments with her child. Some of the relevant findings noted above have shown secure adults to be (when compared to insecure adults) more capable of productively managing emotional arousal in interpersonal situations and less cognitively and emotionally defensive overall.

These capacities, it will be argued, develop out of a secure attachment and in particular, allow for a quality of mental functioning that helps to further develop and benefit the individual's parenting capacities. The following section will introduce and explore this quality of mental functioning, the concept of mindfulness. It is the proposition of this paper that a secure internal working model allows for the development of mindfulness. Further, it is an individual's mindful qualities that then impact the parenting process and help to account for the findings related to the benefits of secure attachment on the parenting process. Thus, mindfulness is seen to mediate the relationship between attachment security and parenting style. Subsequent to the review of mindfulness, its relationships with attachment security and parenting style will be addressed. This will be followed by a discussion of the complete mediated model.

Chapter V

MINDFULNESS

Understanding Mindfulness

Once primarily a facet of Eastern philosophical and religious beliefs, mindfulness has in recent years begun to find its footing in the Western sciences as well. A review of the literature examining mindfulness will attest to the recent growth of interest in this topic (for reviews, see Batten & Santanello, 2007; Kabat-Zinn, 2003; Pauley, 2006). In fact, a current literature search of "mindfulness" on PsycINFO pulls up 871 references, 82% (718) of which were published in the last ten years (2007). As the popularity of the study and practice of mindfulness has grown, so too has the variability in its definitions. This has led to some confusion as to the meaning of "mindfulness."

Brown & Ryan (2004) note that to study mindfulness, one "must enter the shadowy realm of consciousness" (p. 242). As such, quantifying and parceling mindfulness down into recognizable and measurable characteristics is a difficult task. The authors suggest that mindfulness best represents the quality of consciousness that is organized toward observation of the self. It is "pre-reflexive" in that, at its core, it is perceptual rather than evaluative. "Mindfulness is openly experiencing what is there," (Brown & Ryan, 2003, p. 843) rather than making meaning out what is found. In this respect, mindfulness is best understood as a *process* of self-observation rather than a product of self-understanding. The importance of this distinction will be elaborated below.

48

Bishop et al. (2004) describe mindfulness as a "nonelaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is" (p. 232). Utilizing this definition, mindfulness can be broken down into two core components: (1) the self-regulation of attention and awareness and (2) one's orientation toward her experiences (2004).

The self-regulation of attention refers to one's ability to be aware of and attentive to the various images, thoughts, and feelings that pass through the mind. It is aided by two particular skills: sustained attention and switching. Sustained attention refers to an individual's ability to remain observant over long stretches of time and allows one to be informed as to what arises in her awareness. Switching describes a process of flexibility wherein one is able to switch her focus from one particular element of her experience to another (Bishop et al., 2004). The second component, an orientation of openness and acceptance, ensures that everything that comes into awareness is considered relevant and potentially important. Thoughts and feelings are recognized for what they are, but are not overanalyzed or reacted to in a habitual manner (2004).

Brown and Ryan (2004) agree with Bishop et al. (2004) with respect to their first tenet of mindfulness; that is, attention and awareness represent central elements of the mindfulness construct. They note, however, that these terms are not well defined by Bishop et al. and are often used interchangeably. Brown and Ryan (2004) define awareness as "the subjective experience of internal and external phenomena; it is the pure apperception and perception of the field of events that encompass our reality at any given moment" (pp. 242-243). Attention is defined as "a focusing of awareness to highlight selected aspects of that reality" (p. 243). As this suggests, attention and awareness are

interconnected: "Awareness is the field or ground upon which perceived phenomena are expressed, and attention continually pulls 'figures' out of that ground to hold them up for closer examination" (p. 243).

Although Brown and Ryan (2004) agree with Bishop et al. (2004) with respect to their second tenet of mindfulness, openness and acceptance, they do so with a caveat. In creating a self-report measure for assessing mindfulness (Brown & Ryan, 2001) they found that, through repeated use across several large samples, mindfulness repeatedly reduced down to one factor. In essence, the second factor, acceptance, provided no explanatory power over the initial factor of attention/awareness. They explain:

> Specifically, embedded within the capacity to sustain attention to and awareness of what is occurring is an openness to and acceptance of it… When an individual does not accept what is occurring at a given moment, a natural reaction is to limit awareness and redirect attention, to seek to avoid or escape from that event or experience – mentally, behaviorally, or in some other way. To turn away is to become (intentionally) inattentive and unaware – that is, to cease to be present… (2004, p. 245)

Therefore, to be attentive and aware, one must also be open. Brown and Ryan (2004) note that, "as a distinct construct, acceptance is functionally redundant in mindfulness" (p. 245). Utilizing these understandings, Brown and Ryan (2004) define mindfulness as "an open or receptive attention to and awareness of ongoing events and experience" (p. 245).

The development of the capacity for mindfulness offers an individual the possibility for certain qualities of mental, emotional, and behavioral functioning. The process of being attentive to all of one's passing thoughts, feelings, and images means

that one is aware of as much of her conscious experience as is possible. Being open to

one's mental imagery in a non-judgmental and non-elaborative way allows for this

material to be seen for what it is before it can be acted upon in some way. Additionally,

taking a non-judgmental stance helps one to avoid becoming overly-identified with a

particular mental or emotional state. Martin (1997) elaborated on this point and noted

that non-attachment to a particular point of view offers an escape "from one's own

habitual view of self and the world" (p. 293). He adds, "Mindfulness essentially

disentangles mental gestalts so that each can be held in view. It accomplishes this by

observing alternatively possible figures in relation to alternatively possible backgrounds.

Thus, it provides the freedom to choose among them" (p. 293). In this respect, one is able

to

approach mental objects as if for the first time, what is often referred to as "beginner's

mind." Miller et al. (1995) note that mindfulness and the clarity that it brings allows the

individual to "respond" to life rather than "react" (pg. 197) to it.

Before moving on to discuss findings relevant to mindfulness research, it would

prove beneficial to discuss what mindfulness *is not*. An examination of mindlessness as

well as the various concepts that are at times erroneously linked to mindfulness should

help one to arrive at more refined understanding of the meaning of this concept.

Mind*less*ness and Related Concepts

There are a number of ways in which an individual can behave mindlessly.

Brown and Ryan (2003) describe four types of mindlessness. First, an individual's focus

can become distracted from the here-and-now. For instance, rumination and fantasizing

about the future, both reflect an individual who is absorbed in material that is not of the present. Second, an individual's attention or awareness can become divided in the present, such as when one is absorbed in multiple tasks and therefore less effectively engaged with each task (than if there was a singular focus). A third form of mindlessness is represented in compulsive or automatic behaviors; inherent in these processes is a lack of awareness or attention to one's actions or motivations. A fourth type of mindlessness, which could be called defensive avoidance, is reflected in defensive processes that help one to avoid unwanted thoughts or feelings (Brown & Ryan, 2003).

It should be noted that mindlessness is not entirely undesirable. In fact, much of human life would be impossible without the mindless, automatic activity that we engage in on a daily basis. Having to focus on every step one takes while walking, or the meaning of every word as one speaks, would essentially bring human functioning to a halt. These forms of mindlessness represent examples in which the limiting of consciousness actually helps to maximize a person's abilities. What stands out in the prior examples of ineffective forms of mindlessness is that the limiting of consciousness acts as a detriment toward one's potential for health and growth. When one is unable to disengage from these forms of mindlessness, they remain stuck in their experience. Rather than opening up possibilities, it closes them. Martin (1997) noted that with detrimental mindlessness, "one is perceptually lost in one perspective, either unaware that there is an alternative, or forgetting how to get back there once discovered" (p. 293).

As was noted above, Brown and Ryan (2003) highlight the "pre-reflexive" nature of mindfulness. This is contrasted with *reflexive* thought, which involves "cognitive operations on aspects of the self through self-examination" (p. 823). In other words,

mindfulness captures the process of *observing* what is there, while reflexive thought characterizes the mental maneuvers upon that which is observed. Once one has begun reflecting upon her mental world, she can no longer be fully mindful of it.

This distinction is important in helping to differentiate the definition of mindfulness utilized here from another form of mindfulness that has been characterized in the literature. Langer and Moldoveanu (2000) state that mindfulness is "best understood as the process of drawing novel distinctions" (p. 1) and, in particular, highlight creativity as helping one to remain focused in the present. They suggest that one's openness to new perspectives allows the individual to create new categories and therefore expand her awareness. Although related to the form of mindfulness as defined in this paper, Langer and Moldoveanu's form of mindfulness differs slightly; by introducing and highlighting creativity, the authors incorporate cognitive operations into the process. Therefore, mindfulness in their definition is not just a process of observing what is there, but is also a cognitive act upon what is observed. It is reflexive, rather than pre-reflexive, as the definition utilized in this paper emphasizes (Brown & Ryan, 2004).

This distinction between pre-reflexive and reflexive thought is useful for contrasting mindfulness with other forms of mental functioning that have been discussed in the literature as well. This includes the closely connected constructs *theory of mind*, *mentalization*, and *reflective functioning*. Theory of mind is a term that is used to reference an individual's mental representations of another individual's internal functioning. It is described as "an interconnected set of beliefs and desires, attributed to explain a person's behavior" (Fonagy & Target, 1997, p. 680) and is functionally similar to the concept of mentalization. Mentalization is defined as "the capacity to understand

one's own and others' behavior in terms of underlying mental states and intentions"
(Slade, 2005, p. 269).   As such, theory of mind and mentalization represent an
individual's capacity to perceive, construct, and hold representations of both self and
other within her mind and to make sense of these representations. Reflective functioning
refers to these capacities and their operation within the interpersonal world. Fonagy and
Target (1997) describe it as "the developmental acquisition that permits the child (or
adult) to respond not only to other people's behavior, but to his *conception* of their beliefs,
feelings, hopes, pretense, plans, and so on" (p. 679, parenthetic statement added). While
theory of mind, mentalization, and reflective functioning likely incorporate the
observational quality of mindfulness, they move beyond this process and into cognitive
operations. And, as is apparent in the term *reflective* functioning, these constructs are
more representative of reflexive thought.   Slade (2005) likens mentalization to the
psychoanalytic concept of insight; mindfulness as it is defined in this paper is less about
insight, and more about the process that can lead one there.

In a similar vein, free association has been suggested as a comparable process to
the mindfulness approach (Delmonte, 1990). When compared to the above noted mental
processes, free association probably most closely resembles the qualities of mindfulness
that have been discussed here. The definition of mindfulness noted above, "an open or
receptive attention to and awareness of ongoing events and experience" (Brown & Ryan,
2004), is arguably an apt description of free association. Two comments could be made
about this though. First, in free association an individual generally says what is coming
to mind. It could be argued that the very act of selecting, and then reporting particular
elements of the flow of consciousness could in effect remove one from an open and

attentive state. Second, as will be discussed below, mindfulness is an aspect of experience that can be brought out and utilized in the day to day affairs of one's life. Free association, for all intents and purposes, is utilized within particular forms of therapy and requires (though not always) the help of another to make meaning of the process. Mindfulness, on the other hand, is generally an intrapersonal event.

