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OBJECT REPRESENTATIONS REVEALED IN EARLY MEMORIES AND
THEIR RELATIONSHIP TO MOTHER-INFANT ATTACHMENT

by

Edgar G. Davis

A dissertation submitted to the Graduate Faculty
in Psychology in partial fulfillment of
the requirements for the degree of Doctor of
Philosophy, The City University of New York.

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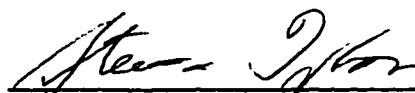
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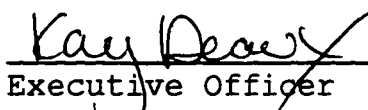
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This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

Object Representations Revealed In Early Memories
And Their Relationship to Mother-Infant Attachmentby
Edgar G. Davis

Adviser: Professor Steve Tuber

This study investigated the degree to which early memories can elucidate mothers' internalized object representations and predict the quality of mother-infant attachment. Thirty-one primiparous women were administered the Mayman Early Memories Test and their early memories were scored using the Krohn Object Representation Scale. Mother-infant attachment was assessed through the administration of the Strange Situation. It was hypothesized that the nature of a mothers' internalized object representations influences her ability to respond empathically to a range of her infant's expressions and to provide sensitive, consistent maternal care. According to attachment theory, these maternal capacities are the primary factors determining the quality of a child's attachment to his mother. No significant relationships, however, were found between Krohn Scale scores for subjects' earliest memories recalled, earliest memories of their mothers recalled, or earliest memories of their fathers recalled and attachment quality. Mothers who did not produce discrete early memories to each of six memory queries were significantly more likely to have an insecurely-attached child.

To my parents, Margaret and Edgar

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INTRODUCTION

[While my family was in France] it was decided to send me to a convent to learn French and to have me out of the way when the new baby arrived. I was not yet six years old. [While at the convent] I fell prey to a temptation. One of the girls swallowed a penny. Every attention was given her, she was the center of everybodys' interest. I longed to be in her place. One day I went to one of the sisters and told her that I had swallowed a penny. It must have been evident that my story was not true, so they sent for my mother. She took me away in disgrace. (Eleanor Roosevelt, 1937)

I remember when I was five or six. It was a Sunday evening, the only time my parents did not have to work. They put me to bed and went to Hyde Park for a stroll. They were sure I would be asleep until their return. But I woke up, called out, and no one answered. Nothing but night all around me. Shaking, I got up, wandered around the empty, dark house and, finally arriving in the kitchen, found a piece of cold meat which I ate while drying my tears. (Alfred Hitchcock, 1960; Spoto, 1983)

Roosevelt considered her early memory revealing of her emotional experiences as a child and of the nature of many of her early significant relationships. She interpreted the memory as reflecting her childhood loneliness, her longings for approval and attention, and her conviction that she was a disappointment to her mother. In her autobiography, in which she disclosed this memory, Roosevelt formed no associations between the feelings and fantasies expressed in this childhood recollection and the nature of her affective and interpersonal experiences as a mother and an adult.

Hitchcock divulged his memory in an interview and

considered it meaningful both in terms of his childhood and adulthood experiences. To him it communicated his fear of abandonment and of the "unexpected", which affected his capacity to have close interpersonal relationships throughout his life and influenced so much of his professional career.

The meanings of childhood memories have been debated by theorists and researchers for much of this century. Freud (1899/1950) believed early memories distort or "screen" unconscious material, usually from the Oedipal period of development, in order to protect a person from anxiety. For Freudians, "the early memory is a product of and about the past, which is retained in the present" (Bruhn, 1990). Others (Adler, 1937; Bruhn, 1990) view early memories primarily as self-fabrications that mirror a person's present attitudes, conflicts, and fantasies. Some object relations psychologists (Mayman, 1960) contend that early memories reveal internalized mental representations of relationships and reflect one's current interpersonal predispositions.

This study further investigates the degree to which early memories can elucidate an individual's internalized object representations and predict the quality of interpersonal interaction in a significant relationship. The research involved the collection of early childhood memories from a group of first-time mothers, and the assessment of the

developmental level of object representation revealed in their memories. It then attempted to predict the quality of attachment between the mothers and their 14-month old infants. It was hypothesized that the nature of a mother's internalized object representations influences her ability to respond empathically to a range of her infant's expressions and provide sensitive, consistent maternal care. According to attachment theory, these maternal capacities are the primary factors which determine the quality of a child's attachment to his mother. This study further investigates the convergences between object relations theory and attachment theory, particularly the associations between a mother's internal object world and her child's developing internal working models of relationships.

The first three chapters review the relevant literature for each of the primary domains covered in this study: object relations, attachment, and early memories. Brief descriptions of the theories of Fairbairn and Kernberg are included in the first chapter because of their important influences on current conceptualizations of object relations and how it has been researched.

CHAPTER ONE

OBJECT RELATIONS

Object Relations Theories

Early in this century, Freud introduced the concept of object relations as part of his drive model of personality development (1915/1957). He regarded biological drives and their derivatives to be the chief determinants of psychic structure and behavior. Humans seek objects of an animate or inanimate nature in order to satisfy their drives and reduce bodily tension. According to Freud, object relations are totally embedded within a framework of biological instincts.

Some psychoanalytic theorists later disagreed with Freud about the predominance he attributed to drives. Fairbairn (1954) emphasized the central role of actual object relationships with other humans in the development of structures of the mind and of personality. Fairbairn (1954) believed the primary motivation for humans is not the satisfaction of drives, but the formation of relationships with other people. Children internalize, that is form mental representations, of aspects of relationships with significant others, particularly their parents. According to Fairbairn (1954), these internal objects are dynamic in nature and are independent agencies continually interacting with other

structures of the mind. In his conceptualization an infant mentally separates or "splits" his mother into two partial objects, the good object who pleases the infant, and the bad object who disappoints or frustrates him. When the infant internalizes the "bad mother" aspects of the relationship, he takes possession of them so that he becomes the "bad person", while his mother is perceived as "all good". Through this process of splitting and internalization, the infant defends himself against the anger and frustration he would otherwise feel when his mother disappoints him. Fairbairn (1954) argued that internalized objects interact with other psychic structures and influence expectations, feelings and behaviors in other relationships. It is only when the caregiver is especially disappointing and frustrating that a child's internalized bad objects prevent him from having mature, trusting relationships later in life. Fairbairn (1954) believed that in normal development an individual is increasingly able to differentiate himself, in terms of feelings and needs, from others. A person gradually becomes less narcissistically focused and develops a greater capacity for mutuality in relationships.

Other theorists, such as Kernberg (1976), have attempted to integrate Freud's drive model with an object relations perspective. Kernberg (1976) asserts that early significant

relationships are internalized and that each internal representation contains three aspects, an image of the object in the environment, an image of the self in interaction with the object, and a feeling that "colors" the object image and the self-image. Internal representations of affective experiences with gratifying caregivers accumulate and form the libidinal drives, while bad affective experiences constitute the aggressive drives. In Kernberg's model (1976) internal representations serve as the basis for the psychic structures of id, ego and superego and the internalization of objects has three developmental levels: introjection, identification, and ego identity (Kernberg, 1976). When an object is introjected, the self-representation and object representation are not yet differentiated from each other, and the feelings linking both are primitive and strong. Identification reflects the recognition and internalization of the role aspects of interactions with people and allows for better integration and modulation of emotions. Ego identity refers to the capacity of a person's ego to organize and differentiate internal objects, forming a stable sense of self and other.

Behrends and Blatt (1985, 1987) proposed their own model of the nature and process of internalization. They believe internalization requires regulatory, gratifying interactions with a human object, followed by "experienced

incompatibilities", when the object temporarily fails to gratify the individual. When gratification is disrupted, a person attempts to preserve the psychologically significant aspects of the relationship through internalization. A child, for example, may internalize his mother's ministrations and emotional attunement. It is primarily through the internalization of gratifying aspects of relationships, according to this model, that psychological development occurs, including the process of separation-individualization and the formation of psychic structures. Behrends and Blatt (1987, 1987) view their model of internalization and psychological growth as occurring throughout the life-cycle.

The theories of Fairbairn, Kernberg, and Behrends and Blatt have considerably influenced current conceptualizations of object relations. Although there are differences between object relations theorists, particularly over the nature and process of internalization, there are also many important convergences (Greenberg and Mitchell, 1983). Object relations theorists agree that relationships with people, particularly primary caregivers, are the primary factor influencing personality development. In normal psychological development, internal representations begin as vague, diffuse and inconsistent bodily experiences of pleasure and displeasure. They gradually become more differentiated, consistent and

relatively realistic representations of the self and the object world (Arcaya and Gerber, 1990). Object relations psychologists agree that throughout life a person interacts not only with external, actual others, but with internal others, representations of interpersonal relationships which influence a person's affective states, observable behavior and social style.

The Assessment of Object Representations'

Most frequently, researchers have used projective psychological tests, especially the Rorschach, to evaluate object representations in individuals and elucidate "the developmental level and quality of interpersonal relationships to which an individual is predisposed" (Blatt and Lerner, 1983). Other sources of data, in these types of studies, such as early memories (Mayman, 1968) and manifest dreams (Brenneis, 1971) have also been utilized. The variables of object representation investigated by Mayman (1967), Blatt (1976), and Urist (1977) have significantly affected the development and interpretation of numerous object relations research instruments, including the Krohn Scale which will be used in this study.

In Mayman's view (1967) a person unconsciously projects his internal representations, developed from his own

phenomenological world, onto projective test stimuli. In the evaluation of object representations, he stresses the qualitative analysis of an individual's descriptions of humans in his test responses, including whether humans are described in a warm, interested and detailed style, or in a detached and vague manner. Mayman (1967) pays particular attention to the affect tone in descriptions of human interactions, as well as the kinds of people portrayed by the test subject, and the nature of the human activity in the response. An individual who is capable of the most developmentally advanced level of internalization will portray humans on projective tests as varied in content, objectively described, and clearly separate and engaged in a mutual activity. Mayman has found significant relationships between the quality of individuals' object representations and levels of psychopathology, independent rating of object relations, and the capacity to benefit from psychotherapy (Mayman, 1967; Krohn and Mayman, 1974).

Blatt et al. (1976) stress the assessment of the structural qualities of object representations that are revealed in projective tests, including level of differentiation (the nature of a response describing a human figure, whether it is a human whole or detail or a quasi-human whole or detail), articulation (the degree of detail and

elaboration) and integration (the relationship between the description of a human figure, the activity being performed, and other objects in the percept). Their research has demonstrated that in a normal population there is a significant increase in the number of well-differentiated, highly articulated, and integrated human figures from pre-adolescence to adulthood (Blatt et al., 1976). In comparison to normal subjects, a sample of hospitalized patients in long-term treatment described human figures on a projective test that were significantly more inaccurately perceived, distorted, and partial and that were seen as inert or engaged in unmotivated, incongruent, or malevolent activity (Blatt et al., 1976). Blatt and Lerner (1976) believe object representations in normal individuals become increasingly differentiated, integrated and accurate due to cognitive and psychosexual development.

Urist (1977) developed his Mutuality of Autonomy Scale (MOA Scale) for use with projective data in order to evaluate an individual's developmental progression toward separation-individualization, particularly a person's capacity to experience self and other as mutually autonomous within relationships. The scale assesses the relationships of animate and/or inanimate objects in a subject's verbalizations to projective stimuli, for example, the degree to which one

object may control or overwhelm another. Urist reported that MOA scores correlated significantly with autobiographical data and staff ratings of inpatients (Urist, 1977). The scale has also been used to predict later rehospitalizations of adults from childhood MOA scores (Tuber, 1983) and to distinguish between the object representations of normal populations of children and those with particular clinical syndromes, including gender identity disorder, and separation anxiety disorder (Coates and Tuber, 1988; Goddard and Tuber, 1989). Because some studies have not shown MOA scores to be significantly correlated with age, Tuber (1992) argues that the MOA scale more accurately assesses an individual's "repertoire of previous interpersonal interactions" and the range of his internal representations of self and others.

There continues to be some questions as to the degree to which object relations research with projective tests assesses object relations per se, rather than other variables, such as level of psychopathology (Stricker and Healey, 1990). By examining the relationship between the nature of object representations in mothers and the quality of interpersonal interaction between a mother and child, this study will attempt to provide additional validity for this type of research.

Krohn Object Representation Scale

The object relations scale used in the present study was developed by Krohn (1974). The Krohn Object Representations Scale (KORS) is derived largely from Kernberg's work and has been used to assess object representations revealed in a variety of sources, including the manifest content of dreams, Rorschach responses, and early memories (Krohn and Mayman, 1974). Krohn and Mayman (1974) assert that the KORS evaluates the overall maturity of object representations as reflected in a subject's depiction of human figures. They believe differentiation and elaboration of mental representations are determined by the nature of the internalization process under which they were integrated. Introjection, the most primitive mode of internalization, reflects a reliance on "splitting", and produces an experience of self and/or other as either idealized and perfect or empty and persecutory. Identification reveals a greater understanding of the roles and functions of people, expectations of the self, and the capacity for more modulated and differentiated affects. For the most advanced level of internalization, referred to as ego-identity, object-images and self-images are consolidated and unified and "become richer, more varied, more consistent, and more congruent with what objects are really like" (Krohn and Mayman, 1974).

The KORS, encompassing eight levels of internalization, incorporates many of the principal object representation variables previously discussed, including articulation, differentiation, integration, affect tone, level of narcissistic need-gratification, degree of mutuality, complexity and psychological-mindedness. Krohn and Mayman (1974) make an important distinction between object representations rated at level 5 or below on their scale, which have an anonymous, stereotyped and shadowy quality, from object representations rated at level 6 or above, which are clearly more defined, rich and unique. Representations scored at level 6 and above reflect an advanced level of internalization and a high level of empathic object-relatedness. The KORS is designed for use by skilled clinicians who are encouraged to use their full inferential capacities to evaluate a subject's level of self-awareness and interpersonal relatedness (Hatcher and Krohn, 1980).

The KORS has demonstrated interrater reliability ranging from .58 to .80 for exact agreement and from .74 to .89 for agreement within one scale point (Krohn and Mayman, 1974; Spear, 1980). Krohn and Mayman (1974) found high intercorrelations of the KORS when applied to data from the Rorschach, early memories and dreams, and between the scores of projective data and therapist-supervisor judgment of the

patient's level of object relations. Frieswyk and Colson (1980) reported that the KORS predicted global improvement in hospitalized patients, and predicted termination levels of object relations, health-sickness rates, and state of the therapeutic alliance. For a sample of neurotic patients in psychotherapy, Hatcher and Krohn (1980) found, that the modal score of the KORS was significantly associated with three important ego aspects of the patient: 1) the capacity for introspection and to see the sources of problems and behavior as internal; 2) the capacity to tolerate the ambiguity and the irrational in themselves; and 3) the capacity to reflect on conflicts rather than translate them into action.

The Krohn Scale will be used in this study to assess the object representational world of mothers revealed in their early memories.

Object Relations and Mother

Winnicott (1965) and Mahler (1975) stress the crucial role a mother has in facilitating the psychological development of her child. The mother's capacity for empathy and attunement, as well as her ability to consistently provide security and gratification are seen as essential conditions for a child to successfully negotiate the separation-individuation process. Although the mother-child relationship

is viewed as especially significant by many object relations theorists, there has been relatively little research, particularly of a nomothetic design, investigating the association between the object representational world of mothers' and their ability to provide "good-enough mothering" (attachment research in this area will be discussed in the next chapter).