Research Findings

Laboratory Research

Brown and Ryan (2003) noted a number of findings in relation to mindfulness as measured by the self-report they developed. As has been noted, mindfulness as they defined it is recognized as "an open or receptive attention to and awareness of ongoing events and experience" (Brown & Ryan, 2004). Utilizing this definition, they developed a self-report measure that presented various descriptions of more- or less-mindful day-to-day states. Individuals respond by indicating how much these statements reflect their experience. They found that mindful individuals were more aware of both their internal and external experiences than were less mindful individuals. They demonstrated better recognition of their emotional states and a greater capacity for altering these states. More mindful individuals were less self-conscious, reported lower levels of social anxiety, and were less ruminative than less mindful individuals. More mindful individuals demonstrated enhanced psychological health as defined by lower levels of neuroticism, anxiety, depression, and negative affect than their less mindful counterparts. Likewise,

more mindful individuals reported higher levels of autonomy, self-worth, optimism, and satisfaction in life (2003).

In addition to these findings, Brown and Ryan (2003) also noted trait- and state-related effects. They found that while trait level dispositions toward mindfulness predicted beneficial effects for individuals, momentary experiences of mindfulness were also valuable in promoting well-being. Even though these effects were independent, it was found that they were not unrelated. An individual who demonstrated trait-level mindfulness was more likely to demonstrate the momentary state-level instances of mindfulness. This suggests that while individuals may differ from others in their ability to be mindful based on inherent capabilities or trait dependent factors, an individual's level of mindfulness may also vary from moment to moment based on state dependent factors.

Clinical Research

Mindfulness Based Stress Reduction

One of the more significant developments in the recent growth of mindfulness research was the appropriation of mindfulness practices to organized medical and psychological treatments. Mindfulness was first adapted to the applied field through incorporation into a manualized treatment program, called Mindfulness Based Stress Reduction (MBSR, Kabat-Zinn, 1990). MBSR is a group oriented program that utilizes a systematic procedure aimed at cultivating mindfulness. Based on mindfulness meditative techniques, it is an 8 to 10 week group-program involving single, weekly sessions on the average of 2.5 hours per session. In addition to one full-day session in the program,

individuals are asked to complete 45 minutes of individual homework each day. A number of research findings attest to the benefits of utilizing a mindfulness-based treatment program. These benefits have been noted across a wide-range of treatment venues (e.g. clinical/non-clinical, short/long-term, and quantitative/qualitative) for physiological disorders, mood disorders, and cognitive functioning. What follows is a brief summary of the various bodies of clinical research and their findings.

Mood Disorders

Ramel et al. (2004) found that, following the completion of an MBSR program, a depressed population of participants experienced reductions in depression, trait-anxiety, rumination, brooding, reflection, and need for approval. Kabat-Zinn et al. (1992) measured levels of anxiety, panic, and depression in a group of clinically anxious and depressed participants who completed a mindfulness training program. The researchers found that upon completion of this program (at 3-month follow-up), 20 of the 22 participants' demonstrated significant reductions in their levels of depression and anxiety. In addition to these findings, mindfulness techniques were successfully utilized in the management of affect related to Post Traumatic Stress Disorder (Wolfsdorf & Zlotnik, 2001), stress levels related to addictive disorders (Marcus, Fine, Moeller, Khan, Pitts, Swank, & Liehr, 2003), and binge eating behaviors in eating disordered females (Kristeller & Hallett, 1999).

Long-term benefits of mindfulness practice on mood functioning were examined as well. Miller et al. (1995) completed a three-year post-treatment follow-up with a population deemed clinically anxious and depressed at treatment time (Kabat-Zinn et al., 1992). Utilizing the same measures as the prior study, Miller et al. found that reductions

57

in anxiety and depression, as well as reductions in levels of panic, and rate of panic attacks all remained significant. The fact that 17 of the 18 participants tracked at the 3-year level had maintained much of the formal practices of the course makes it impossible to distinguish between mindfulness practice as an ongoing maintenance treatment or as a cure of sorts. Nonetheless, this shows that the benefits of mindfulness practice can be maintained over time.

Autobiographical Memory

Studies have examined the impact of mindfulness on cognitive functioning as well. Previous findings within the autobiographic and narrative research have indicated that depressed people disproportionately access more general levels of memory, and tend to recall fewer specific memories. It is thought that overgeneralized memories may represent the individual's attempt to avoid engaging unwanted thoughts and feelings that may be pulled forth through the recall of specific memories.

Williams et al. (2000) were interested in how mindfulness training would affect the specificity of autobiographical memories. In their study, participants who completed the mindfulness training evidenced a significant drop in the tendency to present overgeneralized memories. This trend was not found in the group who did not complete the mindfulness training.

The authors suggested that mindfulness training helped individuals to alter patterns of avoidant informational processing. By practicing nonjudgmental recognition of specifics of their experience, it is thought that the individual becomes more comfortable with the exploration of their memories. As self-exploration progresses, it is probable to suggest that self-understanding and emotional relief should follow.

Physiological Changes

In addition to the findings for cognitive and affective changes, mindfulness-training was shown to stimulate physiological changes as well. Research demonstrated the effectiveness of mindfulness training as seen by the significant reductions in the pain and duress related to a number of physical disorders including cancer (Carlson, Speca, Patel, & Goodey, 2004; Tacon, Caldera, & Ronaghan, 2004), heart disease (Tacon, McComb, Caldera, & Randolph, (2003), fibromyalgia (Weissbecker, et al., 2002), and brain injury (Bedard et al., 2005). Davidson et al. (2003) found that individuals who participated in an MBSR course demonstrated significant changes in brain functioning in the left-sided activity of the anterior cortical area. Activity in this region has been found to be related to both state and trait levels of positive affect. Additionally, when inoculated with the influenza vaccine, these same individuals show elevated levels of immune functioning in comparison to the control group. These findings demonstrated that mindfulness training could lead to changes that extended beyond the levels of mental and affective functioning.

Non-clinical Populations

While the above noted findings were in reference to clinical samples, the benefits of practicing mindfulness techniques were examined in non-clinical samples as well. Rosenzweig et al. (2003) noted that practicing mindfulness techniques led to reductions in stress in a population of medical students. Chang et al. (2004) utilized a general, non-clinical sample and measured changes in stress, states of mind, and self-efficacy following the completion of an MBSR program. Participants evidenced significant reductions in perceived stress, improved levels of mindfulness self-efficacy, and

increases in positive states of mind. As this research showed, mindfulness training was effective in helping individuals to manage the everyday stresses of life as well.

Qualitative Research

In addition to the quantitative research findings, the subjective effects of mindfulness training were assessed as well. Mackenzie, Carlson, Munoz, and Speca (2006) followed a group of cancer patients who attended weekly MBSR groups. Through analysis of a series of interviews, the authors found five themes that emerged. Participants reported greater *openness to change*, particularly in learning how to manage the problems they faced. Participants reported greater *self-control* and as the authors noted, "The practice of mindfulness provided a means by which participants monitored and controlled their own arousal and were able to face and evaluate their problems with greater emotional equilibrium" (p. 63). The communal environment led to an increased sense of *shared experience*, wherein the participants felt more supported in their problems. Participants also reported a sense of *personal growth,* and "talked about mindfulness as a powerful method for coming to terms with their relative personal situations in ways that provided comfort, meaning, and direction in times of high stress and uncertainty" (p. 64). And finally, although the focus of the group was secular, an increased sense of *spirituality* arose as the fifth theme.

Summary of Research Findings

As has been described above, the benefits found in mindfulness training are widespread. In a meta-analysis of 20 studies examining the short-term effects

(immediate post-intervention) of MBSR, Grossman et al. (2004) found "consistent and relatively strong" effect sizes (ranging from $d = 0.50$ to $d = 0.54$) for both controlled and observational studies whether they were examining changes in mental or physical health. The authors suggested that "mindfulness training might enhance general features of coping with distress and disability in everyday life, as well as under more extraordinary conditions of serious disorder or distress (p. 39)." The clinical, non-clinical, and qualitative findings support this assertion.

Summary

As defined here, mindfulness is reflected by "an open or receptive attention to and awareness of ongoing events and experience" (Brown & Ryan, 2004, p. 245). This best represents a process of self-observation of, rather than reflection upon, one's internal flow of thoughts, feelings, and mental imagery. This distinction between pre-reflexive and reflexive thought helps to differentiate mindfulness from related mental constructs including mentalization and reflective functioning. The proposed benefits of mindfulness include the capacity for greater openness and awareness, the fostering of a non-judgmental stance (which should help to reduce ruminative states), the possibility of escaping habitual cognitive, emotional, and behavioral patterns, and the capacity for responding to life in a mindful way, rather than reacting to it mindlessly.

Research investigating individual correlates of greater mindfulness supports many of these assertions. Brown and Ryan (2003) found that more mindful individuals were more aware of internal and external stimuli, more capable of recognizing and altering mood states, and less (negatively) self-conscious and ruminative. Additionally, more

mindful individuals reported less social anxiety, depression, and neuroticism, and greater autonomy, self worth, and optimism. Furthermore, it was found that the capacity for mindfulness could be reliably differentiated between individuals at a trait level and within individuals at a state level.

Experimental research examining the effects of mindfulness training has produced a large body of findings that support the proposed benefits of increased mindfulness. Some of these findings include improved emotional functioning, enhanced access to specific autobiographical memories, and beneficial physiological functioning in clinical populations, as well as reduced stress in normal populations. Further, qualitative findings suggest potential mechanisms that may account for these findings. Individuals involved in mindfulness training reported increased openness to change, greater self-control, an increased sense of shared experience or communion, a sense of personal growth, and increased spirituality.

These correlational and experimental findings offer a great deal of support for the proposed benefits of mindfulness across diverse populations. The wide-ranging successful application of mindfulness based programs suggests that these practices could be utilized across a number of intervention areas. Of interest in this paper is the application of mindfulness to the parenting arena. As was discussed above, it is proposed that the capacity for mindfulness provides an important link between attachment security and parenting style. This relationship will be addressed and expanded below as a case is made for mindfulness functioning as a mediator between attachment security and parenting style.

Chapter VI

THE MEDIATING MODEL

The Association between Attachment Security and Mindfulness

This section will describe the relevant aspects of an individual's internal working model as they relate to mindfulness. For the purposes of this discussion, the internal working model will be referred to in its singular and understood as the individual's overarching, general model of interpersonal dynamics (as opposed to a more specified model, e.g. peer relationships). It will be argued that the capacity for mindfulness is requisite on particular characteristics of a secure internal working model and would therefore be less likely to develop within the framework of an insecure working model.

The first distinction that can be made with respect to differing qualities of secure and insecure models of attachment is related to the access to, and processing of, attachment related information. As Main, Kaplan, and Cassidy (1985) emphasized, the internal working model is in part composed of rules "limiting access" (p. 67) to attachment related information. As was noted above, Bowlby (1988) described this process as "defensive exclusion" (p. 35) and noted that it reflects an attempt on the part of the individual to deactivate the attachment system. This was further described by Bretherton (2005) as having "the effect of shutting available, but potentially anxiety-provoking, information out of awareness" (p. 18).

Main (1991) explored this process in adults through the analysis of narratives about early and current attachment relationships (i.e., the AAI). As was briefly described

above, adults with secure working models demonstrated distinct differences from those with insecure models. These differences were proposed to account for the individual's "overall state of mind with respect to attachment" (p. 141). Secure adults presented coherent narratives and demonstrated easy access to early memories. Insecure adults were generally incoherent, contradicted themselves, and demonstrated poor access to early memories. Insecure classifications were further differentiated by dismissive adults, who were insistent on their inability to recall early experiences and presented incomplete responses, and preoccupied adults, who presented lengthy, confusing, and often tangential or irrelevant responses in their narratives. Hence, the internal working models of secure adults can be distinguished from those of insecure adults by their "flexibility and readiness for examination" (p. 128). Main noted further, "In contrast to the integration of information relevant to attachment seen in secure children and adults is the incoherence and lack of integration of, or lack of access to, information seen in those who are insecure with respect to attachment" (p. 132)

Thus, one could argue that the differences in organization of attachment-related information, as seen in secure and insecure adults, would exert direct effects on the individual's capacity for mindfulness. An insecure adult's internal working model is characterized by defensive processes that limit access to important information. A model such as this necessarily precludes the capacity for "an open or receptive attention to and awareness of ongoing events and experience" (Brown & Ryan, 2004, p. 245). Secure adults on the other hand demonstrate the capacity for remaining open to, and aware of, attachment related information that would be of importance. Adults evidencing a secure

64

working model are therefore much more likely to demonstrate the capacity for mindfulness than are adults with an insecure working model.

The second distinction that can be made with respect to differing qualities of secure and insecure models of attachment is related to the concept of affective arousal. Infant research has demonstrated consistent patterns of affective arousal in the Strange Situation as differentiated by attachment classification (Ainsworth, 1970). Secure infants express distress when their caregiver leaves but are easily soothed upon the parent's return. Anxious-ambivalent infants express distress when the caregiver leaves, but cannot be soothed upon the parent's return and have been shown to express excessive anger (Main, 1991). Anxious-avoidant infants are outwardly unexpressive, but physiological measures have indicated that they are actually highly aroused and remain so for a considerable period of time (Spangler & Grossmann, 1993). Though the focus of this project is adult functioning, these findings are nonetheless relevant. Shaver, Collins, and Clark (1996) noted, "The strategies adults employ to maintain proximity with an attachment figure are not presumed to be (nor are they) identical to the ones used by infants in the Strange Situation, but they are conceptually parallel and empirically predictable" (p. 28). As such, research on adult attachment styles has produced similar findings.

Hazan and Shaver (1987) found that while secure adults reported emotional stability, both preoccupied and dismissive adults reported high emotional volatility. Shaver and Mikulincer (2002a) found that secure adults were much more likely to approach and deal with conflict; this could be argued as example of the secure adult's willingness to confront potentially emotionally arousing situations. Preoccupied adults

were much more ruminative, and in particular tended to focus on their distress. Additionally, these individuals were unable to attenuate their feelings and only tended to exacerbate and become more reactive to the stress. Finally, Shaver and Mikulincer found that dismissive adults were largely unaware of their underlying anger (2002a).

These differences in affective arousal seen in the various attachment styles are likely related to the organization of the internal working model with respect to information processing described just above. In fact, Spangler and Grossman (1993) made a similar point and noted that the affective responses characteristic of infants in the Strange Situation are most likely reflective of the effectiveness, and ineffectiveness, of the varying attachment coping strategies. This should be true of adults as well when considered in the context of the coping strategies reflected by the various forms of inclusion and exclusion of attachment related information demonstrated by the varying attachment styles. Therefore, patterns of affective arousal should vary according to the particular patterns of attachment related information processing as seen in secure and insecure adults.

Even though these factors are likely related, affective arousal is important as a distinct concept when considering its impact on the adult's capacity for mindfulness. In particular, the presence or absence or emotionally charged stimuli may affect the extent to which an adult could be mindful. For instance, a secure adult may demonstrate an adequate capacity for mindfulness when there is relative peace and calm, and less so when the emotional stress of a situation is increased. Insecure adults, who are already impeded in their mindfulness abilities by the restrictive nature of the information to

66

which they attend, would likely be even more incapable of demonstrating mindfulness when the emotional volatility of an environment is elevated.

Thus, attachment security and mindfulness are meaningfully related primarily through two avenues: the relative access to attachment related information as it is differentiated by security of the adult's internal working model, and the regulation of emotion as it is differentiated by the security of the adult's internal working model. Following these guidelines, secure adults should evidence a greater capacity for mindfulness than would insecure adults.

The following section will explore the second component of this mediated relationship, the association between mindfulness and parenting style.

The Association between Mindfulness and Parenting Style

As Darling and Steinberg (1993) argued, parenting style reflects the attitudes the parent holds about the parenting process. These attitudes are proposed to create an emotional environment within which the parenting process unfolds, affecting both her child's willingness to be socialized and the effectiveness of her parenting practices. Therefore, when questioning the impact of mindfulness on parenting style, one is more specifically considering how mindfulness affects the *attitudes* the parent brings to the parenting process. Thus, this section will explore the manner in which a parent's capacity for mindfulness would impact the attitudes she holds about the parenting process.

As noted above, Brown & Ryan (2004) define mindfulness as "an open or receptive attention to and awareness of ongoing events and experience" (p. 245). This open awareness refers not just to the individual's internal stimuli, but to the external

environment as well. In this respect, a mindful parent is one who will be open to, and aware of, a wide range of stimuli related to both themselves and their child. This paper will argue that mindfulness impacts the attitudes a parent holds about the parenting process by allowing for a fuller consideration of both the parent's and child's need. Further, it will be proposed that a parent who demonstrates the capacity for mindfulness will be more likely to demonstrate an authoritative parenting style. In contrast, parents who demonstrate less mindfulness will be more likely to exhibit a non-authoritative style.

Parenting is undoubtedly at times a difficult, stressful, and emotionally draining experience. Even the most optimal of parent-child pairings will at times face moments of disagreement or strife. It could be argued that it is in these moments, when arousal is high, that the parent is most at risk for losing the context of the situation and reacting in habitual ways (e.g., ways in which the parent was treated as a child). This paper proposes that a parent who is mindful is capable of placing the interaction with her child into a particular context and therein, avoid habitual patterns of relating. The capacity for mindfulness suggests the ability to take a step back, to look inside for a better understanding of the underlying cognitive and emotional motivations of one's actions, to "respond," rather than "react" to life (Martin, 1997, p. 197). Taking a step back allows for a full consideration of both what the parent and child bring to the process.

A parent who demonstrates the capacity for recognizing both her own motivations and the motivations of her child fosters a collaborative environment of reciprocity (Baumrind, 1989). Baumrind highlighted the importance of reciprocity in the parent-child relationship. She noted that reciprocity is a balance between agency and communion, a balance between the recognition of one's own needs and those needs of

the other. When agency and communion are given equal status, the relationship is given priority over the individual needs of either parent or child, but not to the detriment of those needs. Kochanska (1997) found support for this and noted that, "mothers and children who establish a system of reciprocity in their relationship embark on a smoother and more successful developmental trajectory" (p. 108).

Though limited research has investigated the relationship between mindfulness and parenting, a recent project offers some insight into the impact of mindfulness on the parenting process. Singh et al. (2007) trained three mothers of significantly impaired autistic children in a 12-week mindfulness course. Important to note is that the mothers were trained in mindfulness techniques (not in parenting techniques) and the children were not part of the training intervention. The authors noted that parents often react habitually to their children without focusing on the present moment. Through training, the mothers were taught to focus their attention on one thing at a time with the hypothesis that this would allow them to gain better control for staying in the present. While prior to intervention the children demonstrated considerable levels of aggression, non-compliance, and self-injury, at the completion of the program they evidenced significant reductions in each of these negative behaviors. In addition, the mothers' reported increased parenting satisfaction, both in terms of their interactions with their child and in their own parenting confidence. Importantly, the children's improvement came with no implemented change in parent or child behaviors. The changes in the dyadic interactions were a result of the increased mindfulness experienced on the part of the mothers.

Singh et al. (2007) noted that, "Unlike behavioral and other parent training methodologies, where awareness of contingencies is heightened   and behavioral

intervention is taught, mindfulness transforms the individual's view of self and others as the basis for behavior change" (p. 174). In other words, the active ingredient for change in their program of mindfulness training was the parent's modification of beliefs and attitudes about both herself and her child. As such, mindfulness offered a path toward the development of more open and accepting attitudes.

Singh et al. (2007) suggested that one of the key components of the mindfulness training was ensuring that the mothers' developed an unconditional acceptance of their child, both for his person and for his behaviors. It was proposed that developing an attitude of unconditional acceptance would help to

> reduce attempts by the mother to impose her will on her child and, instead,
> will generate a harmony that supports both individuals. She will recognize
> that both she and her child have important and valid needs that, even when
> different and in conflict, are interdependent. (p. 174)

Two important points can be made regarding these last two statements made by Singh et al. First, the authors highlighted the fact that the mother's *attitudinal* change was one of the fundamental means for altering the trajectory of these parent-child dyads. Through mindfulness training, the mothers were able to cultivate an environment of acceptance with their child, the origins of which were a shift in her attitudes. Second, the shift toward an accepting attitude led to the mother's greater recognition of both her and her child's needs. This resulted in increased "harmony," or as described above, reciprocity.

This study supports the argument proposed above. Namely, mindfulness impacts the parent's attitudes toward the parenting process in a predictable manner. The capacity to remain open and aware of both the motivations of self and other allow for a fuller,

70

more present centered understanding of the parent-child relationship. A consequence of this open attitude toward the parenting process is increased balance between agency and communion, and thus, reciprocity between parent and child. It follows then that a more mindful parent is likely to foster an environment of reciprocity between parent and child. As has been discussed above, authoritative parents have repeatedly been shown to demonstrate high levels of reciprocity in their relationships with their children. It can be argued then that more mindful parents are more likely to demonstrate an authoritative parenting style.