Benedek (1959) believed that the experience of parenthood profoundly affects a mother's object representational world as well as offering her opportunities for personality growth. She (1959) believed that, "the reciprocal interaction between mother and child, ...through the processes of introjection-identification...creates structural change in each of the participants." When a child receives consistent and sensitive gratification of his needs from his mother, he develops a "primary mental construct" of confidence, which serves as a defense against frustration, facilitates the integration of his object and self-representations, and encourages the formation of relationships with other people. For the mother, by internalizing the gratifying experience of successful caregiving, she too develops a sense of confidence enabling her to achieve a new integration of her internal object world. Benedek (1959) argued that for a mother the early phases of parenthood are accompanied by a regression to the oral stage

of development and the reactivation of certain object and self-representations. She (1959) stated that,

"Since motherliness involves the repetition and working through of the primary, oral conflicts with the mother's own mother, the healthy, normal process of mothering allows for resolution of those conflicts, i.e., for intrapsychic reconciliation with the mother."

For each developmental stage a child moves through, related developmental conflicts are revived in the mother, leading to either pathologic manifestations in the parent or, through resolution of the conflicts, to a new level of integration in the parent.

Fraiberg et al. (1975) discuss how a mother may ignore, reject and abuse her children as a consequence of the poor parenting she experienced as a child. They coin the phrase, "ghosts in the nursery", to refer to the pathological object representations of significant caregivers that a mother has internalized during her life which may prevent her from being empathic and providing security to her child. To defend herself from the intense hurt, fear and anger engendered by her own pathological internal representations, a mother may "identify with the aggressor" and display similar insensitive, abusive attitudes and behaviors towards her children. Fraiberg et al. (1975) believe that a mother is particularly vulnerable to continue this pattern if her feelings about her childhood and parents remain unconscious.

Based on their longitudinal research of mothers, Bibring et al. (1961) concluded that pregnancy and the earliest stages of the mother-child relationship constitute a normal period of developmental crisis. According to the researchers, "the special task that has to be solved by pregnancy and by becoming a mother lies within the sphere of distribution and shifts between the cathexis of self-representation and of object-representation." Early in pregnancy a woman experiences a phase of enhanced narcissism under the impact of her physiological and anatomical changes, which leads to an integration and merging with the fetus. Quickening interrupts this narcissistic process as the mother normally begins to perceive the baby as the new object within the self, and in the later stages of pregnancy as an object which will soon be anatomically separate. Following delivery, the mother's relationship with the child,

"will have the distinctive characteristic of a freely changeable fusion - varying in degree and intensity - of narcissistic and object-libidinal strivings, so that the child will always remain part of herself, and at the same time will always have to remain an object that is part of the outside world and part of her sexual mate."
(Bibring et al., 1961)

A mother's inability to negotiate these developmental shifts in her object world can lead to neurotic and even psychotic symptomatology.

Through intervening and projective testing Ballou (1978)

investigated the relationship between interpersonal characteristics of 12 primiparous women and their perceptions and interactions with their babies postpartum. Ballou (1978) contended that a woman's resolution of ambivalent feelings towards her own mother and her acceptance of her own dependent feelings are two major object-relational tasks of pregnancy and motherhood (Ballou, 1978). Successful negotiation of these issues enhances the mother's capacity to experience her new-born baby realistically without distortions created by her own conflicts and affects. Women in her study who discussed experiencing triadic relationships in their lives and successfully resolving oedipal conflicts were found to be less enmeshed with their mothers and displayed more enjoyment and confidence caring for their babies. Women who felt adequately separate and autonomous from parental figures were more likely to experience their children as separate. The capacity to perceive other people as separate, according to Ballou, allows a mother to experience enhanced mutuality in interacting with her child, particularly as the baby develops and becomes more responsive and sociable.

Zeanah, Keener and Anders (1986) found that mothers develop highly elaborated internal representations of their infants as early as pregnancy and early infancy. Mothers' representations regarding the temperament of their infants'

were shown to remain stable prenatally to postnatally particularly with respect to the activity, distractibility, intensity and unadaptability levels of the infants' temperament. Stern-Bruschweiler and Stern (1989) maintain that there is an important relationship between a mother's and infant's internal representations and the dyad's overt interactional behavior. In support of this theory Crowell and Feldman (1989) reported mothers' internal representations were significantly related to their behavior in a play session with their infant. Mothers whose internal representations reflected interpersonal security were found to be more supportive and helpful with their children during a play session than mothers whose representations reflected dysfunctional interpersonal patterns, such as detachment or enmeshment. Haft and Slade (1989) found that mothers whose internal representations of their childhood relationships reflected security were more attuned to their infants' affects, than mothers whose representations revealed insecure interpersonal expectations and patterns. Their research demonstrated that the "secure" mothers attune to a range of infant affect, whereas the "insecure" mothers attune to particular affects and not to others. These researchers agree with Stern (1985a) that the affective exchange between mother and infant is the primary way a child learns about social

interaction and about his own feelings. A mother's ability to consistently attune to her infant's emotional experience influences the nature of object representations the child will develop.

In case studies of 12 middle-class mothers of toddlers, which included the examination of several object relations variables, Kaplan (1992) reported that most subjects had negative internal representations of their own mothers as being unavailable, unnurturant and intrusive. Nearly all of these subjects had positive internal representations of their husbands and father with whom they felt more intimately connected. The majority of subjects who felt either "unmothered" as children or who felt the loss of a good mother in their lives were able to experience their own children as separate objects, who were "capable of having some positive, transformative effect on them" (Kaplan, 1992).

CHAPTER TWO

ATTACHMENT

Attachment Theory

Bowlby developed attachment theory in response to research on the detrimental effects for children of extended separations from caregivers for children while in institutions and hospitals (Bretherton, 1985). His theories on attachment were influenced by ethology, control systems theory, cognitive psychology and psychoanalysis, particularly the object relations school. He believed humans are biologically motivated to establish special attachment relationships to primary caregivers in order to protect themselves from injury and death and to maintain a psychological state of felt security (Bowlby, 1969). Bowlby (1969) considered the primary attachment figure for children in most cases to be their mother. Behaviors which foster the development of attachment relationships to caregivers, such as proximity-seeking and signaling (smiling, crying, calling), comprise an attachment behavioral system, which, although more visible in young children, functions throughout the life-span. Bowlby (1969) argued that this organization of attachment behaviors evolved because it enhanced the human species' ability to survive.

The attachment behavioral system functions similar to a

feedback or goal-corrected system (Bretherton, 1985). When a young child feels a critical amount of fear or anxiety, the system is activated and a child signals or seeks proximity to an attachment figure in order to restore feelings of security. A child's motivation for proximity to an attachment figure varies from situation to situation. Feeling sick, tired, hungry or being at too great a physical distance from a caregiver are all examples of situations which typically activate attachment behaviors in a child. If a child is feeling less afraid, other behavioral systems, such as those involving exploration of the environment, may predominate. Bowlby (1969,1973) believed a child's attachment behaviors normally activate an inherent behavioral system in the mother to provide protection and comfort to the distressed child. He proposed four developmental phases of attachment in which a child is increasingly able to discriminate special caregivers from other people (Bowlby, 1969). A child develops more complex and organized patterns of maintaining proximity to his primary attachment figure, especially as locomotor skills emerge. Discrimination of persons and the development of more complex attachment behaviors typically occur in the second half of the child's first year (Bowlby, 1969, 1973).

Internal Working Models of Attachment

According to Bowlby (1960, 1973, 1980) by approximately one year of age a child has formed internal working models of his relationships with primary caregivers. From repeated interactions with a caregiver a child forms a generalized model of that person's behaviors, attitudes and tendencies. For each significant relationship a child develops separate models of the attachment figure and of the self in relation to the attachment figure. A child who is consistently rejected by his mother would likely develop a model of the self in relation to her as being unworthy of attention and love. Slade and Aber (1992) state that, "in infancy, the child's internal working models of self and attachment figure (usually the mother) develop in complementary fashion and initially center around the issue of maternal availability." As a child matures, more complex working models replace earlier and simpler versions.

Internal working models or IWM's direct an individual's behaviors, feelings and expectations in interpersonal interactions. Because they guide how a situation is appraised and predict which behaviors will best maintain feelings of security, IWM's are a central component of the attachment behavioral system. Main et al. (1985) believe IWM's "are best conceived as structured processes serving to obtain or to

limit access to information." Internal working models function at an unconscious level and tend to resist dramatic changes over time because new information typically is assimilated into existing models (Bretherton, 1985). Information which contradicts current models is often ignored or sometimes reinterpreted to conform with existing perceptions and expectations. Changes in a child's internal working model of a parent are thought to occur when life circumstances, such as divorce or poverty, create a change in the level of availability or sensitivity of the parent.

Diamond and Blatt (1994) posit that the mode in which internal working models of attachment are represented in the mind undergoes developmental transformations. Initially, a young child develops concrete enactive representations of attachment, involving motor actions or responses that may be modified by interaction with the environment. Enactive representations are expressed through bodily gestures, movements, facial expressions and posture. By approximately age 2-3 years, most children have the capacity to form affectively-laden, sensory attachment representations, such as visual representations of comforting interactions with caregivers. The most advanced stage of attachment representation is the lexical, symbolic mode, which normally emerges as a child's capacity for language and other symbolic

processes becomes more advanced. In the lexical stage an individual has the capacity to verbally represent his attachment patterns and increasingly does so in a coherent and complex manner. Diamond and Blatt (1994) state that "these three modes of representation differentially organize the way in which...information is processed and an inner model of the world is constructed." They believe secure attachment in older children and adults is associated with the more advanced, lexical mode of representation.

Attachment Research

Ainsworth et al. (1978) developed an empirical procedure, known as the Strange Situation, to assess the quality of a young child's attachment to his caregiver. The Strange Situation involves the observation of a child and usually his mother during a series of separation and reunion episodes in a playroom setting away from home. A stranger is present during some of these episodes. Attachment researchers pay particular attention to the child's behaviors and facial expressions during reunions with his mother. Researchers also note whether a child uses his mother as a secure base from which to explore an unfamiliar environment and the manner in which he interacts with the stranger. It is a child's enactive representations of attachment which are displayed and

assessed in the Strange Situation procedure.

The research of Ainsworth et al. (1978) demonstrated a significant relationship between the quality of maternal care a child receives at home and the child's pattern of behavior during the Strange Situation. Their renowned Baltimore Study, involving 23 mother-infant pairs, was "based on prolonged monthly observations of mothers and infants in the homes, [and] revealed that maternal sensitivity to the infant's signals during feeding, face-to-face play, physical contact, and distress episodes in the course of the first 3 months was predictive of the quality of the relationship during the fourth quarter of the first year [as assessed by the Strange Situation]" (Bretherton, 1985). Ainsworth et al. (1978) identified three classifications of childrens' behavior in the Strange Situation, secure, anxious-avoidant and anxious-resistant. Behavior correlates of secure attachment during the Strange Situation include using the mother as a secure base from which to explore the environment, altering behavior when the mother leaves the room (such as stopping play), and acknowledging the mother's return to the room and seeking, or at least not resisting, physical contact with her. The nature of a child's internal working models of his mother and of himself in relation to his mother direct the child's pattern of behaviors in the Strange Situation.

The research of Ainsworth et al. (1978) also found significant correlations between insensitive and inconsistent maternal care in the home and insecure attachment behaviors displayed by a child in the Strange Situation. In the anxious-avoidant pattern of behavior the child generally seems unconcerned about the presence or absence of his mother. He does not react towards the stranger with an appropriate degree of wariness and tends not to seek physical contact with his mother during reunion episodes. In the anxious-resistant pattern the child seems predominately angry, particularly during the separation episodes from his mother, and the mother is usually unsuccessful at soothing the child upon reunion. The anxious-resistant child appears highly ambivalent of physical contact with his mother, alternating contact-seeking with avoidant behaviors.

Subsequent to the research of Ainsworth et al. (1978) Main and Solomon (1986) described a new attachment category, a disorganized/disoriented pattern of attachment behavior which they observed in children during the Strange Situation. These children demonstrated sequences of behavior that appeared to lack a coherent strategy for dealing with separations from and reunions with their mothers. Organized bouts of behavior are frequently interrupted by periods of disorganized, sometimes contradictory behavior patterns and

therefore, the disorganized/disorientated category is always assigned together with an avoidant, secure, resistant, or "cannot classify" category. Main and Hesse (1990) argue that an infant who is frequently alarmed by a parent, rather than simply by the external situation, is disposed to forming a disorganized/disoriented attachment.

The Strange Situation is usually administered to children between the ages of 12 to 18 months. In Strange Situation studies with normative U.S. samples 65-70% of infants demonstrate a secure pattern of attachment, 20-25% show an anxious-avoidant pattern, and less than 10% show the anxious-resistant pattern (Slade and Aber, 1992). Ainsworth et al. (1978) reported highly satisfactory inter-judge reliability for the classification of children in the Strange Situation.

Other research has demonstrated that child-mother attachment classification is stable during childhood, except when significant changes in the family situation occur (Waters, 1978; Main et al., 1985). A child's attachment classification has been shown to be significantly related to interpersonal functioning at school and to a child's patterns of language and structures of mind at a later age (Main et al., 1985). Secure children also appear to develop stronger ego resources than insecure children, allowing them to better modulate their anxiety about separations from their parents

(Main et al., 1985).

Main and her colleagues at the University of California-Berkeley developed the Adult Attachment Interview (AAI) to study the internal working models of attachment of parents and the intergenerational transmission of attachment patterns (George, Kaplan and Main, 1985). The AAI is a semi-structured interview that is primarily assessed for its degree of coherence, the extent to which an individual is able to provide specific episodic memories supporting generalizations about her filial relationships. Internal working models of attachment, Main et al. (1985) believe, reflect not only individual patterns in nonverbal behavior, as displayed in the Strange Situation, but also in patterns of language and structures of mind. Main and Goldwyn (1990) found a significant relationship between the quality of a mother's internal working model of attachment as assessed by the AAI and the quality of her child's attachment to her, as assessed by the Strange Situation.

Mothers and Attachment

Ainsworth (1973) proposed that the sensitivity of care a mother provides to her infant is of crucial importance for the development of her infant's secure attachment. The Baltimore Study of Ainsworth et al. (1978) relied mostly on naturalistic

observation, approximately 72 hours per dyad, to assess the responsivity, sensitivity and consistency of maternal care, and they found striking individual differences for these variables. These researchers demonstrated that interactional patterns of behavior between mother and infant in the first quarter postpartum were associated with infant behavior in the Strange Situation. Subsequent research with diverse samples have replicated these findings (Bates, Maslin and Frankel, 1985; Egeland and Farber, 1984; Smith and Pederson, 1983), although in some of these studies the association between maternal sensitivity and infant-mother attachment was less than Ainsworth et al. (1978) found.

Some researchers have argued that infant attachment may be influenced primarily by temperament, that there may be endogenous individual differences in the disposition to become distressed at separation. Sroufe (1985) cogently argued against this theory, citing research which demonstrated that infants may have a secure attachment with one caregiver and an anxious attachment with another (Grossman et al., 1981) and that the quality of attachment, even with the same caregiver, is subject to change if the life stress experienced by the caregiver changes (Vaughn et al., 1979). Attachment, according to Sroufe (1985) is predominantly a relational construct, reflecting the quality of functioning of the

infant-caregiver dyad. He argued that maternal sensitivity is an important influence on the patterns of infant-caregiver behavioral organization.