The question that follows then is, "Does reduced mindfulness infer a non-authoritative parenting style?" Although no data exist to support this argument, extrapolating from the findings above would suggest this to be true. With reduced mindfulness comes a reduction in the capacity to be aware of, and attentive to, both the motivations and needs of self and other. In considering the parenting style literature (Baumrind, 1989; Maccoby & Martin, 1983), there are therefore two means through which reduced mindfulness could affect parenting style: (1) the recognition of the child's need for love, autonomy, and self-expression, otherwise known as parental responsiveness, and (2) the recognition of the child's need for rules, limits, and structure, otherwise known as demandingness. A parent who is not mindful of her child's needs for love, autonomy, and self-expression and in contrast overemphasizes the importance of demandingness is likely to engender a non-reciprocal, somewhat corporal environment. This is reflected in the authoritarian parenting style, and represents a parent who is demanding but not responsive (Baumrind, 1989). A parent who is not mindful of her child's need for direction and authority and in contrast overemphasizes the need for

71

responsiveness is likely to foster an emotionally supportive environment, but one that ignores the importance of the child's need for parental authority. This is reflected in the permissive parenting style, and represents a parent who is responsive but not demanding (Baumrind, 1989). Finally, a parent who is not mindful of the importance of either her child's need for autonomy or her child's need for structure, will likely foster an environment characterized by a deficiency of care. This is reflected in the neglectful parenting style, and represents a parent who is neither responsive nor demanding.

It is argued then that with reduced mindfulness, a parent is less capable of being aware of and attentive to the needs of the child. Permissive, authoritarian, and neglectful parenting styles reflect attitudes about parenting that overlook important components of the parenting process. As such, research has shown that these non-authoritative parenting styles have less than favorable consequences (Baumrind, 1967, 1971, 1989, 1991; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Maccoby & Martin, 1983; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). An authoritative parenting style, which reflects attitudes that highlight the importance of bi-directional (Lewis, 1981) and reciprocal processes (Baumrind, 1989; Maccoby & Martin, 1983) suggests a more open and attentive parent, one who is able to take account of the needs of both parent and child. Therefore, as this paper has proposed, an increased capacity for mindfulness would likely lead to an authoritative parenting style, while a decreased capacity for mindfulness would likely lead to a permissive, authoritarian, or neglectful style.

Summary

This paper has reviewed the literatures pertaining to the development and related research of attachment security, parenting styles, and mindfulness. It was suggested that an individual's attachment security would relate to their parenting style in consistent and predictable ways. It was further proposed that although this suggestion can be supported by theoretical and empirical findings, it likely represents an oversimplified model. As such, it was argued that rather than reflecting a direct relationship, attachment security and parenting style are more likely indirectly related.

Mindfulness was introduced as a potential mediator of this relationship, explaining the connection between attachment security and parenting style, and offering greater explanation and specificity to the model. The relationship between attachment security and mindfulness was explored and specific propositions about the relationship were made. It was suggested that a secure internal working model, as opposed to an insecure model, would predispose an individual toward a greater capacity for mindfulness. Both cognitive and affective characteristics of the internal working model were introduced as mechanisms through with this relationship would be expressed. Reduced defensiveness reflected in greater openness to attachment related information as well as reduced affective arousal in interpersonal scenarios suggests that a secure internal working model would more likely lead to increased capacities for mindfulness. In contrast, the restriction of awareness to attachment related information and increased disruptive emotional arousal characteristic of insecure working models suggests that the capacity for mindfulness would be reduced in insecure adults.

73

Following this, the relationship between mindfulness and parenting style was explored. It was suggested that mindfulness would impact parental attitudes in consistent and predictable ways. It was proposed that increased mindfulness would lead to greater openness and awareness of the needs of both parent and child and would provide a reciprocal context for the parenting process. A recent study was presented that demonstrated mindfulness' impact on the attitudes of parents, showing that it can indeed lead to a greater recognition of the need for reciprocity in the parent child relationship. It was argued that the open and accepting qualities of mindfulness are reflected in the attitudes of authoritative parents. As research has shown, a central component of authoritative parenting is the balanced recognition of reciprocal needs in the parenting process. In addition, it was argued that the more restrictive qualities of reduced mindfulness are reflected in the non-authoritative parenting styles. Research has demonstrated that the attitudes of non-authoritative parents reflect a limited awareness of the importance for reciprocity and the need for a balance between demandingness and responsiveness.

It is thus argued that attachment security creates particular conditions that either favor or disfavor the development of the capacity for mindfulness in adults. This capacity for mindfulness is consequently reflected in the parent's attitudes about the parenting process, i.e. parenting style. Thus, a secure internal working model is likely to favor the development of the capacity for mindfulness which then favors the development of an authoritative parenting style. An insecure working model would be likely to inhibit the development of the capacity for mindfulness which would likely lead to the

development of a non-authoritative parenting style. As this model describes, mindfulness

is proposed to mediate the relationship between attachment security and parenting style.

Chapter VII

METHODS

Participants

Thirty-five mothers were recruited through the University of Tennessee Psychology Clinic. Mothers ranged in age from 24 to 54, with an average age of 37.8. Thirty one mothers identified themselves as Caucasian, one mother identified herself as African-American, one mother identified herself as Hispanic-American, one mother identified herself as Native-American, and one mother did not respond. With respect to marital status, two mothers reported being single and never married, 19 reported being currently married, 11 reported being divorced and currently single, two reported being divorced and currently remarried, and one mother did not respond. In terms of education, three mothers reported a graduate or professional degree, six mothers reported a bachelor's degree, seven mothers reported an associate's degree, 18 mothers reported a high school diploma, and one mother reported some high school. With respect to annual household income, eight mothers reported less then $10,000, four mothers reported between $10-20,000, 18 mothers reported between $20-50,000, four mothers reported greater than $50,000 annual household income, and one mother did not respond. Thirteen mothers reported residing in a rural setting, 10 in a small town, 10 in an urban setting, and two mothers did not respond.

Attachment

One measure assessing attachment classifications was utilized. The Relationship Questionnaire (RQ; Bartholomew, 1990; Bartholomew & Horowitz, 1991) is an adaptation of the self-report attachment measure originally developed by Hazan and Shaver (1987). As was noted above, this measure developed out of Bartholomew's extension of Bowlby's proposition about self and other appraisals for an interactive model of attachment. It consists of four short descriptions of an individual's possible attachment styles. For instance, the *secure* description states, "It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others not accept me." After reading the four descriptions, the participant is instructed to select the classification that he feels best describes him in relationships. The RQ, when used in tandem with an attachment interview and a friend-report (which utilized an adapted form of the RQ), demonstrated good construct validity. Each of the three methods of assessing the underlying self and other dimensions of attachment security proposed to be measured by the RQ independently produced similar results (Bartholomew & Horowitz, 1991). This finding was replicated in a group of studies that measured attachment in both family relationships and peer relationships (Griffin & Bartholomew, 1994). Methods included family- and peer-related attachment interviews, self-completion of the RQ, and modified versions of the RQ for both peers and romantic partners to complete. Utilizing this multi-method approach, these studies demonstrated good construct and discriminant validity for

the RQ. Additionally, the RQ also demonstrated good predictive validity with respect to the underlying self and other components of the attachment model (Griffin & Bartholomew, 1994).

Parenting Style

One measure was utilized for the assessment of parenting style. The Parental Authority Questionnaire - Revised (PAQ-R; Reitman, Rhode, Hupp, & Altobello, 2002) is a 30-item measure designed to assess the particular parenting style of a respondent based on phenomenological appraisals of their parenting attitudes. This measure is a minor modification of Buri's (1991) original Parental Authority Questionnaire (PAQ). Whereas the PAQ was designed to ascertain retrospective adolescent ratings of their parent's parenting style, the PAQ-R items were modified for completion by the parents themselves. The items of the PAQ-R are based on concepts derived from Baumrind's (1971) discussion of components of the various parenting styles. Participants respond to each of the items on a five-point Likert-scale indicating how much they agree with each statement. From these response patterns, continuous scales indicating the propensity to demonstrate particular attitudinal styles are derived. This includes the tendency to demonstrate authoritative, authoritarian, and permissive attitudes. Findings have indicated modest reliability with coefficients averaging .66 for the authoritative scale, and .74 for both the permissive and authoritarian scales. There is some variability related to ethnic and socioeconomic factors (Reitman, Rhode, Hupp, & Altobello, 2002) with better internal consistency in predominantly Caucasian and higher SES populations. This scale was also shown to demonstrate moderate convergent validity (2002).

Mindfulness

One measure was utilized for the assessment of mindfulness. The Mindful Attention Awareness Scale (Brown & Ryan, 2003) is a 15-item scale that measures the frequency of mindful states in day-to-day life, using both general ("I find it difficult to stay focused on what's happening in the present.") and situation specific statements ("I drive places on 'automatic pilot' and then wonder why I went there."). Participants respond to each of the items on a six-point Likert-scale indicating how often each statement reflects their everyday experience. These scores are then averaged for an MAAS score which can range from 1 to 6. Higher scores indicate greater mindfulness. Factor analyses of college and national adult samples data showed a single-factor structure with good internal reliability: .82 and .87 respectively (Brown & Ryan, 2003). In addition it showed good test-retest reliability and good convergent validity (2003). The single-factor structure of the MAAS has been supported in more recent use with both cancer patients and a matched control group (Carlson & Brown, 2005).

Procedure

The measures utilized here were part of a larger project being conducted in our research lab. Participants came to the clinic for a one-time session generally lasting about one hour. In addition to the three measures noted above, participants also were asked to provide a narrative about their relationships and to fill out various other forms. Participants were compensated with a $25 gift-card to an electronics store upon completion of their participation.

Chapter VIII

RESULTS

Tests of main effects revealed no significant differences with respect to demographic variables. As such, age, ethnicity, marital status, educational level, income level, and residency were collapsed for the analyses.

Reliability Analyses

The Relationship Questionnaire

The categorical nature of the RQ made it impossible to conduct a reliability analysis for this measure. Additionally, no measures were given that could be utilized to determine construct validity and insure that the RQ demonstrated valid assessment of attachment security in this project. To provide some measure of comparison, the frequency of attachment security classifications found in this project was evaluated in relation to cited averages noted above (Hazan & Shaver, 1987).