George, Kaplan and Main (1985) developed a research instrument, the AAI, demonstrating the association between a mother's internal working models of attachment and the quality of her infant's attachment. Their research showed that internal working models of attachment are reflected not only in patterns of interpersonal behavior, but also in patterns of language and mental structures. Main et al. (1985) conceptualize an individual's internal working models as facilitating or limiting access to information regarding attachment-related experiences, feelings and ideations. In this way a mother's internal working models affect her capacity to empathically recognize and respond to her infant's cues and, consequently, influence the nature of her child's developing internal working models of attachment.

Van IJzendoorn (1995) conducted a meta-analysis of several pertinent attachment studies and concluded that there is a significant association between mothers' attachment representations (as assessed by the AAI) and their infants' security of attachment (as assessed by the Strange Situation). He found a particularly strong relationship between the autonomous classification of parents and secure attachment

behaviors of children. His meta-analysis supports the theory of the intergenerational transmission of attachment representations. Van IJzendoorn (1995) addresses the question of how this transmission might be accomplished. Many attachment researchers have stressed the role of maternal sensitivity as the primary vehicle for transmission. Based on his research findings, Van IJzendoorn (1995) believes maternal sensitivity is an important influence on infant attachment security. He concludes, however, that a large part of the parental influences on childrens' attachment is unaccounted for and that maternal sensitivity may not be the largest factor.

From their own review of relevant attachment research, Belsky et al. (1995) conclude that ratings of maternal sensitivity in the first year are significantly linked to infant attachment security (Grossman et al., 1985; Cox et al., 1992; Isabella, 1993). They also discuss social-ecological factors which, along with maternal sensitivity, may influence infant attachment behaviors. Although research examining the direct effects of social support and marital satisfaction on attachment have been mixed, Isabella (1994) described how these social variables can affect infant attachment indirectly through mediational processes. Finally, by compositing data on several sets of factors, including maternal personality,

infant temperament, and marital quality, Belsky and Isabella (1988) found a powerful relation between degree of risk and rate of attachment insecurity.

From research findings it seems clear that maternal sensitivity does influence infant attachment security, although the degree of influence is still being debated. According to Slade and Aber (1992):

"the quality of [a] child's attachment - as defined by the secure, anxious-avoidant, and anxious-resistant patterns - essentially provides a measure of the history of the mother-child relationship. Infants who expect their mothers to comfort them in their distress return to them upon reunion and miss them while they are away; infants whose mothers are typically unresponsive to their needs appear to function well in their absence and do not turn to them upon reunion. Infants whose mothers have been inconsistent in their responsiveness find it impossible to function apart from them and to derive comfort from their ministrations, largely because the infants are angry and fussy."

The current study posits that maternal sensitivity is a primary factor influencing infant attachment and will investigate whether the capacity for maternal sensitivity is affected by the nature of a mother's internal object representations.

A Comparison of Object Relations and Attachment Theories

Recently, several articles have discussed the significant convergences between attachment theory and psychoanalytic object relations theories (Bretherton, 1987; Slade and Aber,

1992; Diamond and Blatt, 1994; Eagle, 1995). Slade and Aber (1992) state that "in fact, attachment theory is an object relations theory; it emphasizes the primacy of a social bond, the direct impact of the quality of the mother-child relationship on internalized object relations, as well as the link between the quality of a parent's internal representations and the nature of their relationships to others." Attachment theory and the object relations theories of Fairbairn (1954), Winnicott (1965), Mahler (1975) and Kernberg (1976) stress the link between early caregiving experiences and a child's sense of trust, autonomy, and security in later relationships. Both schools of thought agree that the development of a coherent sense of self and the ability to modulate and integrate conflictual emotions depend on the experience of responsive and sensitive maternal care. The development of internal representations, which influence expectations, emotions, and behaviors in interpersonal relationships, is a central aspect of attachment and object relations theories.

Both attachment theory and psychoanalytic object relations theories reject certain core assumptions and formulations of Freudian drive theory, specifically, "the ideas that the infant's attachment to mother is secondary to the latter's role in gratification of the infant's hunger

drive; that the vicissitudes of the sexual drive are primary determinants of personality development; and, that reduction of excitation is a superordinate motive underlying a wide range of behaviors (Eagle, 1995). Both schools maintain that infant-mother attachment is an autonomous motivational system, which is not subordinate to other instinctual drives. Attachment and object relations theories deemphasize the importance of the oedipal complex and place a greater significance on earlier developmental periods. An additional area of commonality, "is a clear deemphasis of sex and aggression and a correspondingly strong emphasis on the two broad developmental trends of relatedness and autonomy (Eagle, 1995). Both theoretical models posit that a crucial factor in personality development is how an individual negotiates the interplay between relatedness and autonomy, or in the language of attachment theory, between attachment and exploration. According to both literatures, in order to experience oneself as a separate and individuated person who feels secure exploring the world, one must have received adequate early caring and have successfully internalized these early experiences.

Also central to both schools of thought is the concept of object constancy, that internal representations are generally stable and influence personality and behavioral functioning

whether significant caregivers are actually present or not (Diamond and Blatt, 1994). Both view internal models as operating unconsciously, as limiting attention to some information, and as blocking awareness to certain feelings and impulses to minimize conflict with existing models.

Eagle (1995) asserts that in both attachment theory and in most object relations theories internalized representations of self-other interactions are viewed as relatively accurate accounts of actual events. He believes this conception of object representation reflects a general shift in psychoanalytic theories of etiology, from an emphasis on endogenous factors in the production of pathology to the greater recognition of the roles of environmental failure. Fairbairn (1952) and Winnicott (1965) believe pathology is largely the result of actual, severe deficiencies in early caregiving, including rejection and deprivation. Most attachment theorists (Bowlby 1969, 1973; Ainsworth et al., 1978; Slade and Aber, 1992) claim that a caregiver's actual unresponsive and inconsistent behavior towards a young child leads to his insecure attachment and to internal working models that predispose him to pathology and maladaptive behaviors. Both attachment and object relations theories deemphasize the role of innate temperament in the interpretation of events and the formation of internalized

object representations.

In addition, the two theories view a mother's ability to provide consistent and sensitive care to her child as related to her own childhood history and the quality of her internal representations (Slade and Aber, 1992). In order for a mother to be attuned to and contain the negative emotions of her child, she must have the capacity to accept and modulate her own negative emotions, which is influenced by the nature of her own internal object world.

There are some important differences between attachment theory and psychoanalytic object relations theories, particularly regarding the development and nature of internal representations. Object relations theorists emphasize the multi-dimensionality and complexity of the structure of internal representations, including variables such as articulation, differentiation, integration, affect tone and several others. In contrast, the description and assessment of internal working models in attachment theory have typically been much more circumscribed, focusing specifically on the internalized patterns of regulating proximity to attachment figures and maintaining felt security (Diamond and Blatt, 1994). In object relations theory, mental representations include internalizations of a wide range of interpersonal transactions with others and are not limited solely to

attachment interactions with primary caregivers. Some object relations theories emphasize the role of developmentally determined shifts in self and object representations and its effects on one's interpersonal capacities and experiences. Attachment theory generally has stressed developmental factors to a much lesser extent (despite Bowlby's description of four attachment phases), and attachment researchers have been mostly concerned with documenting the stability of internal models across the lifespan (Slade and Aber, 1992). Only recently have attachment researchers begun to focus more on the effects of cognitive development on the internal representation of attachment (Main et al., 1985). Certain object relations theorists (Mahler, 1975); Behrends and Blatt, 1985, 1987) have stressed that separation episodes from primary caregivers are essential catalysts for the internalization of functions and aspects of the relationship. Separation as a condition of internalization is not an aspect of attachment theory.

Bowlby (1969) and many of his attachment colleagues have stressed the ethological and evolutionary underpinnings of attachment, a perspective which is not emphasized in object relations theories. Bowlby (1969) believed, that for the human species to have survived despite its extended infantile immaturity and vulnerability, that its' young must be endowed

with a relatively stable behavioral system which, through adequate parental care, serves to reduce the risk of death. Ainsworth (1969) described how "a human infant's attachment to his mother originates in a number of species-characteristic behavior systems, relatively independent of each other at first, which emerge at different times, become organized toward the mother as the chief object, and serve to bind child to mother and mother to child." Bowlby's conception that attachment behavior functioned as a goal-corrected system is also distinct from object relations theories.

Eagle (1995) contrasts the linear causal model characteristic of many contemporary object relations theories with the "developmental pathways" model of attachment theory. Fairbairn (1952), for example, believes psychopathology is directly caused by early parental failures, such as deprivation, frustration and rejection, an "A cause B" linear etiological form. There is little role for any intervening, modulating variables. A "developmental pathways" paradigm is similar to a decision tree, with several choice points and indirect connection between variables. Eagle (1995) illustrates this point by citing Main and Goldwyn's (1984) research with the AAI. They found that "although a woman may have been rejected as a child and may have therefore developed an insecure attachment style, the ability to remember,

confront, and work through these early experiences in some way transforms her internal working model and interactive style so that she does not transmit a pattern of rejection and consequent insecure attachment to her own infant" (Eagle, 1995). Main and Goldwyn (1984) demonstrated that intervening experiences can modify internal working models.

Research Linking Object Relations Theory and Attachment Theory

To the present there has been little empirical research investigating the convergences between internal representation as conceptualized by object relations theory and attachment theory. In one recent study Levine et al. (1991) found that the quality of mothers' internal working models and of their object representations were significantly related. They also reported that mothers' internal working models and object-representations were significantly related to the quality of infant-mother attachment as assessed by the Strange Situation. It is important to note that this study did not use projective tests in the evaluation of object representations. The AAI was the source of data for both the mother's object representations and for her internal working models. Based on this study Levine and Tuber (1993) later assessed the strengths and weaknesses of measures of mental representation from attachment theory and object relations theory. They

concluded that the AAI is considerably more limited than the KORS when used to analyze and categorize less adaptive object representations. Attachment theorists view nonautonomous models of adult attachment (e.g., dismissing, enmeshed) as less healthy than the autonomous model in terms of their effects on interpersonal functioning, but contend that the nonautonomous models still fall within the range of normal functioning. Levine and Tuber (1993) argue that the AAI can not adequately differentiate individuals who will make "generally successful adaptations" from those who will be more dysfunctional. In contrast, they assert that the KORS is well-designed to capture a wide range of an individual's store of representational experience. They note, however, that because the AAI relies less on clinical inference in scoring and focuses much more on tangible, specific information than the KORS, it is better suited to predict patterns of parent-child interaction.

Sperling et al. (1992) also judged the taxonomy of the AAI as too restrictive when used to assess object representation. They presented an alternative classification of adult attachment, the Attachment Style Inventory, integrating attachment and object relations theories. They proposed that the relative strength of relational drives for affiliation and aggression, such as those described in

Fairbairn's writings (1952), interact with an individual's ongoing relational experiences and defense processes and contribute to the manifestation of an adult attachment style. This process "yields a two-dimensional matrix wherein high manifest anger and high dependence result in a resistant-ambivalent attachment style, high dependence and low anger result in a dependent style, low dependence and high anger result in a hostile style, and low dependence and low anger result in an avoidant style." Berman et al. (1994) found that the Attachment Style Inventory was correlated with other attachment scales which measured cognitive and emotional responses of college students to perceived separations from parents.

Frank et al. (1994) demonstrated that mothers' primary process integration, revealed in their fantasy representations on the Rorschach Test, was significantly and positively related to their infants' security of attachment at 1 year. Mothers who showed a greater capacity to freely, flexibly and coherently access and communicate unconscious derivatives of primary process thought and fantasy were more likely to have securely attached infants. Frank et al. (1994) believe a higher level of primary process integration, "represents a kind of controlled freedom that would afford a new mother maximum psychological flexibility in interpreting infant cues,

anticipating contingencies in infant responsivity, and adapting to shifts in infant relatedness," all necessary conditions for their infants' development of secure attachment behaviors.

CHAPTER THREE

EARLY MEMORIES

Theoretical Discussion

Freud (1899/1950) apprehended that people frequently do not have conscious memories of important events in their childhood and that the memories they do have of their early years often seem trivial. He believed significant material is often excluded from the conscious presentation of childhood memories because it would create too much anxiety for the person. The conscious presentation of childhood memories conceals or "screens" meaningful unconscious material. According to Freud (1899/1950), there is typically a "fit" between the manifest content of a childhood memory and the feelings, conflicts and wishes it conceals. He (1899/1950) wrote about a man who had a childhood memory of stealing flowers from a little girl and how this manifest memory concealed later desires and anxieties the man had about "deflowering" a woman. Freud argued it is possible to interpret unconscious material based on both the manifest content of the memory and the patient's associations to the memory. He felt the accuracy of conscious memories was irrelevant and that often they were mostly fantasy constructions. Because of their primary screening function,

Freud believed childhood memories required a full analysis to understand their meanings.

Adler (1931, 1937; Ansbacher, 1947) emphasized the significance of early childhood memories in many of his writings and, like Freud, believed that early memories were mostly unconscious expressions and deterministic. Adler felt early memories are expressions of basic attitudes and perceptions people currently have in their lives. People remember and repeat early memories because they reflect these basic attitudes of their current phenomenological world. An individual's memories,

“...represent his “Story of My Life”, a story he repeats to himself to warn him or comfort him, to keep him concentrated on his goal, to prepare him, by means of past experiences, to meet the future with an already tested style of action.” (Adler, 1931)

According to Adler, if a person feels security and trust in current significant relationships, his early recollections will reflect similar feelings of trust and security. Future experiences that harmonize with an existing framework of attitudes will tend to be remembered better than those which in some way contradict it. Adler (1937) believed that the first early memory a person recalls is particularly revealing of personality attitudes and agreed with Freud that memories are often fantasy constructions.

In his essay, “Early Memories and Character Structure”

Mayman (1968) further develops the ideas of Freud and Adler. He agrees with Freud that the manifest content of early memories can sometimes "screen" unconscious id desires. However, from his predominant ego psychology perspective, Mayman emphasizes how the style and manifest content of early memories can reveal vital information about an ego's defensive and adaptive capabilities. In his view, how latent content is hidden by the ego becomes equally, if not more important, than what is hidden. For example, to what extent does a person's ego defend against emotional excitation on a projective task, or is the person able to reveal and adequately modulate his feelings?

Conscious thought processes, such as the manifest content of memories and fantasies, communicate important unconscious material in Mayman's view. He believes memories are not autobiographical truths, but projected fantasies which reveal psychological truths about a person. A person constructs his memories of childhood based on his current psychological state and his current phenomenological experience. In support of his belief that memories are not autobiographical truths, Mayman (1968) claims most people do not recall visual details in a childhood memory from the perspective of a young child. Instead, memories are commonly described from the perspective of an outside observer looking down upon the memory scene,

such that people typically view themselves in the memory.

Consonant with object relations theory Mayman maintains a person's character structure is organized around internal representations of relationships and of the self. Internal representations intrude projectively into the structure and content of early memories. There is congruence between the nature of an individual's internal representations and the content and style of his childhood memories. For instance, a schizoid person's early memories would likely reveal his relationship predispositions, determined by his internalized object representations, to be distant and aloof from others. Relationship predispositions revealed in early memories can also inform a clinician about likely transference patterns. To accurately assess internal object relations patterns, Mayman recommends the collection of several early memories from a subject. He agreed with Adler that the first early memory recalled can be especially revealing about a subject's personality.

Mayman's writings (1960, 1968) reflect a central tenet of most object relations theories by emphasizing the developmental aspects of object representations. He asserts that the relationship patterns revealed in early memories typically fall into psychosexual developmental categories (e.g., oral, anal, phallic, oedipal, latency). These

psychosexual categories,

"Are meant to designate developmental phases from which a relationship [pattern] is drawn, rather than to refer to the more narrowly instinctual meanings of these terms as used in a psychoanalytic id-psychology. As used here these terms define a multiplicity of different ego-states, each organized around a distinctive affect and self-experience, and made up of a definitive need, a need appropriate object-relationship and self-representation, and phase appropriate conflicts, defenses and compromise formations, and ego competencies." (Mayman, 1968)

For Mayman an oral phase memory would reflect a model of self-other relatedness in which one is dependent on an adult figure for sustenance and care in order to survive; relationship paradigms in an anal phase memory would reflect conflicts with autonomy, and concerns about possessing, holding back or producing what one should; a phallic-phase memory would include themes of making an assertive impact on one's environment to gain admiration and respect, or of feelings of being overpowered and compliant; oedipal phase memories would reflect conflict and competition with the parent of the same sex; and latency phase memories would include themes of interest and involvement with peer group members (Mayman, 1968).

Mayman Early Memories Test

Mayman (1968) developed the first systematic approach to gathering early memories, which has been widely used in

research (Greenwald, 1984; Arnow, 1991; Richman et al., 1992; Fowler et al., 1995). The test is typically given orally to subjects, and initially includes six unstructured memory queries, requesting a subject's earliest memory, next earliest memory, earliest and next earliest memories of mother, and earliest and next earliest memories of father. The remainder of the test includes queries for specific types of memories, such as the happiest and unhappiest, and memories of feeling angry, scared, etc. For each memory the subject is urged to relate a specific incident, not a general description, and to describe in detail the visual image they have of the event. They are also asked about the feeling they have accompanying the memory and whether they remember their feeling at the time the incident occurred.

Using the Mayman Early Memories Test, Richman et al. (1992) found that borderline subjects had a developmentally lower capacity for object representation and evocative memory of affective object relationships, less positively toned representations, and a more pervasive experience of aloneness than subjects with neurotic character pathology. Fowler et al. (1995) used the Mayman Early Memories Test in their study and included additional memory queries, such as the earliest memory of eating, and the earliest memory of a transitional object. They scored eight memories for each of their subjects

using an affect tone scale and a complexity of object representation scale, both incorporating an object relations and social cognition perspective. They found that a clinical population demonstrated a significantly lower level of object complexity and had significantly more malevolent themes in their memories than a nonclinical population. They also found significant positive correlations between their subjects' complexity of object representations scores from the early memories test and their Urist Mutuality of Autonomy scores from the Rorschach. Fowler et al. (1995) argued this demonstrated that people with poor differentiation of self and other as manifested on the Rorschach revealed the same pattern in their early memories.

Conceptual-Perceptual Theory of Memories

Bruhn (1990) described a "cognitive-perceptual" theory of childhood recollections. In his view people develop subjective perceptual and analytical patterns, based on their life experiences, to organize and interpret their phenomenological world. Life experiences are interpreted and encoded into memory in a way which conforms to these acquired perceptual patterns. If an experience cannot be interpreted or organized in such a way, it is not consciously remembered. By analyzing early memories, Bruhn maintains a clinician gains

an understanding of a patient's cognitive patterns.

Like Adler and Mayman, Bruhn considers the content of conscious memories to be meaningful. He views early memories as mostly fantasy constructions and as reflecting unresolved fears and conflicts that an individual experiences in his current life. Bruhn explains that,

"It is adaptive to focus on what most needs to be done, and this is how autobiographical memory is organized - to remind us via specific recollections of what is most pressing in our personal development."

Early memories introduce only the unresolved issues that we are currently prepared to process. The issues that we are not prepared to process are embedded in early memories that are not available to consciousness..." (Bruhn, 1990).

Bruhn argues, for example, that early memories which express themes of victimization are remembered and repeated because of current feelings of anger and impotence.

Bruhn (1990) suggests that clinicians form a "precis" of each of their subjects' early memories, a concise summary of a patient's main issues typically taking the following form: "When x occurs, y results". The first early memory recalled reveals a subject's primary psychological issue in its clearest form. Subsequent memories clarify and elaborate this central concern and reveal some of the subject's frequently used coping strategies. Bruhn (1990) rates each memory for the degree it expresses positive, negative or neutral affect.

Positive affect early memories typically reflect wishes a person has about how they would like their life to be, and serve as important self-reminders of what the individual needs to be happy. Negative affect memories express fears and situations that the person feels he cannot resolve or control. A person who recalls mostly neutral affect memories, Bruhn believes, indicates a lack of awareness and fear of feelings. Bruhn asserts that when personal growth occurs, sometimes as the result of psychotherapy, memory organization also changes and new early memories may be constructed and remembered. According to this theory, the resolution of an individuals' conflicts and fears causes changes in his perceptual and analytical patterns. Under these conditions the early memories one creates also change.

Other Early Memory Research

Much early memories research has involved the investigation of object representations (Langs, 1965; Bruhn and Schiffman, 1982; Nigg et al., 1991; Richman et al., 1992; Fowler et al., 1995). Bruhn and Schiffman (1992) studied the prediction of locus of control stance from the content of the earliest childhood memory of a group of subjects. They found that their subjects' attitudes expressed in their earliest memories in one of five categories (including mastery,

appropriateness of punishments, the self following interpersonal difficulties, separation, and physical harm) distinguished as internal locus of control stance from an external stance. For instance, subjects who described being punished as a child, but who in the memory accepted responsibility for their actions and viewed the consequences of their behavior as predictable and appropriate, tend to have an internal locus of control stance. External locus of control subjects tended to describe punishment in their memories as being unpredictable and unjustified. Bruhn and Schiffman (1982) reported that the attitudes of internal stance subjects typically included descriptions of reliable and sensitive caregivers. Some expression of a dependable environment in an early memory, they concluded, is crucial in distinguishing internal and external locus of control subjects.

Langs (1965) conducted a series of early memory studies demonstrating that personality type (obsessive-compulsive, hysterical, or narcissistic) was associated with particular object representation features, including number of people in a memory, and the degree to which a memory reflected activity/passivity and benevolence/malevolence. Langs (1965) analyzed only the earliest memory of each of his subjects and concluded that this memory is, "both a vehicle for derivatives

of important early experiences and reflective and predictive of current functioning and personality."

Nigg et al. (1991) used early memories to investigate the relation between adult borderline personality disorder and reported histories of childhood sexual and physical abuse. In their study they assessed the affect tone, the effectiveness of caregivers/helpers, and the descriptions of deliberate injury in the early memories of borderline and normal subjects. They found that a history of sexual abuse, but not a history of physical abuse, predicted the presence of extremely malevolent representations as well as representations involving deliberate injury in early memories. Nigg et al. (1991) believe their results suggest that malevolent representations associated with the borderline diagnosis may be partially related to a history of childhood sexual abuse.

Acklin et al. (1991) assessed early memories based on the presence or absence of three types of scenarios: 1) attempts at instrumental mastery by self; 2) caregiver interactions between adults and children; 3) peer-sibling interactions. Dimensions of these scenarios were rated, according to their nature and outcome, views of self and other, perception of environment, coherence, and affect. Acklin et al. (1991) found that their early memory ratings were significantly

associated with other measures of clinical symptomatology, such as the MMPI (Minnesota Multiphasic Personality Inventory) and the SCL-90-R (Symptom Checklist 90-Revised).

Summary and Hypotheses

The goal of this research was to examine the relationship between a mother's level of internalized object representation as revealed in her early memories and her capacity to remain consistently available to her pre-lingual infant. The study tested the following hypotheses:

Major Hypothesis: There is an optimal level of internalized object representation which increases a mother's capacity to sensitively respond to her developing infant.

Hypothesis 1: Mother's of securely-attached infants will demonstrate in their responses to the Mayman Early Memories Test a higher level of internalized object representation as assessed by the KORS.

Internalized object representations reflective of a high level of differentiation, complexity, and empathy will enhance the cognitive and affective capacities mothers require to respond to the widest range of their infants' expressions. These maternal capacities will be reflected by their infants' tendencies to reestablish contact with them following brief separations.

Hypothesis 2: Compared to mothers of securely-attached infants, mothers of insecurely-attached infants will demonstrate in their responses to the Mayman Early Memories Test a lower level of internalized object representation, as assessed by the KORS.

Mothers who reveal object representations reflecting vagueness, emotional coldness, dominance or insensitivity will have a diminished capacity to respond to their pre-lingual infants. Some of these mothers, in order to defend against their own negative affect, will be unable to respond empathically to a range of their infants' expressions. Infants of these mothers will avoid displays of negative affect and stop using their mothers as a base of security. In the Strange Situation they will manifest reunion strategies classified as anxious-avoidant. Other mothers of insecurely attached infants will have difficulties modulating their own anxiety, and will not be objective and consistent in response to their infants' expressions. Infants of these mothers will also show difficulties regulating distress and in reunion episodes will be classified as anxious-ambivalent.

CHAPTER FOUR

METHOD

Introduction

These hypotheses were tested by a study of early childhood memories of first-time mothers. The early memory responses were scored using the Krohn Scale which assesses the developmental level of internalized object representations. This variable was used to predict the quality of mother-infant attachment at 14 months.

Subjects

The subjects for this study are 31 middle-class, primiparous women between the ages of 25 and 35 and their first-born children. The subjects were obtained through a longitudinal study of mothers and infants, directed by Arietta Slade, Ph.D. at the City College of New York. Dr. Slade's study followed mothers through their second and third trimesters of pregnancy, and evaluated the mother-infant dyad up until the infant's twenty-eighth month. Mothers were recruited through private obstetricians and Lamaze and other childbirth education classes. They were interviewed and tested three times during their pregnancy and returned for five postpartum visits during which the mother was interviewed

and the mother and child videotaped. Subjects were paid a total of \$160.00 for their participation.

Procedure

During their third trimester of pregnancy subjects were administered a battery of psychological tests at City College. They were told that the tests assessed the way they thought, reasoned, and solved problems. Trained graduate students in clinical psychology administered to subjects five subtests of the Wechsler Adult Intelligence Scale (WAIS), a drawing exercise, the Rorschach and the Mayman Early Memories Test. These tests were administered to each subject in the same order.

When a child was 14 months old, the mother brought him/her to Dr. Slade's laboratory at City College and the Strange Situation was administered.

Measures

Mayman Early Memories Test - This test was presented orally to the mothers, and their responses were transcribed verbatim by the test administrators. Six early memories for each subject were used as data for this study including the earliest memory, next earliest memory, earliest and next earliest

memory of mother, and earliest and next earliest memory of father.

All early memories were scored using the KORS. The Krohn Scale evaluates a subject's inner object world based on the content, style, and "feel" of early memory responses. It represents a continuum of developmental levels of internalized object representation. The scale is designed to assess, "how primitive, shadowy, malevolent, anonymous, stereotyped, or one-dimensional [a person's early memories] are on the one hand, or how full, defined, feeling and, in general, human and complete they are on the other" (Krohn and Mayman, 1974). Krohn and Mayman recommend that researchers rely predominately on their global impression of a memory based on clinical intuition and empathy when determining scores. A full description of the eight levels of the Scale is included in the appendix.

The Strange Situation - This procedure was designed to evaluate the quality of mother-child attachment. It was administered by trained graduate students under the supervision of Dr. Slade at City College. Two adjacent rooms separated by a one-way mirror were used for the experimental and observation rooms. The experimental room was arranged identically for all mother/child pairs, including chairs for

the mother, child and stranger and several toys for the child. Instructions pertaining to the Strange Situation procedure were told beforehand to each mother. Neither the child nor the mother met the "stranger" before the procedure began. The Strange Situation consists of eight separate episodes which were presented in the same order for this study. Episodes which are expected to be the least stressful for the child occur first. Brief descriptions of each episode are listed below:

<u># of Episode</u>	<u>Persons Present</u>	<u>Duration</u>	<u>Description</u>
1	Mother, baby & observer	30 secs.	Observer introduces mother and baby to experimental room, then leaves.
2	Mother & baby	3 min.	Mother is nonparticipant while baby explores: if necessary, is stimulated after 2 min.
3	Stranger, mother & baby	3 min.	Stranger enters. First minute: Stranger converses with mother. Third minute: Stranger approaches baby. After 3 minutes mother leaves unobtrusively.
4	Stranger & baby	3 min.	First separation episode. Stranger's behavior is geared to that of baby.
5	Mother & baby	3 min. or less	First reunion episode. Mother greets and/or comforts baby, then tries to settle him again in play. Mother then leaves, saying "bye-bye".
6	Baby alone	3 min. or less	Second separation episode.

<u># of Episode</u>	<u>Persons Present</u>	<u>Duration</u>	<u>Description</u>
7	Stranger & baby	3 min. or less	Continuation of second separation. Stranger enters and gear her behavior to that of the baby.
8	Mother & baby	3 min.	Second reunion episode. Mother enters, greets baby, then picks him up. Meanwhile stranger leaves unobtrusively. (Ainsworth et al., 1978)

The following interactive behaviors by a child are key variables in the scoring of the Strange Situation: proximity and contact-seeking, contact-maintaining, resistance, avoidance, search and distance interaction. A child's behavior in the Strange Situation was rated, and each infant was assigned to one of four categories: secure (Group B), anxious-avoidant (Group A), anxious-resistant (Group C), or disorganized (Group D). Videotapes of each Strange Situation administered were rated by Dr. Jude Cassidy's research staff at Pennsylvania State University. Prior to rating, the staff had been trained to reliability by Dr. Cassidy.

CHAPTER FIVE
RESULTS

This chapter initially will present descriptive and reliability data as well as the distribution of infants' attachment classifications. A discussion of the data analyses relevant to the hypotheses follows.

Descriptive Information

Table 1 compares descriptive data for mothers of securely-attached children (MSC group) and mothers of insecurely-attached children (MISC group).

Table 1
Comparison of Descriptive Data for Mothers of
Securely-Attached Children and Mothers of
Insecurely-Attached Children

Variable	Secure		Insecure	
	m	sd	m	sd
Age	31.00	3.35	31.00	3.45
Yrs. Married/ Cohabiting	2.34	1.13	5.24	4.21
	F		F	
Highest Education level				
Graduate	4		9	
College	5		7	
High School	2		1	

Variable	Secure	Insecure
	F	F
First Marriage		
Yes	7	13
No	4	3
Planned Pregnancy		
Yes	10	12
No	1	5
Complications prior to pregnancy		
Yes	5	8
No	6	9
Gender of baby		
Boy	5	8
Girl	8	10

Note: Sample sizes range from 37-39 due to missing data; m=mean, sd=standard deviation, F=frequency.

No significant differences for any of the descriptive variables were found between the MSC and MISC groups. All subjects in the study were white, and at the time of the testing all but one subject were employed. Most reported that they intended to return to work after their baby was born. The majority of the sample worked in professional, public service, business or other white collar jobs.

Reliability

Interrater reliability for the Strange Situation, derived from Dr. Jude Cassidy and her research staff at Pennsylvania State University, was adequate. The percentage of agreement for the A, B and C attachment classifications was 88% and 65%

when the D classification was included. Interrater reliability for the Krohn Scale, which was calculated as a straight percentage of agreement between scorers, was also adequate. Rate of exact agreement was 72%, and 84% for agreement within one scale point.