Hazan and Shaver reported population averages of 56% for the secure classification, 24% for the dismissive population, and 20% for the preoccupied classification and noted that these percentages reflected accurately on those reported in other projects. Because the RQ allows for a third insecure classification (fearful) in addition to the dismissive and preoccupied classifications utilized in the Hazan and Shaver (1987) measure, this comparison is not direct. The current data indicated 32%

classified as secure, 15% classified as dismissive, 18% classified as preoccupied, and 36% classified as fearful. Reducing these two population averages to secure versus insecure classifications allows for a more direct comparison. Hazan and Shaver's (1987) population evidenced 56% classified as secure and 44% classified as insecure (dismissive and preoccupied). The current population evidenced 32% classified as secure and 68% classified as insecure (dismissive, preoccupied, and fearful). This comparison suggests that the current population evidenced considerably lower percentages of securely classified individuals than has prior research.

It could be argued that this comparison is biased because the fearful category was not present on the Hazan and Shaver measure. Excluding the participants who identified themselves as fearful in the current project, the current data evidenced 50% classified as secure, 23% classified as dismissive, and 27% classified as preoccupied (or 50% classified as secure and 50% classified as insecure). This comparison excluding the fearful category evidenced a comparable level of each classification when examined in relation to the percentages noted by Hazan and Shaver (1987).

The Mindful Attention Awareness Scale

A factor analysis of the MAAS demonstrated a single factor structure with good reliability. The internal consistency of the scale (Cronbach's alpha) was .91. Brown and Ryan (2003) reported average scores on the MAAS of 4.29 for a Zen mindfulness practitioner group, 3.97 for an adult community sample, and 3.77 for a college population. The current data evidenced a mean score of 3.69 on the MAAS suggesting lower, but comparable scores for the current population.

81

The Parental Authority Questionnaire – Revised

A factor analysis of the PAQ-R demonstrated three factors, but indicated moderate-to-low reliabilities for the three parenting styles. For each of the three parenting styles, 10 statements were designed to load on to each factor. The authoritarian scale demonstrated the highest internal consistency with a Cronbach alpha of .75. Seven of the statements referring to an authoritarian parenting style loaded correctly on the authoritarian factor, but two permissive statements loaded on this factor as well. Additionally, one authoritarian statement loaded incorrectly on the permissive factor and two authoritarian statements loaded incorrectly on the authoritative factor. The authoritative scale demonstrated a lower level of internal consistency with a Cronbach alpha of .67. While eight statements referring to an authoritative parenting style loaded correctly on this factor, two authoritarian statements and one permissive statement loaded on the authoritative factor as well. Additionally, two authoritative statements loaded incorrectly on the permissive factor. Finally, the permissive scale demonstrated the lowest internal consistency with a Cronbach alpha of .47. While seven of the statements referring to the permissive parenting style loaded correctly on this factor, two authoritative statements and one authoritarian statement loaded on this factor as well. Additionally, two permissive statements loaded incorrectly on the authoritarian factor and one permissive statement loaded incorrectly on the authoritative factor. The moderate-to-low reliabilities and the elevated frequency of responses loading on incorrect factors suggest poor internal consistency for this measure.

Correlational Analyses

Initial two-tailed correlational analyses revealed a number of predicted results (for all correlations, see Table 1). Attachment security was positively correlated with mindfulness indicating that a securely attached individual was more likely to demonstrate higher levels of mindfulness, $r(34) = .41$, $p < .02$. Attachment security was related in the predicted manners with the three parenting styles, though non-significantly: $r(35) = .25$, $p = .14$ for authoritative parenting style, $r(35) = -.15$, $p = .38$ for authoritarian parenting style, and $r(35) = -.29$, $p = .09$ for a permissive parenting style. The specific propositions made with respect to the relationship between attachment security and parenting style warrant examining one-tailed tests as well. One-tailed correlational tests indicate a trend in the predicted direction for the relationship between a secure internal working model and an authoritative parenting style ($p = .07$) and a significant negative correlation between a permissive parenting style and a secure internal working model ($p = .05$).

Mindfulness was positively correlated with an authoritative parenting style, $r(34) = .53$, $p < .01$, indicating that greater mindfulness is linked with greater tendencies toward an authoritative parenting style. Mindfulness was negatively, though non-significantly, correlated with an authoritarian parenting style, $r(34) = -.32$, $p = .06$. Though non-significant, this finding represents a trend in the predicted direction. A one-tailed correlational test indicates a significant negative correlation between an authoritarian parenting style and the level of mindfulness a parent demonstrates ($p = .03$). Finally, mindfulness was unrelated to the permissive parenting style, $r(34) = .03$, $p > .05$.

With respect to parenting styles, an authoritative style was unrelated to either the permissive (r (35) = -.04, p > .05) or authoritarian styles (r (35) = -.09, p > .05). Permissive and authoritarian parenting styles were negatively correlated, though non-significant, r (35) = -.30, p = .08.

Mediational Analyses

The purpose of this investigation was to test the proposition that the relationship between attachment security (as measured by the RQ) and parenting style (as measured by the PAQ-R) would be mediated by the level of mindfulness a parent demonstrates (as measured by the MAAS). As the propensity toward each parenting style was assessed per parent, three mediational analyses could be performed. Baron and Kenny (1986) indicated three requirements that must be met to ensure mediation. First, variation in the independent variable (attachment security) significantly accounts for variation in the mediator (mindfulness). Second, variation in the mediator (mindfulness) significantly accounts for variation in the dependent variable (parenting style). Third, when the mediator (mindfulness) is controlled, the once significant relationship between the independent (attachment security) and dependent variable (parenting style) is no longer significant.

Although this model of mediation analysis will be utilized, it will be done so with one caveat. While Baron and Kenny (1986) suggested that the original relationship between the independent and dependent variables must be significant to warrant the pursuance of an analysis of this sort (in this case, the relationship between attachment security and parenting style), recent arguments have suggested that this step may not be

necessary (Collins, Graham, & Flaherty, 1998; MacKinnon, 2000; MacKinnon, Krull, & Lockwood, 2000; Shrout & Bulger, 2002). Shrout and Bulger (2002) suggested that the "mediational analysis proceed on the basis of the strength of the theoretical arguments rather than on the basis of the statistical test (of the relationship between the independent and dependent variable)" (p. 430). This is important with respects to the current study as attachment security demonstrated varying trends toward significance with the three parenting styles. Nonetheless, these trends are in the predicted direction and two (authoritative and permissive) are nearing significance.

In following Baron and Kenny's (1986) steps, a hierarchical regression was performed for only the *authoritative* parenting style. The second step in this analysis requires that the mediator and outcome variables to be significantly correlated; mindfulness is not significantly correlated with either the authoritarian or permissive parenting styles and so mediational analyses can not be performed for these two parenting styles. Thus, this analysis will proceed forward only with the authoritative style. As was noted above, the initial relationship between attachment security and an authoritative parenting style was non-significant but in the predicted direction, $p = 0.14$ (two-tailed; $p = .07$, one tailed). This general trend, as well as the theoretical argument for the relationship between these two variables warranted pursuing this model. With regards to steps one and two of Baron and Kenny's (1986) model, mindfulness (the mediator) was positively correlated with both the predictor, attachment security ($r (34) = .41, p < .02$) and the outcome, an authoritative parenting style ($r (34) = .53, p < .01$). A regression with both attachment security and mindfulness predicting an authoritative parenting style was performed. When mindfulness was controlled, the reduction in the

85

significance of attachment security's relationship with an authoritative parenting style was measured. A Sobel's test confirmed that this reduction was significant (1.97, $p < .05$). Thus, the likelihood that a secure internal working model would be related to an authoritative parenting style was mediated by the level of mindfulness demonstrated by the parent.

Chapter IX

DISCUSSION

In accordance with the theoretical arguments presented in this paper, the present study found support for the mediating effects of mindfulness on the relationship between attachment security and an authoritative parenting style. It should be noted that this finding indicated *partial* rather than *full* mediation. Full mediation refers to the process wherein the introduction of the mediator to the original relationship completely explains the original correlation initially found between two variables. Partial mediation, as was found in this project, indicates that the mediator explains a significant portion of the original relationship, but that there are other extenuating variables as well. Potential explanations for partial mediation include: (1) the independent variable exerts a direct effect on the outcome variable in addition to its indirect effect through the mediator, and (2) there are other mediating processes that have not been measured and, if they were measured along with the identified mediator, would likely result in full mediation (Shrout & Bolger, 2002). This topic will be explored further in the conclusion section that follows.

The proposed relationships between attachment security and the three parenting styles were not supported. While each of the correlations was in the predicted direction, none of the three relationships was significant. Even so, it should be noted that one-tailed tests demonstrated a trend in the predicted direction for the relationship between an authoritative parenting style and a secure internal working model (r (35) = .25, p = .07)

and a significant negative relationship between a permissive parenting style and a secure internal working model (r (35) = -.29, p = .05). Further investigation is required before the meaning of these findings can be better understood.

The predicted relationship between attachment security and mindfulness was supported. An individual deemed secure was more likely to demonstrate increased levels of mindfulness than was an individual deemed insecure. It should be noted that while causality was suggested with respect to the mediated model, this can not be supported by the present data. As such, it is unclear whether a secure internal working model leads toward the development of increased levels of mindfulness, or if the opposite is true. This will need to be addressed in future research.

The predicted relationships between mindfulness and the three parenting styles were only partially supported. As predicted, an authoritative parenting style was related to increased levels of mindfulness. A trend in the predicted direction indicated that an authoritarian parenting style was related to decreased levels of mindfulness. A one-tailed test shows this relationship to be significant, r (34) = -.32, p = .03. The data demonstrated no relationship between a permissive parenting style and the level of mindfulness an individual demonstrates.

The discrepancy between the two non-authoritative parenting styles with respect to their relationships with mindfulness may be related to the reliability issues that the PAQ-R demonstrated. As was noted above, the permissive scale evidenced a low level of internal consistency (.47), particularly when compared to the authoritarian scale (.75). Although further investigations are necessary to address this possibility, issues of

measure reliability may explain the variable findings that were noted with respect to mindfulness and the non-authoritative parenting styles.

It should be further noted that, of the three measures utilized, only the MAAS demonstrated good reliability. The categorical nature of the RQ made it impossible to ascertain whether attachment security was in fact being measured accurately. As the RQ data demonstrated, the current population evidenced a considerably high level of insecure respondents when compared to previously published averages. In fact, more individuals reported a fearful classification than did those who reported a secure classification. The limited demographic data does not allow for further investigations into this issue, particularly in addressing why this population evidenced a high concentration of insecurely attached as opposed to securely attached individuals. Nonetheless, nearly a third of the current population reported a secure classification which allowed for the correlational and mediational analyses to be performed. As was discussed, the PAQ-R demonstrated a number of problems with respect to internal consistency issues. While the authoritarian and authoritative scales demonstrated moderate reliability, the permissive scale was quite low. These reliability issues suggest that further investigations are necessary to support the findings demonstrated in the current project.