Infant Attachment

The distribution of the infant's attachment classifications is shown in Table 2. The table includes classification percentages typically found in previous research with low-risk, middle-class subjects in the U.S. (Slade and Aber, 1992; Main, 1995). Two infants received a primary "unclassifiable" rating for the Strange Situation, but are included in the distribution based on their secondary rating in category C, anxious-resistant. The rate of secure attachment in this sample is considerably lower than generally has been found in similar populations. The percentage of anxious-resistant and disorganized children is higher, and of anxious-avoidant children lower, than found in prior research.

Table 2

Distribution of Infant's Attachment Classifications

<u>N=31</u>	<u>F</u>	<u>% of Total</u>	<u>Typical %</u>
Anxious-Avoidant (A)	5	16%	20 - 25%
Secure (B)	13	42%	60 - 70%
Anxious-Resistant (C)	5	16%	5 - 10%
Disorganized (D)	8	26%	Approx. 15%

As in prior research with the Krohn Scale (Levine et al., 1991) scores for the mothers ranged from the high to the low ends of the Scale (range 1-7, with 1 the lowest and 8 the highest), providing further support for the use of the Scale in assessing early memories data. For each subject the following memory queries from the Mayman Early Memories Test were scored using the Krohn Scale: earliest memory; next earliest memory; earliest memory of mother; next earliest memory of mother; earliest memory of father; next earliest memory of father.

Data Analyses

Mothers were divided into four groups according to their infants' classification of attachment: A (anxious-avoidant); B (secure); C (anxious-resistant); D (disorganized). The number of subjects in categories A, C, and D was too low for

statistical purposes; therefore, all 18 subjects in these categories were combined to form a larger "insecure" group. Because the memory scores for both the mothers of securely-attached children (MSC group) and the mothers of insecurely-attached children (MISC group) were not normally distributed, non-parametric tests were used to analyze the data. 76 early memories from the MSC group and 91 early memories from the MISC group were rated with the Krohn Scale. Krohn scores were clustered in the following manner for analysis: Differentiated (Krohn Scale level 6,7,8) - memories expressing complex, differentiated object representations; Stereotyped (level 5) - memories expressing superficial and/or stereotyped representations of others; Need-gratifying (level 4) - memories focusing on the need-gratifying aspects of people without acknowledgment of their individual qualities; Undefined/Malevolent (level 1,2,3) - memories expressing emotionally cold, extremely vague and/or malevolent object representations. Memories were then grouped as follows: 1.) subjects' earliest memories; 2.) subjects' earliest memories of their mothers; 3.) Subjects' earliest memories of their fathers; 4.) Total early memories.

Table 3 shows the statistical difference between the MSC and MISC groups for their earliest memories recalled and for their earliest memories of mother recalled were not

significant. Although the MSC group tended to have higher Krohn scores for memories of their father compared to the MISC group, the statistical difference again fell short of significance. Finally, for the total of early memories no significant difference was demonstrated.

Table 3
Frequency of Krohn Scores for Mothers
of Secure and Insecure Children

Variable	Secure F	Insecure F	df	
<u>Earliest and Next</u> <u>Earliest Memories</u>				
Differentiated	7	5		
Stereotyped	7	15		
Need-Gratification	10	9		
Undefined/Malevolent	2	5	3	3.50 (p=.32)
<u>Earliest and Next</u> <u>Earliest Memories</u> <u>of Mothers</u>				
Differentiated	8	7		
Stereotyped	7	4		
Need-Gratification	6	7		
Undefined/Malevolent	4	7	3	1.78 (p=.62)
<u>Earliest and Next</u> <u>Earliest Memories</u> <u>of Fathers</u>				
Differentiated	12	9		
Stereotyped	7	15		
Need-Gratification	4	1		
Undefined/Malevolent	2	6	3	6.24 (p=.10)

Variable	Secure F	Insecure F	df	
<u>Total Early Memories</u>				
Differentiated	27	21		
Stereotyped	21	34		
Need Gratification	20	17		
Undefined/Malevolent	8	18	3	6.71 (p=.08)

Fisher Exact Test

Note: The one occurrence of a 1 score (by a mother in the MISC group) was considered an outlier and omitted from the analysis. This analysis includes the two primary "unclassifiable" subjects.

A statistically significant difference between the MSC and MISC groups was found in terms of "missing" early memories (Table 4). Memories were considered "missing" if: 1.) A subject declined to produce a specific memory; 2.) A subject repeated a previously described memory; 3.) A memory was missing from a protocol for an unknown reason. Out of 18 "missing" memories total from all protocols, 5 were missing for unknown reasons.

Table 4
Comparison of "Missing" Early Memories Between
Mothers of Secure and Insecure Children

	Secure F	Insecure F
Missing Early Memories (by case)		
Yes	2	10
No	11	8
df(1); p=.03		
Fisher Exact Test		

A Fisher Exact Test found that "missing" data in a protocol predicted inclusion in the MISC group. Mothers who did not produce six discrete early memories were more likely to have an insecurely-attached child. Mothers of anxious-avoidant children declined to respond to memory queries about their fathers 30% of the time on the Mayman Early Memories Test, compared to 0% for the secure group and the other insecure groups.

Data Analysis Excluding "Unclassifiable" Subjects

The previous analyses included the early memories of two mothers whose children received a primary "unclassifiable" rating for the Strange Situation and a secondary rating of category C, anxious-resistant. Since the introduction of the

"disorganized" category by attachment researchers, the percentage of primary "unclassifiable" children in the Strange Situation has been substantially reduced (Main, 1995). The raters of the "unclassifiable" children in this study could not discern a pattern of attachment behaviors which warranted a primary rating, even of the "disorganized" category, which typically indicates incoherence and lack of goal-directedness. Because these children differed from the others in the study in this important respect, a separate Fisher Exact Test was run in which the early memories of the mothers of these two children were excluded. Once again, single earliest memories and earliest memories of their mothers did not distinguish between groups. As shown in Table 5, the Krohn scores of the MSC subjects' earliest memories of their fathers were significantly more adaptive than the MISC group. Although the difference in the Krohn scores for "Total Early Memories" is also found to be significant when the "unclassifiable" subjects are excluded, most of the effect is carried by the subjects' early memories of their fathers.

Table 5
Frequency of Krohn Scores for Mothers
of Secure and Insecure Children,
Omitting Two "Unclassifiable" Subjects

Variable	Secure F	Insecure F	df	
<u>Earliest and Next</u>				
<u>Earliest Memories</u>				
Differentiated	7	5		
Stereotyped	7	12		
Need-Gratification	10	8		
Undefined/Malevolent	2	5	3	2.82 (p=.42)
 <u>Earliest and Next</u>				
<u>Earliest Memories</u>				
<u>of Mothers</u>				
Differentiated	8	6		
Stereotyped	7	4		
Need-Gratification	6	6		
Undefined/Malevolent	4	6	3	1.34 (p=.71)
 <u>Earliest and Next</u>				
<u>Earliest Memories</u>				
<u>of Fathers</u>				
Differentiated	12	6		
Stereotyped	7	14		
Need-Gratification	4	1		
Undefined/Malevolent	2	6	3	7.71 * (p=.05)
 <u>Total Early</u>				
<u>Memories</u>				
Differentiated	27	17		
Stereotyped	21	30		
Need-Gratification	20	15		
Undefined/Malevolent	8	17	3	7.68 * (p=.05)
 Fisher Exact Test				

Note: The one occurrence of a 1 score (by a mother in the MISC group) was considered an outlier and omitted from the analysis.

CHAPTER SIX

DISCUSSION

Introduction

Contrary to the original hypotheses, no significant relationships were found between Krohn Scale scores of subjects' earliest memories recalled and the quality of infant-mother attachment. Early memories theorists, including Adler (1937), Bruhn (1990) and to a lesser extent Mayman (1968) have argued that an individual's earliest memory recalled is especially revealing of his primary psychological issues and internal object world. Research by Langs (1965), Bruhn and Schiffman (1982) and Acklin (1991) have supported this view. Much of the early memories literature would have predicted that the nature of the earliest memories recalled would have been related to quality of attachment.

The results also demonstrated no relationship between the subjects' earliest memories of their mothers and infant-mother attachment. Previous research with the AAI (Main, 1990; Levin et al., 1991) have shown a significant relationship between the quality of mothers' internal working models of their own mothers and infant-mother attachment, as assessed by the Strange Situation. Attachment theory maintains that a woman's internal working models of her own mother which reflect

reliability and sensitivity enhance her cognitive and affective capacities to respond to the widest range of her infant's expressions and promote secure infant-mother attachment. Levine et al. (1991) found that the quality of mothers' internal working models of relationships and their object representations were significantly related. The attachment literature would have predicted that in this study the MSC subjects' object representations of their mothers would be of a significantly higher quality compared to the MISC subjects'.

Surprisingly, this study found that MSC mothers were more likely to reveal a higher quality of object representation in early memories of their fathers compared to the MISC group, although the statistical difference between the two groups fell short of significance. When the early memories of two mothers of "unclassifiable" infants in the Strange Situation were excluded from the statistical analysis, the difference between the MSC and MISC groups for their earliest and next earliest memories of father was significant. Because this analysis, however, was done "post-hoc" one should be cautious in interpreting its outcome.

The outcome that no significant relationships were found between Krohn scores and attachment may be due to the disturbed nature of the sample. The degree of psychopathology

for both the MSC and MISC groups, as assessed by the SCL-90-R, was higher than for a normal population. Mayman (1967) and Blatt (1976) have both demonstrated a relationship between level of psychopathology and the nature of object representation. In this study the elevated levels of psychiatric symptomatology may reflect the mothers' difficulties in developing stable object representations, affecting the congruence between their internal objects and infant-mother attachment.

The findings may also be related to the source of the data in this study, a projective early memories test. The AAI, the source of memory data in the vast majority of similar investigations, is a considerably more structured test. Even Levine et al. (1991), who found that mothers of securely-attached children revealed a significantly higher level of object representation than mothers of insecurely-attached children, used the AAI for her data. It is possible that a different quality of early memories may be elicited by projective early memories tests, perhaps more revealing of certain types of unconscious material. Further studies are necessary to investigate this issue.

This research did find that mothers who were unable to recall discrete memories in response to all six memory queries were significantly more likely to have an insecurely-attached

child. Mothers of anxious-avoidant children failed to produce discrete memories nearly 30% of the time. Similar to their anxious-avoidant infants, these mothers appeared to "avoid" anxiety-provoking objects by consciously refusing to describe recollections of past significant relationships or by an inability to access certain episodic memories.

Although the groups were not significantly differentiated by Krohn scores, a qualitative analysis of early memories from each attachment group reveals several interesting trends, which will be discussed in the next section. Additional speculations about the meanings of the results of this study will be presented following the qualitative analysis.

Qualitative Analysis of Early Memories

From the entire sample of subjects only three mothers, each having a securely-attached child, revealed multi-dimensional, unique object representations in all or all but one of their early memories (Krohn Scale scores of 6 or higher). These subjects demonstrated a stable ability to form and recall differentiated internal objects, reflecting an awareness of others' separateness, and conveying the centrality of people in their inner lives. One such MSC woman recalled the following memory:

(Next Earliest Memory) "When I was four, at my birthday. We had left Ohio, and we had driven,

stayed overnight in a hotel because of a huge rainstorm. My mother was in the Volkswagen by herself with some of the kids, my father was following. I remember being in [my mother's] car and finally getting to a hotel. She was terrified, but then we got there. And the next day we were pulling into the house and my grandparents were there to welcome us, and they had a birthday cake for me, and lots of presents and I hardly knew it was my birthday, but I felt really great because no one had forgotten. It was this horrible storm and then coming into our house was just this wonderful feeling. (What do you notice about yourself and your mother?) I felt my mother's fear on the road and I knew she was very scared. I felt as though even though there were other people in the car, I was always the one who knew what mom was really feeling. I remember feeling very important and very loved and very much a part of my mother's life."

(Note: On the Mayman Early Memories Test the examiner is instructed to ask specific clarifying questions if necessary.)

In this memory the subject presents a detailed and coherent narrative. She is engaged with people and aware of others' feelings and concerns. In a frightening situation, she portrays her environment as ultimately reliable and reassuring. She reflects on the emotional closeness she has always felt with her mother, revealing a central quality of her internal representation of their relationship. The same subject described this "earliest memory of her father":

"Earliest memory of my father? Probably about 2 or 3. I had a brother and I had learned to talk and [my brother] couldn't talk yet. Dad had just bought a tape recorder, and it was this real big thing. He had this huge microphone, and he would ask me questions and I would talk into the microphone, and into this tape recorder and it

would record. I remember, we still have the tape, but I remember talking into it and telling stories and my dad asking me questions. I would give the answers and he would say very good, and he was like trying to educate me. And then he would talk into the machine, and there was a banter back and forth. And I remember my little brother who couldn't talk yet, and every once in a while my father would turn to him and say, "what do you have to say?" And [my brother] would make noise "rarararararara", and I felt very superior because I could talk. (What do you notice about your father?) Father was very accomplishment oriented. He likes things to be correct, education oriented. Very much of a father figure, a strong man who has expectations of his daughter, of his children."

This recollection vividly describes her father's character and the nature of their relationship. She is acutely aware of her father's expectations for her and recognizes her own feelings, such as sibling rivalry. The tone and substance of her interactions with each parent are distinct in these memories, indicating how well-defined and differentiated her internal objects are.

It is surprising that a greater number of mothers of secure children did not show a consistent pattern of high-level Krohn scores. The majority of mothers of securely-attached children had only one or two memories rated at Level 6 or higher on the Krohn Scale. These subjects demonstrated a capacity to develop some complex, individualized representations, but more often revealed inner objects which were less consistently unique and whole. Most of their memories were scored at Level 5, expressing impersonal,

stereotyped internal representations, or Level 4, expressing a preoccupation with the gratification of needs. One MSC subject demonstrating this pattern of scores described the following memory:

(Next Earliest Memory) "Only a vague...I remember sitting in the living room on the floor, I was watching TV and there's a general sense of the layout of the house. I only lived in this house my first three years. (What details do you recall as you experienced them then?) I remember friends...or a friend being with me. But I don't remember my parents. But I do remember other little kids. (What do you notice about these people?) That would get into hearsay. I know we had a little blind girl in the neighborhood. So I picture her. I don't directly remember her. (From what vantage point do you see the memory scene?) I'm looking in on it. I feel myself in the memory. I don't really see myself. (What feelings accompany the memory?) Nothing strong...Just contentedness...Not especially negative or positive. That one's really vague also."

People in this memory have no real identity because the subject provides so little information about their personality characteristics, behaviors, or emotions. She recalls a memory in which a friend is with her, but describes virtually no interpersonal interaction. Her narrative is occasionally contradictory, such as her claim that she can picture the blind girl, but cannot "directly remember her". This woman also shows a difficulty articulating her feelings which accompany the memory.

This same subject produced this "earliest memory of her father":

"When I was four...the memory is after my mother died and he was already planning to re-marry. It was just a few months after my mother died. We were riding in the car underneath the "El" of the subway. He was teasing me...pointing out the different women and saying, "Do you want her for your new mommy?" He had already made his choice and he knew I already liked her a lot. (Feeling?) I felt taken care of. That everything was under control and alright. I was going along with him. He'd say, "Do you want her?" I'd say, "No! I want _____" ...and I'd say the name of the woman he was going to marry. It was re-affirming that I really wanted a new mom and he was making me feel that it was my choice. I would say, "I don't want that one...I want the one we picked out." (What do you actually see as you picture it?) I see the traffic and the "El" of the subway. (Do you see yourself in the memory?) No...I am myself. (What do you notice about your father?) He seems good natured...cheerful. (What do you notice about yourself?) It's hard not to project. There was so much going on at that time. I think I must have been dazed underneath it all. Outwardly, I think I thought everything was OK."

In the memory her narrative is much more detailed and vivid. She is able to reflect on the event described and understand her father's motivations, as well as her own emotions and behaviors. Her description of her father is more individualized, and they are mutually interacting with each other.

Most MSC mothers revealed (in their early memories) the development of several internal representations which were less differentiated and whole. These representations, mostly scored at Level 5 on the Krohn Scale, appeared to hinder the ability of many MSC women to have a consistently rich

experience of people. However, MSC mothers also had the highest percentage of high-level Krohn scores, evidence of the capacity to form some multi-dimensional, empathic object representations. This capacity, although sporadic for these women, may be instrumental in fostering their childrens' secure attachment. The MSC group's numerous Level 4 scores, which will be discussed in greater depth later, may indicate an adaptive expression of dependency during pregnancy.

The mothers of anxious-avoidant children had the lowest percentage of early memories scored at Level 6 or higher on the Krohn Scale, compared to the other insecure groups and the secure group. These mothers showed a strong tendency to recall Level 5 memories and had a high rate of low level Krohn scores and "missing" memories. One mother of an anxious-avoidant child recalled these memories:

(Earliest Memory) "When I was about three my father took my younger sister and me to see the house that my parents were buying. I remember meeting the woman who was selling it. I don't remember my mother being there. It's hard for me to imagine my father would have brought us without my mother. (Do you have a visual image of this memory?) It's a visual image. I see us coming in the front door and I see a vestibule, a bird cage and the woman. I was holding dad's hand, as was my sister. (Do you see and feel yourself?) I just see myself. (What do you notice about yourself?) I had the idea that the woman was very old and my father was very young as I look back. (Feelings?) It seems pretty neutral. It's hard to conjure it up as it was. I've repeated it so many times, it's devoid of emotion."

(Earliest Memory of Mother) "I don't remember my mother in my early memories. I can't even picture her. Not even in the house we lived in till I was ten. I remember my parents hugging in the dark. My parents were very involved with each other and not very involved with the children (What do you remember about your mother?) They're silhouettes. They were in the den. I was in the hallway watching them. I was younger than ten. (Feelings?) All my memories from when I was young are pretty depersonalized. I can't connect things with individual memories."

(Earliest Memory of Father) "I don't really have any...memories of my father."

This subject's "earliest memory" includes other people, but none are depicted in any unique, multi-dimensional way. She insists she has no feelings accompanying this memory, and offers no insight about the emotions or thoughts of others. There is no explanation why this memory, which she claims to have repeated "so many times", is personally meaningful in any way.

Her "earliest memory of her mother" is shadowy and conveys her feelings of physical and emotional distance from others. She has difficulty recalling childhood memories of her mother, perhaps because her internal representation of their relationship are so unstable or disturbing. Reflecting on her emotions about her parents seems especially anxiety-provoking, which she defends against by "depersonalizing" her memories. Her rejection of memory queries is a further attempt to maintain emotional distance from her internal

objects and ward off the anxiety they appear to generate.

A different mother of an anxious-avoidant child had these recollections:

(Next Earliest Memory) "I hear the vacuum cleaner. I'm on the floor on my back. The vacuum cleaner is nearby and I'm crying. My mother puts me inside the bed under the covers and everything is dark. (Age?) I don't know, a couple of months old. (What do you notice about yourself?) I'm too small, I can't really do anything, I feel bad. I'm afraid of the dark, afraid I'm going to die. (What do you notice about your mother?) She doesn't care, she doesn't want me to cry. She's very anxious, very angry. She doesn't like me.

(Earliest Memory of Mother) "I'm in the basement...maybe not...maybe we can move on to questions about my father."

(Earliest Memory of Father) "It's sort of blurry, a gentle voice is talking to my mother. I see square hands, very square fingers, and a moustache. (Do you remember a particular incident?) Not clear. Maybe at four. I'm talking to him about my mother (what details do you recall?) Not much - we're in the country. I'm feeling bad about my mother, complaining. (What do you notice about your father?) He sort of agrees but can't do anything, he's sort of placating. (What do you notice about yourself?) I'm crying. I feel very bad. I'm sort of screaming and crying. I see trees, grass, my father and myself."

The first memory is extremely bleak. The subject describes her mother in totally negative terms, but reveals no understanding of her mother's anger or insensitivity. Several women in this study had memories from their first months of life, but few recalled incidents of such extreme despair, vulnerability and rejection. Her "next earliest memory"

generated such a high level of anxiety for this woman that she rejected the examiner's request for a memory of her mother. The memory of her father, although vague and "blurry", is somewhat more modulated. There is an increased sense of mutuality in her interaction with her father, and she characterizes him in more complex terms, as sensitive and placating, but also as ineffectual in helping her with her problems.

These narratives exemplify many characteristics of the early memories of mothers of anxious-avoidant children. Their recollections often conveyed a sense of physical and emotional remoteness from others. Frequently, they attempted to deny the importance of their feelings or seemed easily distressed by them. These mothers had the smallest percentage of high-level Krohn scores, perhaps indicating a deficiency in empathic internal representations, affecting their capacity to cope with emotion and interpersonal stress.

Mothers of disorganized children had the highest percentage of low-level Krohn scores, including the only memory scored as "1" in the study. These mothers also had the second highest percentage of "missing" data. These memories were recalled by one woman in this group:

(Earliest Memory of Mother) "I remember having chicken pox, must have been very young. My fever was very high and I was in my mother's bed. I was tearing my hair out, but I couldn't really feel it.

I was hallucinating. It was just her bed, my mother's bed. I remember actually my grandmother, not my mother. But it was my mother's bed."

(Earliest Memory of Father) "Well, now I've drawn a huge blank. I don't remember. I just know that he worked a lot. My kid is going to know her father. Well, maybe there is one...some birthday party. There was a father there with his daughter. The man had his daughter on his lap and I wanted to do that with my father and have him twirl me around like this man twirled his daughter. I had to have been 2, 3 or 4."

This woman's internal representations of her mother seem so anxiety-provoking and unstable that she is unable to describe her mother or their relationship at all. When representations of her mother are recalled, they appear to diminish her reality-testing and to evoke masochistic impulses. The poor developmental quality of her internal representations prevent her from adequately modulating her emotions and perceiving interpersonal relationships in a more realistic, complex way. Her internal representations of her father, while less extremely pathological, are still quite poorly developed. Her father has no real identity because she provides no information to differentiate him from other men. She expresses a wish that he be more engaged with her, but is unable to articulate her feelings about their relationship, or to reflect on the reasons for his emotional and physical distance from her.

Another mother of a disorganized child recalled the

following memories:

(Earliest Memory) "I must have been 2 or 3 living in an apartment before my sister was born and my sister's 3 years younger. I don't remember anything specific but I can remember the apartment - the formation, and the furniture colors, that kind of thing. It's not a specific incident. (Do you have a visual image of the memory?) I can see it - I can recreate it - but not like I see a particular event. (Do you see yourself in the memory?) No, I'm an observer. I must have a good memory - because I compared this with my father who confirmed that my memory was incredible. (What feelings do you have accompanying the memory?) Empty. I have no memory of people. I don't associate it with people. It's very sterile, cold."

(Next Earliest Memory) "My grandma came to our house - the apartment I just described - and I remember her walking up the stairs and we played a little game. I've heard her tell the story in subsequent years but actually have a memory of this as well. We lived several floors up in a walkup. On each landing...we'd start the game with her saying,... "Grandma - I guess it's a variation on Red Riding Hood - Grandma what big eyes you have". And her reply would be "The better to see you" and she'd walk up another flight of stairs and stop at the landing. And she'd say - no I'd say - "Grandma, what a big nose you have" and she'd say "The better to smell you." And then when she got to the final landing point we'd get up there together and it would be like in Red Riding Hood - "The better to eat you, my dear". And she'd chase me around the apartment because we'd be at the final landing point. (What do you see in the memory?) Her climbing the stairs at each landing point. (Do you see yourself?) Yes. And it's also very visual about how happy she was when she got there and saw me. (What feeling do you have accompanying the memory?) Very pleasant, very warm. (Age?) 3, 4 max."

These memories form an interesting juxtaposition. In her "earliest memory" people are perceived as peripheral, and her

feelings are characterized as empty and cold. In her "next earliest memory", however, she describes in detail her mutual activity with a warm and loving significant other. This woman later refused to describe any early memories of her mother because they were "all very black". Many of this woman's internal representations of relationships seem to be predominately negative and intensely anxiety-provoking. Occasionally, however, she is able to access some inner objects which reflect interpersonal closeness and emotional warmth. The two times she misspoke when describing her "next earliest memory" may indicate the tenuous nature of her more benign representations.

Mothers of disorganized children frequently displayed a wide range of Krohn scores. They sometimes revealed internal representations which were quite disturbing, depicting cold, lifeless and malevolent images. Their narratives, more frequently than other groups, could be confusing, even bizarre, as shown in the preceding examples. Mothers of disorganized children did, however, produce a respectable percentage of high-level Krohn scores, possibly reflecting the extreme variation of their internal representations. Main (1995) believes that children develop disorganized patterns of attachment in response to frightening or frightened behavior on the part of a parent. Perhaps the wide variation in the

quality of internal representations for some of these mothers contributed to their being frightened with or frightening to their children. The nature of their internal object world may have, for example, increased their unpredictability with their children.

Only 3 children received a primary attachment classification of anxious-resistant in this study. A relatively high percentage of their mothers' early memories received Krohn scores of Level 6 or higher. None of these mothers' memories received a rating below Level 4, and they had a low percentage of "missing" data. One subject with an anxious-resistant child produced these recollections:

(Next Earliest Memory) "I'm about 3 or 3 ½ and my mom has rented a house on Long Island for the summer and my bed, a twin, is next to the wall and I've been put down for a nap which I don't want and I started peeling the wallpaper and I just remember the quiet and stillness in the room and everyone was outside having fun and then the fun of peeling wall paper - it was yellow - yellow and white. (You have a visual image of the memory?) Yes, there are visuals - there are all different senses, the quiet, the feeling of the wallpaper. (What do you see?) I see the corner with the bed and the wall and I sort of see where the wallpaper is coming loose and I see my hands - I don't see myself - I see going out of my eyes. (What do you notice about yourself?) I seem small in the bed and the bed feels very big - my hands are small (What were you feeling then?) It was kind of gleeful - kind of fun and I was mad. (What are you feeling now?) Amused and kind of like sympathetic."

(Next Earliest Memory of Mother) "Probably getting punished for the wallpaper - she was furious - she

was absolutely in a rage - I can't remember what she did - and being confused, not confused, but surprised at the strength of her reaction and scared. (What do you see?) Sort of a confusion from the perspective of the floor, of her, and what I think vaguely must be the corridor and kitchen of the house - her arms and her face from a little kid's perspective - and her face was red - she was screaming. She's angry, she's big, she's loud, she's scary. (What do you notice about yourself?) I'm confused - I'm a little bewildered and I'm scared. (What are you feeling now) Anger....At my mother and sympathy for this little kid and for me - you want to know how I ended up working with abused kids - I know all about it - I feel sorry for the kid who didn't know just how angry mom was going to get."

This woman describes her phenomenological experiences in both memories very well. The characterization of her abusive mother is especially graphic. She seems able to understand the links between her own current motivations and behaviors and past events. Main (1995) found that "preoccupied" subjects on the AAI (the adult attachment classification associated with the anxious-resistant category in children) often speak in long, grammatically entangled sentences, indicating difficulties modulating their thoughts and emotions. This subject's lengthy first sentence in her "next earliest memory" may reflect some of these preoccupied tendencies. For a mother of an anxious-resistant child, however, one would expect her narrative to be much more confused and/or inappropriate (although the subject mentions the word "confused" several times, her narrative is coherent).

This woman also does not display a preoccupation with a particular attachment figure in her early memories. In fact, none of the early memories of this group indicated an excessive or confused preoccupation with an attachment figure. This study provides some evidence, although based on a very small number of subjects, that the quality of internal representation may be somewhat higher for mothers of anxious-resistant children, than mothers of anxious-avoidant or disorganized children.

Speculations On the Early Memories of Fathers and Mothers

Based on idiographic research with pregnant women, Ballou (1978) discusses the importance of a woman's successful resolution of oedipal conflicts. Successful negotiation of these issues, Ballou asserts, enhances the mother's capacity to experience her new-born baby realistically without distortions created by her own conflicts and affects. Resolution also enhances her feelings of separateness and autonomy in her relationship with her father. The trend of higher object relations scores for the MSC group for memories of their fathers may reflect their long-standing resolution of oedipal issues. The scores may indicate these women's ability to maintain adequate emotional distance from their fathers and to perceive their fathers as important figures of mediation

and moderation during the stresses of pregnancy and early motherhood. Kaplan (1992) in a study of middle-class mothers found that most of her subjects had negative internal representations of their own mothers as being unavailable, non-nurturant and intrusive, and positive representations of their fathers and husbands.

Benedek (1959) and Bibring et al. (1961) view pregnancy and early motherhood as periods of developmental crisis and transformation. The core adjustive task of pregnancy, according to Bibring et al. (1961), "is the [woman's] relationship to her own mother, its infantile aspects and its maturational resolution in the daughter's move toward becoming a mother herself." Based on their longitudinal research Bibring et al. (1961) found that many pregnant women, "exhibited a regressive shift with the emergence of developmentally earlier patterns of behavior, attitudes and wishes." Regressive tendencies during pregnancy and early motherhood, according to Benedek (1950), often center around early developmental conflict, and reflect intrapsychic processes originating in the mother-child relationship during infancy. The object representational vicissitudes brought on by pregnancy may temporarily skew a woman's perceptions of her own mother. Pregnancy may evoke more primitive object representations of mother (and of self with mother) which are

less modulated and multi-dimensional. This may explain why mothers of securely-attached children tended to have lower Krohn scores for memories of their mothers, compared to memories of their fathers, and may also partially account for why the MSC and MISC groups did not differ regarding memories of mothers. Frank et al. (1994) found that the capacity for adaptive regression in pregnant women was associated with secure infant-mother attachment at 18 months. Benedek (1959) believes that regressive needs and conflicts offer a pregnant woman the opportunity to address unresolved maturational issues, which ultimately may lead to the establishment of a less ambivalent relationship with her mother.

Ballou (1978) discusses how pregnancy and early motherhood often intensify a woman's own dependency feelings and conflicts. A mother's experience of her child's dependency inevitably evokes images and feelings of how well her own dependency needs were met as a child. As Fraiberg et al. (1975) describe, pathological internal representations of insensitive, unreliable caregivers may lead a mother to reject the dependency needs of her own child. If a woman is going to accept the dependency needs of her child, Ballou (1978) argues, she must to some extent accept her dependency on her own mother, husband, and others. Mothers of securely-attached children in this study produced an unexpectedly high number of

Level 4 early memories, perhaps indicating a preoccupation with the gratification of needs and with issues of dependency. An example of this type of memory was recalled by one MSC subject:

(Earliest Memory of Mother) "I'm five or six and I'm with my best friend Kelly. People thought we were twins. We both wore glasses and wore patches. My mom would fix us trays of food and we would sit outside and eat. It seemed special. (Feeling at the time?) I felt lucky that my mom was there to do special things for me and my friends. I have no memory of Kelly's mom. I liked playing at my house. (What do you see in the memory?) The outside and the trays. I don't see us eating, I don't see my mother - she's more of a feeling than a sight. I see myself and Kelly. I'm looking in on the memory. (What do you notice about your mother?) Not much, she does all this stuff and then she leaves us alone. (What do you notice about yourself?) I probably felt like the leader of the party, the hostess, more comfortable to be at my house with my rules. (What do you notice about Kelly?) She's shyer than I am, she'll do what I tell her."