Chapter X

CONCLUSION

The primary purpose of this study was to develop a more concise understanding of the nature of the relationships that exist between an individual's attachment security, the level of mindfulness they demonstrate, and their parenting style. Each of these literatures was explored and cases were made for the specific manners in which each would relate. It was suggested that attachment security, as reflected in the security or insecurity of an individual's internal working model, would be related to the individual's parenting style in predictable ways. In particular, a secure internal working model would likely facilitate an authoritative parenting style, while an insecure internal working model would facilitate a non-authoritative parenting style. The general pattern of trends supported this argument for the authoritative and permissive parenting styles (for one-tailed tests), but not for the authoritarian style.

Arguments were made for the specific manner in which mindfulness should relate to secure and insecure attachment security, and to authoritative and non-authoritative parenting styles as well. In particular, it was hypothesized that a secure individual should be more likely to demonstrate higher levels of mindfulness than an insecure individual. This was supported by the findings noted above. Additionally, it was proposed that a more mindful individual would be more likely to demonstrate an authoritative parenting style, while a less mindful individual would be more likely to demonstrate a non-authoritative parenting style. These patterns were supported for the authoritative style,

were in the predicted direction though non-significant ($p = .06$) for the authoritarian style, and were not supported for the permissive parenting style.

The nature of these findings only allowed for the examination of one mediational model, that being for the authoritative parenting style. It was predicted that the relationship between an individual's attachment security and their parenting style would be mediated by the level of mindfulness they demonstrated. Findings supported this hypothesis for the authoritative parenting style and partial mediation was demonstrated.

Investigating Partial Mediation

As was noted above, partial mediation indicates that there are intervening effects that have not been accounted for. Two potential explanations for partial, rather than full, mediation will be further explored here. The first will address the measures utilized in this study, and discuss their relevance and appropriateness for this project. Second, it will be suggested that there are other mediating processes that have not been accounted for with this model. Finally, it will be suggested that the inclusion of mediating variables in addition to mindfulness, as measured here, should result in a more complete, accurate, and explanatory model.

The Measures Utilized: Their Relevance and Appropriateness

The Relationship Questionnaire

The self-report attachment measure that was utilized for this study (RQ; Bartholomew & Horowitz, 1991) was designed to assess an individual's attachment security as it relates to general adult relationships (i.e., peer and romantic). In essence,

the measure utilized here provides a snapshot of the individual's working model of adult relationships as they report it to be in the here-and-now. With respect to the individual's attachment security and its relationship to their level of mindfulness, this may be of little concern for the present study. In each case, the measures provide an assessment of the individual's quality of mind in the here-and-now and should thus be reasonably related. Potential problems arise though in the comparison of attachment security and the individual's parenting style.

As was discussed above, current theory on internal working models suggests a hierarchical system that likely incorporates a number of models, ranging from general to very specific in their formulations (Shaver & Mikulincer, 2002b). Simpson and Rholes (1998) argue that self-report measures, such as the RQ which is utilized here, are more appropriate for measuring adult relationships, but "poorer at indexing working models that govern parenting and caregiving" (p. 7). In this respect, there may be a methodological discrepancy between the level of mental representation that is being assessed in each of the measures. As such, an attachment measure that incorporates a model of caregiving may be more appropriate for a study of this type. This issue will be explored further in the section on other mediating processes presented below.

An additional critique has questioned the ability of self-report measures to tap into the potentially inaccessible unconscious aspects of an individual's internal working model (Crowell & Treboux, 1995). Bartholomew and Shaver (1998) note that self-report measures "focus on conscious, potentially inaccurate summaries by a person of his or her own experiences and behaviors" (p. 29). This is contrasted with measures such as the AAI that indirectly measure attachment security and are thus less affected by conscious

manipulations. Even so, it has been argued that self-report measures can provide adequate and accurate representations of an individual's internal working models.

> Self report measures of attachment, like interview measures, do not require that people understand or probe into their own dynamics and defenses. Self-report measures require only a modicum of familiarity with one's own feelings, social behavior, and beliefs about relationships and the feedback one has received from relationship partners. It is possible to classify people on these grounds without them understanding their own histories or dynamics. (Brennan, Clark, & Shaver, 1998, p. 68)

Thus, while it seems that some self-reports may provide a more adequate fit for measuring the model of focus, self-report measures can be utilized successfully in determining an individual's underlying internal working models. As was noted above, it was not possible to gauge whether this measure accurately assessed the participants' internal working models. Comparison with the population of previous studies suggested a much lower level of securely attached individuals than has been reported in the past. Whether this is a reflection of the measure or of the population is uncertain. As such, future projects should provide means through which the accuracy of this measure can be assessed.

The Mindful Attention Awareness Scale

The mindfulness measure utilized (MAAS; Brown & Ryan, 2003) has demonstrated good psychometric properties and to date has not been reported to exhibit any significant methodological problems. Similar findings with respect to a single factor structure and good internal reliability were demonstrated with the current study as well.

93

The MAAS has demonstrated mixed results in terms of social desirability. It was modestly correlated with the Marlowe-Crowne, but unrelated to the MMPI Lie scale (Brown & Ryan, 2003). Additionally, the authors note the absence of a positive relationship between the MAAS and public self-consciousness, and suggest that this indicates social desirability may be of less concern (2003). As such, issues of social desirability are not clear at this time. As the mindfulness field is just now beginning to expand, there exist few other measures to compare with the MAAS. Future research should provide further evidence for the strengths and weaknesses of this particular measure of mindfulness.

The Parental Authority Questionnaire – Revised

The parenting style measure utilized (PAQ-R; Reitman, Rhode, Hupp, & Altobello, 2002) has demonstrated some psychometric problems, primarily in accordance with minority and lower SES populations. This study evidenced similar problems related to internal consistency and therefore limits the generalizability of the findings here. Additionally, this further emphasizes the need for extended exploration and replication of the current findings. Furthermore, the PAQ-R has shown that the permissive and authoritative scales are unrelated to social desirability, but that the authoritarian scale is related to desirability (Reitman, Rhode, Hupp, & Altobello, 2002). While the nature of this study limited the possibility of direct observations of parent-child dyads, it is likely that this would provide a more reliable measure of parenting attitudes and help to manage issues related to social desirability as well. The moderate internal reliability of this measure suggests that further development of this model, or new measures altogether, should be pursued in the future.

94

Unmeasured Mediating Processes

As was noted above, partial mediation suggests, among other possibilities, that particular important variables that mediate the model in addition to the identified mediator have gone unmeasured. The findings of this project suggest that mindfulness, while significantly mediating the relationship between attachment security and parenting style, is not alone. There are other potential mediators that, as of yet, have not been identified and incorporated into the model. The following sections will address potentially related concepts that could account for the unmeasured mediational effects.

Maternal Representation and the Caregiving Model

Mayseless (2006) noted that from very early in the development of attachment theory Bowlby discussed two independent, but interdependent systems: the attachment system and the caregiving system. The attachment system reflects the model the infant develops in accordance with his need for security with the caregiver and is reflected in the majority of attachment research that exists today. The caregiver system reflects the model a parent utilizes in her attempts to care for and protect her child. This area of research is only beginning to be developed (2006).

Interest in the caregiving system has led to the development of the concept of *parental representations.* These representations reflect the "parent's views, emotions, and internal world regarding their parenting" (Mayseless, 2006, p. 4) and are theorized to mirror the attributes of the attachment focused internal working model. Parental representations have been shown to correlate with both parent attachment security and infant attachment security. Importantly, parental representations, though related to adult

attachment security, are independent and thus identifiable as a separate construct (2006). In addition to these findings, parental representations have been shown to be related to maternal behaviors in the home and laboratory and to child developmental outcomes (2006).

It has been argued that parental representations may provide a more proximal relationship to actual caregiving attributes than would attachment security as related to the adult's own development (i.e., attachment security derived from their own experience as an infant) (Mayseless, 2006, Slade, Belsky, Aber, & Phelps, 1999). Slade et al. (1999) noted that while maternal representations are linked to a mother's attachment security (as measured through the AAI) they are also related to her actual experiences with her child. In this sense, parental representations (i.e. the caregiving model) may mediate the empirically supported relationship between a parent's attachment status and her respective parenting attributes. Slade et al. (1999) investigated this model and examined the potential mediating effects of maternal representation of caregiving on the relationship between maternal attachment security and maternal parenting attributes. While maternal representation was found to significantly relate to both maternal attachment security and parenting attributes, it did not significantly mediate the relationship. The authors note that the reciprocal relationship of these variables may explain this finding. More specifically, they suggest that the temperamental features of the child likely impact both parenting behaviors and maternal representations of the caregiving process.

This suggests two important points. First, parental representations characterize an independent attribute that, though related to attachment security, stands alone with

respect to its effects on parenting. It therefore provides a more proximal relationship to parenting attributes. In considering the current study then, maternal representation of caregiving may prove to be an additional mediator between adult attachment security and parenting style, and as such, could account for a portion of the unmeasured mediation. Second, the comments by Slade et al. (1999) also highlighted the importance of the infant or child in the parenting process. This suggests that independent effects may be exerted by the child as well. Child attributes and their potential mediating effects on the relationship between parental attachment security and parenting style will be explored in the section that follows.

Child Effects

The measures in this study have been restricted to *intrapersonal* attributes of the parent. Nonetheless, other than mindfulness, the attributes measured are reflective of *interpersonal* processes. The internal working model, though held within as a representation, is forged in the interpersonal world, and is shaped and modified by the lived experiences of the person. Parenting style, although characterizing the internal attitudes of the parent, reflects the goals and values that the parent holds for both self and others, and is likely shaped just as much by the parenting process. Thus, what has up to this point been discussed primarily within the realm of the individual, is largely reflective of an interpersonal experience. Of particular importance for this discussion is the impact that the infant or child makes on the parent.

Spera (2005) noted, "The socialization process is bidirectional in that parents convey socialization messages to their children, but their children vary in their level of acceptance, receptivity, and internalization of these messages" (p. 126). There are a

97

number of findings in the literature that support the independent effects that children exert on the parenting process. For example, Deckard and O'Connor (2000) examined the quality of parent-child interactions across multiple populations of fraternal and identical twins and biological and adoptive siblings. They found considerable evidence to suggest biological temperament effects were important in shaping the quality of the parent-child dyad. Kochanska's (1997, 2002) work recognized the importance of considering child-effects and has moved in the direction of studying the dyad rather than focusing solely on the parent. She emphasized the importance of both the parent and the child's individual attributes in the formation of the quality of the relationship. She described a "mutually responsive orientation" as a relationship that is affectively warm, cooperative, and close (2002). In support of Darling and Steinberg's (1993) propositions about the parenting process, Kochanska found that particular parenting attributes affect the child's willingness to be socialized, which then facilitates further socialization practices on the part of the parent (1997, 2002). Deckard and O'Connor's (2000) findings though, emphasize that particular temperamental qualities of the child can influence the effectiveness of this process.