The focus of this memory is the mother serving the girls a tray of food. The mother is not individualized in any way, except as a reliable provider of "special things" for her daughter. This MSC subject says she has no visual recollection of her mother in the memory, but she is able to recall images of the food. In what is supposed to be a memory of her mother, this woman is better able to differentiate the personality characteristics of her friend.

A more extreme expression of dependency is found in the following "early memory of mother" by a different MSC subject:

"Another memory of being hungry and asking her [for something] to eat and she was sick or something....It felt kind of icky. Feeling like I had to wait. (What do you actually see in the memory?) I see myself going over to my mother and asking her to get me some food. I see her in bed. From a little kid's perspective. (Do you see yourself in the memory?) Yes. (What do you notice about your mother?) Well, she said she was sick, so I experience her as not involved. (What do you notice about yourself?) Just there - trying to take care of myself - see that I was OK."

The memory chiefly conveys a child's experience of insecurity and frustration with her mother around issues of dependency and gratification. The subject has difficulty differentiating her emotions, relying on vague, child-like descriptions, such as "icky". Her mother is portrayed not as a well-defined individual, but as someone who is exclusively weak and uninvolved. In a different early memory this subject revealed internal representations of a much higher developmental level.

The high number of Level 4 memories by the MSC group may reflect an adaptive expression of increased dependency brought on by pregnancy. By producing even a greater number of Level 6 and 7 memories than Level 4 memories, however, it is clear that MSC mothers have the capacity to modulate their dependency feelings and impulses. Mothers of insecurely-attached children produced a lower rate of Level 4 early memories compared to the MSC group. The tendency of MISC mothers to produce memories of a vague and stereotyped nature (Level 5) may indicate a defensive attempt to cope with

overwhelming dependency feelings, a result of the internalization of unreliable, frustrating caregivers.

People construct early memories, according to Mayman (1960), based on their current psychological state and phenomenological experience. Mayman (1960) asserts that an individual's phenomenological experience varies as a result of normal developmental transformations, which are often reflected by the content and quality of her early memories. The trends found in this study may lend support to these theories. Perhaps as a result of the developmental stresses of pregnancy, the quality of internal representations revealed by many MSC subjects in memories of their mothers was generally lower than that revealed in memories of their fathers. This may be a reflection of a pregnant woman's regressed experience of her own mother, including the intensification of dependency needs and conflicts. During this developmental period of a woman's life internal representations of her father may remain more stable and realistic and more accurately reflect her baseline capacity for empathic-relatedness.

Mayman (1960) also maintains that early memories reveal vital information about an ego's defensive and adaptive capabilities. In this study, the absence of memories from a protocol appear equally informative about the nature of an

individual's ego resources. Rejected, repeated or otherwise "missing" memories significantly predicted insecure attachment between a child and his mother. Mothers of anxious-avoidant and disorganized children often had difficulty modulating their anxiety and emotions in response to memory queries. Their rejection of memory queries seemed an extreme defensive attempt to maintain emotional distance from painful, frustrating object representations. These women seemed to lack the internal resources necessary to reflect on past relationships and realistically comprehend others' motivations and feelings. "Repeated" memories may have been a less blatant defensive strategy to avoid anxiety-provoking internal representations.

The Interface of Object Relations and Attachment Theories

From the results of this study, it is unclear whether there is a relationship between the object representations revealed in the subjects' early memories and the quality of infant-mother attachment. The nature of object representations of father (reflecting individuality, complexity and interpersonal insight) and of mothers (reflecting some regressive themes) which was revealed by many MSC women may have enhanced their ability to respond to the widest range of their infants' expressions and serve as a

reliable source of security. The internalized object representations of fathers revealed by the MISC group tended to be less defined and unique. The high percentage of "missing" memories for mothers of anxious-avoidant and disorganized children demonstrated their limited access to childhood experiences and their ego deficiencies modulating distress-related affect. These characteristics of the internal object world of many MISC women may be related to their children's internal working models of their mothers as rejecting or frightening, and of the self in relation to mother as unworthy of love and/or vulnerable.

The results showed no congruence between the internal object world of the three mothers of anxious-resistant children and the nature of their childrens' internal working models of their mothers. These women revealed a pattern of Krohn scores similar to many mothers of securely-attached children, reflecting several differentiated, complex internalized representations. Mothers of anxious-resistant children also had a low percentage of "missing" memories. Nevertheless, children of these mothers displayed marked distress and resistance to soothing following brief separations, suggesting internal working models of their mothers as unpredictable and discouraging of autonomy. This apparent contradiction may support Van IJzendoorn's (1995)

contention that maternal sensitivity is not the only significant determinant of infant attachment.

Object relations theorists (Kernberg, 1976; Mayman, 1968; Blatt, 1976) emphasize the role of developmental factors affecting internalized representations. This study found that the developmental stresses of pregnancy and early motherhood may temporarily skew a woman's perception of her own mother, by evoking regressive object representations. Despite these developmental transformations brought on by pregnancy, the results showed that as long as a woman's internalized representations of her father were of a high developmental quality, there was a tendency for her child to be securely-attached.

This study corroborates other important convergences between the concepts of object representations and internal working models (Main, 1995; Levine et al., 1991). Coherency, relevancy, and specificity in one's recollections of past relationships signify both developmentally mature object representations and secure-autonomous internal working models. Accessibility to episodic memories of one's early experiences with significant others is also an important criterion both in the assessment of object representations and internal working models. Main et al. (1985) view an individual's internal working models as facilitating or limiting access to

information regarding attachment-related experiences. In this way a mother's internal working models affect her capacity to be empathic and responsive with her infant and influence the nature of her child's developing internal working models of attachment. The high percentage of rejected memory queries by mothers of anxious-avoidant children may demonstrate an association between a mother's level of internalization, the accessibility of her early memories, and the nature of her child's internal working models.

Patterns of affect regulation likewise serve as important indicators of developmental level of object representation and of quality of internal working models. Lower Krohn scores are associated with an individual's difficulties modulating affect and anxiety in response to projective stimuli. Kobak and Sceery (1988) believe mothers rated "dismissing" on the AAI frequently fail to produce early recollections in an attempt to minimize distress-related affect associated with the experience of rejections. In this study subjects who revealed developmentally mature object representations showed a greater capacity to acknowledge painful affects associated with early memories and produce a coherent narrative.

What Main (1995) refers to as "metacognitive monitoring", the ability to reflect on past relationships and develop new insights, was demonstrated more frequently by mothers of

securely-attached children in this study, compared to mothers of anxious-avoidant or disorganized children. For many mothers of insecurely-attached children their current perceptions of childhood relationships seem unchanged from when they were young children. In her research with the AAI, Main (1995) found that metacognitive monitoring is commonly demonstrated by parents who reveal secure-autonomous internal working models of attachment.

Limitations of Study

The small sample size precluded a statistical comparison between the mothers of securely-attached children and the separate insecure attachment groups. Because the time interval between the administration of the Early Memories Test and the Strange Situation was over one year, several mother-infant dyads dropped out of the study before both sets of data were collected. Also, the sample was homogeneous with the great majority of subjects being white, highly educated, and middle class. The results of this study are, therefore, generalizable only to similar populations.

Both MSC and MISC subjects had higher levels of psychiatric symptomatology, as assessed by the SCL-90-R, than found in normal populations. This factor may be related to the subjects' willingness to voluntarily participate in a

longitudinal study. Participation may have, in some cases, reflected a need for additional social support from mental health professionals in order to negotiate the stresses of pregnancy and early motherhood. Women with less psychiatric symptomatology and, presumably, stronger ego resources were perhaps less likely to participate in the study. In this way, an important subsample of the population of pregnant women may have been underrepresented in this research.

Conclusions

This study examined the impact of a parent's representational models on her relationship with her child, an area on which empirical object relations research has only recently begun to focus. No significant differences were found between the MSC and MISC groups for their Krohn scores of earliest memories recalled or of earliest memories of their mothers. Mothers of securely-attached children tended to have higher Krohn scores for memories of their fathers, compared to MISC subjects, but again the group difference fell short of significance. Finally, a mother's ability to consistently produce discrete memories of past relationships significantly predicted her child's secure attachment.

The MSC subjects' early memories may have revealed a developmentally-determined shift in their self and object

representations of their own mothers, brought on by the experience of pregnancy. Administering an early memories test to these subjects a few years after the births of their children would clarify whether their experience of their own mothers becomes temporarily skewed during pregnancy.

Krohn (1974) incorporated many object representational variables, such as articulation, affect tone, degree of mutuality, psychological-mindedness and others, when devising the different level of his scale. It may be useful in a future study to analyze projective early memories data from mothers using several separate object relations scales, each assessing a particular variable. In the current study, it is possible that differences in some variables were obscured by a lack of difference in others. The convergences between object representation and attachment concepts and assessment previously discussed in this study substantiate the need for further integration of attachment and object relations research to investigate these intraphysic phenomena.

Appendix

Krohn Object Representation Scale

1. The subject's world seems to be completely lifeless, vacant, alien, strange; it is a world essentially without people; he experiences the world as very stark and static or very fluid and formless; in short, the world for him is an unpredictable, desolate, often strange and bizarre place that he only rarely understands.

2. The subject's internal world includes people, but not really alive, human, benevolent. People are insubstantial figures, prone to seem malevolent, brutal, murderous, extremely cold, mechanical, less than human. The subject's sense of people seems bizarre and distorted. More specifically, it seems that under the pressure of morbid, sadistic, murderous impulses and fantasies, people become transformed into malevolent, animalistic figures. There is no internal experience of real interaction among people, for others are experienced as little more than the subject's own primitive impulses incarnate.

3. People are experienced as insubstantial, fluid, more or less interchangeable, but are not experienced as malevolent as

in #2. Though people do not seem bizarre or aggress against one another as in previous categories, the subject experiences others in a vague, fluid and undefined fashion. The subject cannot really articulate what someone means to him, because he has such an undifferentiated concept of what other people want, feel or do. Such subjects may be unsure who did what to whom, for his internal representations of other people are so unstable, diminished and distorted and because his sense of his own boundaries and the boundaries of other people is so poor. This category is very similar to #2 but different in important ways too: the subject experiences others as confusing, fluid and without any enduring characteristics he can bank on, but not pervasively malevolent, weird, mysterious or strange. Listening to this kind of subject describe an interaction, one would continually hear rather flagrant contradictions in the way other people are depicted. This arises out of the subject's limited capacity to form a meaningful "gestalt" of another person, leaving him with a set of moment-to-moment impressions that fail to capture what is enduring and salient about other people.

4. The subject's experience of people is to a very great extent fashioned around the needs they can quite directly gratify in the subject and/or around the needs the subject can

directly gratify in the other. In this sense people are experienced in a very incomplete way: aspects of the other that do not bear directly on the exchange of gratification are only partially perceived and understood. Put another way, the tremendous importance of other people as gratifiers leads the subject to be only vaguely aware of qualities of the other that exist apart from its need-gratifying function.

5. The subject's world is experienced as populated with other people who are neither fluid nor massively distorted by poorly integrated affects, but who do not have real identity. There is a sense that people are more or less interchangeable for the subject. People either seem very shadowy and their motives are unclear to the dreamer, or else they are experienced in stereotyped ways. People do not really make sense to the subject; for example, he hears them but is often unsure of how they are meaning what they are saying or reads a great deal of implication and hidden messages into what they are saying. There is no real depth, specificity or uniqueness to the people in the subject's world. His world seems to be populated with "passersby", so to speak, who either differ little from one another or who fall into one of several rigid, superficial categories. These subjects may try to use highly intellectualized, at times "symbolic notions" of people.

In the categories that follow the subject has a much richer experience of people, is more tuned into their needs, motives and individual differences. People become more defined and therefore more unique and individual for the subject. Fantasies, fears, needs, guilts and conflicts among them all have an impact on the subject's feelings towards others, but others always maintain a basic humanness and wholeness within the subject. Categories 6-8 try to tap differences in the amount and quality of internal commerce with objects. Beyond feeling whole and human, how much range does there seem to be in the subject's inner repertoire of objects? How much and how readily does the subject consider the feelings and implicit aims of those around him? In general, how subtle and differentiated is his experience of others?

6. The subject has a firm hold on objects and generally conforms to the description above. However, he does not readily, whether for defensive or characterological reasons, try to understand the inner experience of other people - their feelings, thoughts, wishes, etc. Due to neurotic preconceptions and preoccupations, people do not feel to the subject to be able to interact in easy, mutual fashion.

Neurotic conflicts lead the subject to want to be with people, but in a parallel activity or at a safe distance from others. This type of subject is dealing with his conflicts by steering clear of others, avoiding the more intense involvements particularly, that bring his conflicts to the fore and cause him discomfort. This subject might be little aware of any intense conflicts, being only in touch with an overall sense that his life is not as full as he wants it to be.

7. The subject experiences people with a good deal of sensitivity and acuity. They are unique, varied and rather well defined for him. He is aware of important, subtle differences among people, both in terms of changes in moment-to-moment and day-to-day moods and attitudes, as well as overall differences in character of those around him. People seem to be central to the subject's inner life, even if neurotic conflicts lead him to experience them in childish, transference-dominated ways. He seems to be "in touch" with people affectively.

8. The subject lives in a lively world of fully human objects. There is a sense of rapport with people and a well-developed understanding of their thoughts, feelings and conflicts. There is a well-articulated internal model of

people being involved with each other, including an understanding of why they form relationships, why they get out of them, and what interferes with them. Others' behavior and personal characteristics are considered in perspective, remain open to reinterpretation, etc. There is a good deal of self and interpersonal awareness, indeed, a psychological-mindedness. Relationships are, for the most part, not neurotically conceived.

From Krohn, A., Mayman, M. (1974).

BIBLIOGRAPHY

- Acklin, M.S., Bibb, J.L., et al. (1991). Early memories as expressions of relationship paradigms: a preliminary investigation. Journal of Personality Assessment. 57(1), 177-192.
- Adler, A. (1931). What life should mean to you. Boston: Little, Brown & Co.
- Adler, A. (1937). The significance of early recollections. International Journal of Individual Psychology. Vol. 3, 283-287.
- Ainsworth, M.D.S. (1969). Object relations, dependency and attachment: a theoretical review of the infant-mother relationship. Child Development. 40, 969-1025.
- Ainsworth, M.D. (1973). The development of infant-mother attachment. In Review of Child Development Research. Vol. 3. Ed. B.M. Caldwell and H.N. Ricciuti. Chicago: University of Chicago Press, 1-94.
- Ainsworth, M.D.S., Blehar, Waters, E. and Wall, S. (1978). Patterns of attachment: A psychological study of the Strange Situation. Hillsdale, NJ: Erlbaum.
- Ansbacher, H.L. (1947). Adler's interpretation of early recollections: historical account. Journal of Individual Psychology. Vol. 29, 135-145.
- Arnou, D. (1991). Affect in early memories of borderline patients. Journal of Personality Assessment. Vol. 56, 75-83.
- Ballou, J. (1978). The significance of reconciliative themes in the psychology of pregnancy. Bulletin of the Menninger Clinic. 42(5), 383-413.
- Bates, J.E., Maslin, C.A., and Frankel, K.A. (1985). Attachment security, mother-child interaction, and temperament as predictors of behavior problem ratings at age three years. In Growing points of attachment theory and research. Monographs of the Society for Research in Child Development. 1985, 50(1-2, Serial No. 209).
- Behrends, R. and Blatt, S.J. (1985). Internalizations and psychological development throughout the life cycle. The Psychoanalytic Study of the Child. 40, 11-39.