It is not a grand statement to suggest that children shape the manner in which they are parented. While parents can do a great deal in their attempt to enact their desired socialization goals for their child, the effectiveness of these practices is in the end dependent on the child's willingness to be socialized. It can be argued that the ease with which this process unfolds can variably strengthen or weaken the attitudes the parent holds about the parenting process. In this respect, it is likely that child-effects

independently impact the relationship between attachment security and parenting style as well.

Future Directions

This project has attempted to bring together multiple fields of psychological investigation in the hopes of arriving at a more fully developed understanding of the factors that impact the parenting process. In doing so, a number of interesting findings have arisen. These include the relationships between mindfulness and attachment security, the impact of mindfulness on the attitudes a parent holds about the socialization process, and the mediating properties of mindfulness on the relationship between attachment security and an authoritative parenting style.

It should be noted that although causality can be implied from the model used in this project, the methods undertaken cannot support such an assertion. Further investigations that are interested in the causal factors underlying the development of these mental attributes must incorporate a methodology that allows for such an investigation. As such, a number of improvements could be made with regards to this current project. Multi-method approaches for the measurement of attachment security are recommended. Interview-measures of attachment allow for particular developmental arguments to be made that cannot be done with the self-report measures utilized here. Further, observational methods may prove to provide greater accuracy in measuring what is intended as well as offering a means for avoiding potential problems with social desirability that have been addressed above.

In addition, as has been noted, parenting is a highly complex and multifaceted process. A number of variables that have not been accounted for in this project may have nonetheless been present and exerted influences that were not measured. These include parental caregiving representations and various child-effects that could influence the parenting process.

Finally, the population that was utilized in this study was limited in its diversity. Although there was adequate variation in SES and marital status, the population was predominantly represented by educated, Caucasian women. Future studies should seek more varied populations that include greater variability in ethnicity. Additionally, the current population evidenced an abnormally high level of insecurely attached mothers when compared to general population figures. The basis for this abnormality is unclear. Whether it stands as an accurate reflection of the population studied or is related to measurement issues could not be determined from the available data. Lastly, as this study has limited its investigation to the measurement of these attributes in mothers, it will be important to expand the analysis to include fathers as well.

LIST OF REFERENCES

LIST OF REFERENCES

Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant Care and the Growth of Love.*

    Baltimore: Johns Hopkins University.

Ainsworth, M. & Bell, S. (1970). Attachment, exploration, and separation: Illustrated by

    the behavior of one-year-olds in a strange situation. *Child Development, 41(1),*

    49-67.

Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of Attachment: A*

    Psychological Study of the Strange Situation. Hillsdale, NJ: Erlbaum.

Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in

    social psychological research: Conceptual, strategic, and statistical considerations.

    Journal of Personality and Social Psychology, 51(6), 1173-1182.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of*

    Social and Personal Relationships, 7, 147-178.

Bartholomew, K. & Horowitz, L. M. (1991). Attachment styles among young adults: A

    test of a four-category model. *Journal of Personality and Social Psychology,*

    61(2), 226-244.

Bartholomew, K. & Shaver, P. R. (1998). Methods of assessing adult attachment: Do

    they converge? In J. Simpson & W. Rholes (Eds.), *Attachment theory and close*

    relationships (pp. 25-45). New York: The Guilford Press.

Batten, S. V. & Santanello, A. P. (2007). Review of mindfulness and acceptance:

    Expanding the cognitive-behavioral tradition. *Clinical Psychology Review,* 27(3),

    406-407.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool

  behavior. *Genetic Psychology Monographs, 75,* 43-88.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*

  Monographs, 4 (2, Pt. 2).

Baumrind, D. (1978). Parental disciplinary patterns and social competencies in children.

  Youth and Society, 9, 239-275.

Baumrind, D. (1989). Rearing competent children. In W. Damon (Ed.), *Child*

  development today and tomorrow (pp. 349-378). San Francisco: Jossey-Bass.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and

  substance use. *Journal of Early Adolescence, 11(1),* 56-95.

Bedard, M., Felteau, M., Gibbons, C., Klein, R., Mazmanian, D., Fedyk. K., & Mack, G.

  (2005). A mindfulness-based intervention to improve quality of life among

  individuals who sustained traumatic brain injuries: One-year follow-up. *Journal*

  of Cognitive Rehabilitation, 23(1), 8-13.

Belsky, J. (2002). Developmental origins of attachment styles. *Attachment and Human*

  Development, 4(2), 166-170.

Biringen, Z., Brown, D., Donaldson, L., Green, S., Krcmarik,S., & Lovas, G. (2000).

  Adult Attachment Interview: Linkages with dimensions of emotional availability

  for mothers and their pre-kindergarteners. *Attachment and Human Development.*

  2(2), 188-202.

Bishop, S., Lau, M., Shapiro, S., Carlson, L., Anderson, N., Carmody, J., Segal, Z.,

  Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A

proposed operational definition. *Clinical Psychology: Science and Practice, 11(3),* 230-241.

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment.* New York: Basic Books.

Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation.* New York: Basic Books.

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development.* Basic Books: London.

Brennan, K. A., Clark, C. C., & Shaver, P. R. (1998). In J. Simpson & W. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: The Guilford Press.

Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology, 28(5)*, 759-775.

Bretherton, I. (2005). In pursuit of the internal working model construct and its relevance to attachment relationships. In K. E. Grossman, K. Grossman, & E. Waters (Eds.), *Attachment from infancy to adulthood* (pp. 13-45). New York: The Guilford Press.

Brown, K. W. & Ryan, R. M. (2001). *Testing a two-factor model of mindfulness.* Unpublished data, University of Rochester.

Brown, K. W. & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84(4),* 822-848.

Brown, K. W. & Ryan, R. M. (2004). Perils and promise in defining and measuring mindfulness: Observations from experience. *Clinical Psychology: Science and Practice, 11(3),* 242-248.

Buri, J. (1991). Parental Authority Questionnaire. *Journal of Personality Assessment, 57(1),* 110-119.

Carlson, L. E. & Brown, K. W. (2005). Validation of the Mindful Attention Awareness Scale in a cancer population. *Journal of Psychosomatic Research, 58,* 29-33.

Carlson, L. E., Speca, M., Patel, K., & Goodey, E. (2004). Mindfulness-based stress reduction in relation to quality of life, mood, symptoms of stress and levels of cortisol, dehydroepiandrosterone sulfate (DHEAS) and melatonin in breast and prostate cancer outpatients. *Psychoneuroendocrinology, 29(4),* 448-474.

Chang, V., Palesh, O., Caldwell, R., Glasgow, N., Abramson, M., Luskin, F., Gill, M., Burke, A., Koopman, C. (2004). The effects of mindfulness-based stress reduction program on stress, mindfulness self-efficacy, and positive states of mind. *Stress and Health,* 20, 141-147.

Collins, L. M., Graham, J. W., & Flaherty, B. P. (1998). An alternative framework for defining mediation. *Multivariate Behavioral Research, 33,* 295-312.

Collins, N. L. & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58(4),* 644-663.

Crittenden, P. M. (1990). Internal representational models of attachment relationships. *Infant Mental Health Journal, 11(3),* 259-277.

Crowell, J. A. & Treboux, D. (1995). A review of adult attachment measures: Implications for theory and research. *Social Development, 4(3),* 294-327.

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin, 113(3),* 487-496.

Davidson, R., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S., Urbanowski, F., Harrington, A., Bonus, K., & Sheridan, J. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine, 65*, 564-570.

Deater-Deckard, K. & O'Connor, T. G. (2000). Parent-child mutuality in early childhood: Two behavioral genetic studies. *Developmental Psychology, 36,* 561-570.

Delmonte, M. (1990). Meditation and change: Mindfulness versus repression. *The Australian Journal of Clinical Hypnotherapy and Hypnosis, 11(2),* 57-63.

Dornbusch, S. M., Ritter, P. L., Leiderman, P. H., & Roberts, D. F. (1987). The relation of parenting style to adolescent school performance. *Child Development, 58(5)*, 1244-1257.

Fonagy, P. & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and Psychopathology, 9,* 679-700.

Fox, N. A., Kimmerly, N. L. & Schafer, W. D. (1991). Attachment to mother/attachment to father: A meta-analysis. *Child Development, 62(1),* 210-225.

George, C., Kaplan, N., & Main, M. (1985). *Attachment interview for adults.* Unpublished manuscript. University of California, Berkley.

Griffin, D. & Bartholomew, K. (1994). Models of self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology, 67(3),* 430-445.

Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research, 57*, 35-43.

Haag, I. P. (2005). *Attachment security: The genesis of parenting style?* Unpublished

    manuscript. The University of Tennessee, Knoxville.

Hamilton, C. (1995). *Continuity and discontinuity of attachment from infancy through*

    adolescence. (Paper presented at the Biennial Meeting of the Society for

    Research in Child Development, Indianapolis, Indiana).

Harlow, H. & Zimmerman, R. (1958). The development of affectional responses in

    infant monkeys. *Proceedings of the American Philosophical Society, 102*, 501-

    509.

Hazan, C. & Shaver, P. (1987). Conceptualizing romantic love as an attachment process.

    Journal of Personality and Social Psychology, 52, 511-524.

Jones, E. (1996). Introduction to the special section on attachment and psychopathology:

    Part 1. *Journal of Consulting and Clinical Psychology, 64,* 5-7.

Kabat-Zinn, J. (2003). Mindfulness based interventions in context: Past, present, and

    future. *Clinical Psychology: Science and Practice, 10(2),* 144-156.

Kabat-Zinn, J. (1990). *Full catastrophe living; Using the wisdom of your mind to face*

    stress, pain, and illness. New York: Dell.

Kabat-Zinn, J., Massion, A., Kristeller, J., Peterson, L., et al. (1992). Effectiveness of a

    meditation-based stress reduction program in the treatment of anxiety disorders.

    American Journal of Psychiatry, 149(7), 936-943.

Kerr, M., & Stattin, H. (2000). What parents know, how they know it, and several forms

    of adolescent adjustment: Further support for a reinterpretation of monitoring.

    Developmental Psychology, 36(3), 366-380.

Kochanska, G. (1997). Mutually responsive orientation between mothers and their young

    children: Implications for early socialization. *Child Development, 68(1),* 94-112.

Kochanska, G. (2002). Mutually responsive orientation between mothers and their young

    children: A context for the early development of conscience. *Current Directions*

    in Psychological Science, 11(6), 191-195.

Kristeller, J. & Hallett, B. (1999). An exploratory study of a meditation-based

    intervention for binge eating disorder. *Journal of Health Psychology, 4(3),* 357-

    363.

Lamborn, S.D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of

    competence and adjustment among adolescents from authoritative, authoritarian,

    indulgent, and neglectful families. *Child Development, 62,* 1049-1065.

Langer, E. J. & Moldoveanu, M. (2000). The construct of mindfulness. *Journal of*

    Social Issues, 56(1), 1-9.

Lewis, C. C. (1981). The effects of parental firm control: A reinterpretation of findings.

    Psychological Bulletin, 90(3), 547-563.

Maccoby, E. E. (2007). Historical overview of socialization research and theory. In E.

    Joan & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research.*

    New York: Guilford Press, pp. 13-41.

Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family:

    Parent-child interaction. In P. H. Mussen (Series Ed.) & E. M. Hetherington (Vol.

    Ed.), *Handbook of Child Psychology: Vol. 4. Socialization, Personality, and*

    Social Development (4th ed., pp. 1-101) New York: Wiley.

Mackenzie, M. J., Carlson, L. E., Munoz, M., & Speca, M. (2006). A qualitative study of
self-perceived effects of mindfulness-based stress reduction (MBSR) in a
psychosocial oncology setting. *Stress and Health, 23,* 59-69.

Main, M. (1991). Metacognitive knowledge, metacognitive monitoring, and singular
(coherent) vs. multiple (incoherent) model of attachment. In C. Parkes, J.
Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 127-
159). New York: Tavistock/Routledge.

Main, M. (1996). Introduction to the special section on attachment and psychopathology:
Part 2. Overview of the field of attachment. *Journal of Consulting and Clinical
Psychology, 64(2),* 237-243.

Main, M. & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to
infant disorganized attachment status: Is frightened/frightening parental behavior
the linking mechanism? In M. T. Greenberg, D. Cicchetti, & E. M. Cummings
(Eds.), *Attachment in the Preschool Years: Theory, Research, and Intervention*
(pp.161-182). Chicago, IL: University of Chicago Press.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and
adulthood: A move to the level of representation. *Monographs of the Society for
Research and Development, 50* (1-2, Serial No. 209).

Main, M., & Solomon, J. (1986). Discovery of an insecure-disorganized/ disoriented
attachment pattern: Procedures, findings and implications for the classification of
behavior. In T. B. Brazelton & M. Yogman (Eds.), *Affective Development in
Infancy,*(pp. 95-124). Norwood, NJ: Ablex.

MacKinnon, D. P. (2000). Contrasts in multiple mediator models. In J. S. Rose, L.

      Chassin, C. C. Presson, & S. J. Sherman (Eds.), *Multivariate applications in*

      substance use research: New methods for new questions (pp. 141-160). Mahwah,

      NJ: Erlbaum.

MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the

      mediation, confounding and suppression effects. *Prevention Science, 1,* 173-181.

Marcus, M., Fine, M., Moeller, F., Khan, M., Pitts, K., Swank, P., & Liehr, P. (2003).

      Change in stress levels following mindfulness based stress reduction in a

      therapeutic community. *Addictive Disorders and Their Treatment, 2(3),* 63-68.

Martin, J. (1997). Mindfulness: A proposed common factor. *Journal of Psychotherapy*

      Integration, 7(4), 291-312.

Mayseless, O. (2006). Studying parenting representations as a window to parents'

      internal working model of caregiving. In O. Mayseless (Ed.), *Parenting*

      Representations: Theory, research, and clinical implications, (pp. 3-40). New

      York: Cambridge University Press.

Miller, J., Fletcher, K., Kabat-Zinn, J. (1995). Three-year follow-up and clinical

      implications of a mindfulness meditation-based stress reduction intervention in

      the treatment of anxiety disorders. *General Hospital Psychiatry, 17,* 192-200.

Pauley, G. (2006). Review of mindfulness and psychotherapy. *Psychology and*

      Psychotherapy: Theory, Research, and Practice, 79(4), 650-651.

PsycINFO (2007). Search with "mindfulness" in the subject heading.

Ramel, W., Goldin, P., Carmona, P., & McQuaid, J. (2004). The effects of mindfulness

meditation on cognitive processes and affect in patients with past depression.

Cognitive Therapy and Research, 28(4), 433-455.

Reitman, D., Rhode, P. C., Hupp, S. & Altobello, C. (2002). Development and validation

of the parental authority questionnaire – revised. *Journal of Psychopathology and*

Behavioral Assessment, 24(2), 119-127.

Rosenzweig, S., Reibel, D., Greeson, J., Brainard, G., Hojat, M. (2003). Mindfulness-

based stress reduction lowers psychological distress in medical students.

Teaching and Learning in Medicine, 15(2), 88-92.

Shaver, P. R., Collins, N., & Clark, C. L. (1996). Attachment styles and internal working

models of self and relationship partners. In G. Fletcher & J. Fitness (Eds.),

Knowledge structures in close relationships: A social psychological approach (pp.

25-61). Hillsdale, NJ: Erlbaum.

Shaver, P. R. & Mikulincer, M. (2002a). Attachment Related Psychodynamics.

Attachment and Human Development, 4(2), 133-161.

Shaver P. R. & Mikulincer, M. (2002b). Dialogue on adult attachment: Diversity and

integration. *Attachment and Human Development, 4(2),* 243-257.

Shrout, P. E. & Bolger, N. (2002). Mediation in Experimental and nonexperimental

studies: New procedures and recommendations. *Psychological Methods, 7(4),*

422-445.

Simpson, J. A. & Rholes, W. S. (1998). Attachment in adulthood. In J. Simpson & W.

Rholes (Eds.), *Attachment theory and close relationships* (pp. 3-21). New York:

The Guilford Press.

Singh, N. N., Lanconi, G. E., Winton, A. S. W., Fisher, B. C., Wahler, R. G., McAleavey, K., Singh, J., & Sabaawi, M. (2007). Mindful parenting decreases aggression, noncompliance, and self-injury in children with autism. *Journal of Emotional and Behavioral Disorders, 14(3),* 169-177.

Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment and Human Development, 7(3),* 269-281.

Slade, A., Belsky, J., Aber, J. L., & Phelps, J. L. (1999). Mothers' representations of their relationships with their toddlers: Links to adult attachment and observed mothering. *Developmental Psychology, 35(3),* 611-619.

Spangler, G. & Grossmann, K. E. (1993). Biobehavioral organization in securely and insecurely attached infants. *Child Development, 64(5),* 1439-1450.

Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review, 17(2),* 125-146.

Steinberg, L., Lamborn, S. D, Darling, N, & Mounts, N. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development 65(3)*, 754-770.

Steinberg, L., Lamborn, S. D., & Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development, 63*, 1266-1281.

Steinberg, L., Mounts, N. S., Lamborn, S. D., & Dornbusch, S. M. (1991). Authoritative parenting and adolescent adjustment across varied ecological niches. *Journal of Research on Adolescence, 1(1),* 19-36.

Tacon, A., Caldera, Y., & Ronaghan, C. (2004). Mindfulness-based stress reduction in
women with breast cancer. *Family Systems and Health, 22(2),* 193-203.

Van Ijzendoorn, M. H. (1995). Adult attachment representations, parental responsiveness,
and infant attachment: A meta-analysis on the predictive validity of the Adult
Attachment Interview. *Psychological Bulletin, 117(3),* 387-403.

Waters, E., Merrick, S., Albersheim, L. & Treboux, D. (1995). *Attachment security from
infancy to early adulthood: A 20-year longitudinal study.* (Paper presented at the
Biennial Meeting of the Society for Research in Child Development, Indianapolis,
Indiana).

Weissbecker, I., Salmon, P., Studts, J., Floyd, A., Dedert, E., & Sephton, S. (2002).
Mindfulness-based stress reduction and sense of coherence among women with
fibromyalgia. *Journal of Clinical Psychology in Medical Settings, 9(4),* 297-307.

Williams, J. M., Teasdale, J., Segal, Z., Soulsby, J. (2000). Mindfulness-based cognitive
therapy reduces overgeneral autobiographical memory in formerly depressed
patients. *Journal of Abnormal Psychology, 109(1),* 150-155.

Wolfsdorf, B & Zlotnick, C. (2001). Affect management in group therapy for women
with posttraumatic stress disorder and histories of childhood sexual abuse.
Journal of Clinical Psychology, 57(2), 169-181.

APPENDICES

	Model of Self (Dependence)	
	Positive (Low)	**Negative** (High)
Positive (Low)	Cell 1 **Secure**	Cell 2 **Preoccupied**
Model of Other (Avoidance)		
Negative (High)	Cell 3 **Dismissive**	Cell 4 **Fearful**

Figure 1. Interactive models of attachment (Bartholomew, 1990).

Table 1

Intercorrelations of Attachment Security, Mindfulness, and Parenting Styles

Subscale	1	2	3	4	5
1. Mindfulness (MAAS[a])	—	.416*	.533**	$-.324^{\dagger}$	.033
2. Attachment Security (RQ[b])		—	.252	-.153	$-.289^{\dagger}$
3. Authoritative Parenting Style (PAQ-R[c])			—	-.087	-.040
4. Authoritarian Parenting Style (PAQ-R)				—	$-.299^{\dagger}$
5. Permissive Parenting Style (PAQ-R)					—

Note. All cells in row 1, n = 34. All cells in rows 2-5, n = 35. One participant did not complete the mindfulness questionnaire.

[a]MAAS = Mindful Attention Awareness Scale; higher scores indicate greater mindfulness. [b]RQ = Relationship Questionnaire; higher score indicates secure attachment, while lower indicates insecurity. [c]PAQ-R = Parental Authority Questionnaire – Revised; higher scores indicate elevated correspondence with this style.

*p < .05, two-tailed. **p < .01, two-tailed. †p < .05, one-tailed

VITA

Ian P. Haag was born in Topeka, Kansas on August 13th, 1978. He attended Topeka public schools and graduated from Topeka High School in May of 1996. He attended Trinity University in San Antonio, Texas, graduating with a Bachelor of Arts in Psychology in May of 2000. Following graduation, Ian returned to Topeka and began working as a staff member on the adolescent inpatient unit at Menninger Psychiatric Hospital. In the fall of 2001, he entered the Social Psychology doctoral program at the University of Nevada, Reno. Finding himself unfilled by purely research-oriented pursuits, he made the decision to return to the clinical setting. Ian left Reno in the fall of 2002 and entered the doctoral program in Clinical Psychology at the University of Tennessee, Knoxville. He received his Master of Arts degree in Psychology in December of 2005.

Ian is presently completing his training in the University of Tennessee Clinical Psychology Program. He will begin his internship at the Albany Psychology Internship Consortium in the Albany Medical Center Department of Psychiatry in the fall of 2007. He will graduate from the clinical program and receive his doctoral degree in the fall of 2008.