- Belsky, J. and Isabella, R. (1988). Maternal, infant, and social-contextual determinants of attachment security. In: Clinical Implications of Attachment. (ed. J. Belsky and T. Nezworski.) Lawrence Erlbaum Associates: Hillsdale, NJ. 41-94.
- Belsky, J., Rosenberger, K. and Crnic, K. (1995). The origins of attachment security: "classical" and contextual determinants. In Attachment Theory: Social, Developmental, and Clinical Perspectives. (Ed. By S. Goldberg, R. Muir, and J. Kerr.) The Analytic Press: Hillsdale, NJ.
- Benedek, T. (1959). Parenthood as a developmental phase. Journal of the American Psychoanalytic Association. 7, 389-417.
- Berman, W.H., Heiss, G.E. and Sperling, M.B. (1994). Measuring continued attachment to parents: the continued attachment scale - parent version. Psychological Reports. 1994. (75), 171-182.
- Bibring, G.L., Dwyer, T.F., Huntington, D.S. and Valenstein, A.F. (1961). A study of the psychological processes in pregnancy and of the earliest mother-child relationship: some propositions and comments. Psychoanalytic Study of the Child. 16, 9-24.
- Blatt, S.J. and Ritzler, B. (1974). Thought disorder and boundary disturbances in psychosis. Journal of Consulting and Clinical Psychology. 42, 370-381.
- Blatt, S.J., Brenneis, C.B., Schimek, J.G., Glick, M. (1976). Normal Development and Psychopathological Impairment of the Concept of the object on the Rorschach. Journal of Abnormal Psychology. 85(1), 364-373.
- Blatt, S., and Lerner (1983). Investigations in the psychoanalytic theory of object relations and object representations. In J. Masling (Ed.). Empirical studies of psychoanalytic theories. The Analytic Press.
- Blatt, S.J., and Behrends, R.S. (1987). Internalization, separation-individuation, and the nature of therapeutic action. International Journal of Psychoanalysis. Vol. 68, 279-297.

- Blatt, S.J., Tuber, S.B., Auerbach, J.S. (1990). Representations of interpersonal interactions on the Rorschach and level of psychopathology. Journal of Personality Assessment. 54 (3&4), 711-728.
- 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. (1980). Attachment and loss: Vol. 3 - Loss, Sadness & Depression. New York: Basic Books.
- Brenneis, C.B. (1971). Features of the manifest dream in schizophrenia. Journal of Nervous Mental Disorders. (153), 81-91.
- Bretherton, I. (1985). Attachment theory: retrospect and prospect. In Growing Points of Attachment Theory and Research. (Ed. By I. Bretherton and E. Waters.) Monographs of the society for research in child development. Serial No. 209. Vol. 50, Nos. 1-2. University of Chicago Press.
- Bretherton, I. (1987). New perspectives on attachment relations: security, communication and internal working models. In Handbook of infant development-2nd Edition. (Ed. By J.D. Osofsky.) 1061-1100. New York: Wiley.
- Bruhn, A.R., Schiffman, H. (1982). Prediction of Locus of Control Stance from the Earliest Childhood Memory. Journal of Personality Assessment. 46, 380-390.
- Bruhn, A.R. (1990). Early Childhood Memories Volume I: Theory and Application to Clinical Practice. Praeger (New York).
- Chess, S. and Thomas, A. (1982). Infant bonding: mystique and reality. American Journal of Orthopsychiatry. 52, 213-222.
- Coates, S. and Tuber, S.B. (1988). The representation of object relations in the Rorschachs of extremely feminine boys. In H.D. Lerner and P.M. Lerner (Eds.), Primitive Mental States and the Rorschach. Madison, Ct.: International Universities Press, Inc.

- Cox, M. Owen, T., Henderson, V. and Margand, N. (1992). Prediction of infant-father and infant-mother attachment. Developmental Psychology. 28, 474-483.
- Crowell, J.A and Feldman, S. (1989). Assessment of mothers' working models of relationships: some clinical implications. Infant Mental Health Journal. Vol. 10(3).
- Diamond, D. and Blatt, S.J. (1994). Internal working models and the representational world in attachment and psychoanalytic theories. In Attachment in Adults: Clinical and Developmental Perspectives. (M. Sperling and B. Berman - Eds.) Guilford Press: New York.
- Eagle, Morris (1995). The Developmental Perspectives of Attachment and Psychoanalytic Theory. In (Goldberg S., Muir, R., and Kerr, J., Eds.) Attachment Theory: Social, Developmental, and Clinical Perspectives. Analytic Press: Hillsdale, NJ.
- Egeland, B. and Farber, E. (1984). Infant-mother attachment: factors related to its development and changes over time. Child Development. 55, 753-771.
- Fairbairn, W.R.D. (1954). An Object-Relations Theory of the Personality. New York: Basic Books.
- Fowler, C., Helsenroth, M. Handler, L. (1995). Early memories: an exploration of theoretically derived queries and their clinical utility. Bulletin of the Menninger Clinic. Vol. 59(1), 79-98.
- Fraiberg, S.H., Adelson, E. and Shapiro, V. (1975). Ghosts in the nursery: a psychoanalytic approach to the problem of impaired infant-mother relationships. Journal of the American Academy of Child Psychiatry. Vol. 14, 387-422.
- Frank, M.A, Tuber, S.B., Slade, A. and Garrod, E. (1994). Mothers' fantasy representations and infant security of attachment: a Rorschach study of first pregnancy. Psychoanalytic Psychology. 11(4), 475-490.
- Freud, S. (1899/1950). Screen memories. In J. Strachey (Ed. and Trans.), The standard edition of the complete psychological works of Sigmund Freud. (Vol. 3, 303-322) London: Hogarth Press.

- Freud, S. (1915/1957). Instincts and their vicissitudes. In J. Strachey (Ed. and Trans.), The standard edition of the complete psychological works of Sigmund Freud. (Vol. 14, 117-140) London: Hogarth Press.
- Frieswyk, S. and Colson, D. (1980). Prognostic considerations in the hospital treatment of borderline states: the perspective of object relations theory and the Rorschach. In J.S. Kwawer, H.D. Lerner, P.M. Lerner, and A. Sugarman (Eds.). Borderline Phenomena and the Rorschach Test. New York: International Universities Press, Inc.
- George, C., Kaplan, N. and Main, M. (1985). The Berkeley Adult Attachment Interview. Unpublished manuscript. Department of Psychology. University of California, Berkeley.
- Goddard, R. and Tuber, S. (1989). Boyhood separation anxiety disorder: thought disorder and object relations psychopathology as manifested in Rorschach imagery. Journal of Personality Assessment. Vol. 53, 239-252.
- Greenberg, J. and Mitchell, S. (1983). Object Relations in Psychoanalytic Theory. Cambridge: Harvard University Press.
- Grossman, K., Grossman, K.E., Spangler, G., Suess, G. and Unzner, L. (1985). Maternal sensitivity and newborns' origination responses as related to quality of attachment theory and research. Ed. by I. Bretherton and E. Waters. Monographs of the Society for Research in Child Development. Serial No. 209, Vo. 50, Nos. 1-2, 233-257.
- Grossman, K.E., Grossman, K. Huber, F. and Wartner, V. (1981). German childrens' behavior toward their mothers at 12 months and their fathers at 18 months in Ainsworth's strange situation. International Journal of Behavioral Development. 4, 157-181.
- Grossman, K.E. (1995). The evolution and history of attachment research and theory. In Attachment Theory: Social Developmental and Clinical Perspectives. (Ed. by S. Goldberg, R. Muir, and J. Kerr). The Analytic Press: Hillsdale, NJ.
- Haft, W. and Slade, A. (1989). Affect attunement and maternal attachment: a pilot study. Infant Mental Health Journal. Vol. 10, 157-172.

- Hatcher, R.L. and Krohn, A. (1980). Level of object representation and capacity for intensive psychotherapy in neurotics and borderlines. In J.S. Klawer, H.D. Lerner, P.M. Lerner, and A. Sugarman (Eds.). Borderline Phenomena and the Rorschach Test. New York: International Universities Press, Inc.
- Isabella, R.A. (1993). Origins of attachment. Maternal interactive behavior across the first year. Child Development. 64, 605-621.
- Isabella, R.A. (1994). Origins of maternal role satisfaction and its influences on maternal interactive behavior and infant-mother attachment. Infant Behav. Devel. 17, 381-388.
- Kagan, J. (1982). Psychological research on the human infant: an evaluative summary. New York: W.T. Grant Foundation.
- Kaplan, M.M. (1992). Mothers' Images of Motherhood: Case Studies of Twelve Mothers. New York: Routledge.
- Kernberg, O. (1976). Object Relations Theory and Clinical Psychoanalysis. New York: Aronson.
- Krohn, A., Mayman, M. (1974). Object representation in dreams and projective tests. Bulletin of the Menninger Clinic. Vol. 38, 445-466.
- Langs, R.J. (1965). First memories and characterologic diagnosis. The Journal of Nervous and Mental Disease. Vol. 141, 318-320.
- Lerner, H.D., St. Peter, S. (1984). Patterns of Object Relations in Neurotic, Borderline and Schizophrenic Patients. Psychiatry. 47, 77-92.
- Levine, L.V., and Tuber, S.B. (1993). Measures of mental representation: clinical and theoretical considerations. Bulletin of the Menninger Clinic. Vol. 57(1), 69-87.
- Levine, L., Tuber S., Slade A., Ward, M. (1991). Mother's mental representations and their relationship to mother-infant attachment. Bulletin of the Menninger Clinic. Vol. 55(4), 454-469.
- Mahler, M., Pine, F., and Bergman, A. (1975). The Psychological Birth of the Human Infant. New York: Basic Books.

- Main, M., Kaplan, N., Cassidy, J. Security in Infancy, Childhood, and Adulthood: A Move to the Level of Representation. In Growing Points of Attachment Theory and Research. (Ed. By I. Bretherton and E. Waters.) Monographs of the Society for Research in Child Development. Serial No. 209, Vol. 50, Nos. 1-2. University of Chicago Press.
- Main, M. and Goldwyn, R. (1990). Interview based adult attachment classifications: related to infant-mother and infant-father attachment. Developmental Psychology.
- Main, M. and Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In Attachment in the Preschool Years. Ed. M.T. Greenberg, D. Cichetti and E.M. Cummings. Chicago: University of Chicago Press. 161-182.
- Main, M. and Soloman, J. (1986). Discovery of a new, insecure-disorganized/disoriented attachment pattern. In Affective Development in Infancy. Ed. T.B. Brazleton and M. Yogman. Norwood, NJ: Ablex. 95-124.
- Main, M. (1995). Recent studies in Attachment: Overview with Selected Implications for Clinical Work. In Attachment Theory: Social, Developmental, and Clinical Perspectives. Ed. By S. Goldberg, R. Muir and J. Kerr. Hillsdale, NJ: The Analytic Press.
- Mayman, M. and Faris, M. (1960). Early memories as expressions of relationship paradigms. American Journal of Orthopsychiatry. 30, 507-520.
- Mayman, M. (1967). Object Representations and Object Relationships in Rorschach Responses. Journal of Personality Assessment. 55(1&2), 296-318.
- Mayman, M. (1968). Early memories and character structure. Journal of Projective Techniques and Personality Assessment. 32, 303-316.
- Nigg, J.T, Silk, K.R., et al. (1991). Object Representations in the early memories of sexually abused borderline patients. American Journal of Psychiatry. 148:7, 864-869.

- Richman, N., Sokolove, R.L. (1992). The experience of aloneness, object representation, and evocative memory in borderline and neurotic patients. Psychoanalytic Psychology. 9(1), 77-91.
- Roosevelt, A.E. (1937). This is My Story. New York: Harpers & Brothers Publishers.
- Slade, A., Aber, J.L. (1985). Attachments, drives, and development: conflicts and convergences in theory. In J. Barron, M. Eagle, and D. Wolitsky (Eds.) Interface of Psychoanalysis and Psychology. APA Publications.
- Slade, A. (1995). Infants and Their Mothers: Pathways to Secure Attachment.
- Sroufe, L.A. (1985). Attachment classification from the perspective of infant-caregiver relationships and infant temperament. Child Development. 1985. 56, 1-14.
- Spoto, D. (1983). The Dark Side of Genius: The Life of Alfred Hitchcock. New York: Ballentine Books.
- Spear, W.E. (1980). The psychological assessment of structural and thematic object representations in borderline and schizophrenic patients. In J.S. Klawer, H.D. Lerner, P.M. Lerner, and A. Sugarman (Eds.) Borderline Phenomena and the Rorschach Test. New York: International Universities Press, Inc. 321-340.
- Sperling, M.B., Berman, W.H., and Fagen, G. (1992). Classification of adult attachment: an integrative taxonomy from attachment and psychoanalytic theories. Journal of Personality Assessment. 59(2), 239-247.
- Stern, D.N. (1985). The Interpersonal World of the Infant. New York: Basic Books.
- Stern-Bruschweiler, N. and Sten, D. (1989). A model for conceptualizing the role of the mother's representational world in various mother-infant therapies. Infant Mental Health Journal. Vol. 10(3).
- Stricker, G., Healey, B.J. The Projective Assessment of Object Relations: A Review of the Empirical Literature. Psychological Assessment: A Journal of Consulting and Clinical Psychology. 2, 219-230.

- Stuart, J., Westen, D., Lohr, N. et al. (1990). Object relations in Borderline Depressives, and Normals: An Examination of Human Responses on the Rorschach. Journal of Personality Assessment. 55(1&2), 296-318.
- Tuber, S.B. (1983). Childrens' Rorschach scores as predictors of later adjustment. Journal of Consulting and Clinical Psychology. 51, 379-385.
- Tuber, S.B. (1992). Empirical and clinical assessments of childrens' object relations and object representations. Journal of Personality Assessment. Vol. 58(1), 179-197.
- Urist, J. (1977). The Rorschach Test and the Assessment of Object Relations. Journal of Personality Assessment. 41, 3-9.
- Urist, J., Shill, M. (1982). Validity of the Rorschach Mutuality of Autonomy Scale: A Replication Using Excerpted Responses. Journal of Personality Assessment. 46(5), 451-454.
- 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. Vol. 117, No. 3, 387-403.
- Vaughn, B., Egeland, B., Waters, E. and Sroufe, L.A. (1979). Individual differences in infant-mother attachment at 12 and 18 months: stability and change in families under stress. Child Development. 50, 971-975.
- Waters, E., (1978). The reliability and stability of individual differences in infant-mother attachment. Child Development. 49, 483-494.
- Winnicott, D.W. (1965). The Maturation Processes and the Facilitating Environment. New York: International Universities Press.
- Zeanah, C.H., Keener, M.A. and Anders, T.F. (1986). Adolescent mothers' prenatal fantasies and working models of their infants. Psychiatry. 49, 193-203.
- Zeanah, C.H., Keener, M.A., Stewart, L. and Anders, T.F. (1985). Prenatal perception of infant personality: a preliminary investigation. Journal of the American Academy of Child Psychiatry. 29, 204-210.