

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI[®]

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

A

IMAGINING THE CHILD: MATERNAL REPRESENTATIONS OF THE
CHILD AS A FUNCTION OF THE QUALITY OF THE
MOTHER'S OBJECT RELATIONS

by

Jennifer D. Gerber

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.

1999

UMI Number: 9946164

Copyright 1999 by
Gerber, Jennifer Dale

All rights reserved.

UMI Microform 9946164
Copyright 1999, by UMI Company. All rights reserved.

This microform edition is protected against unauthorized
copying under Title 17, United States Code.

UMI
300 North Zeeb Road
Ann Arbor, MI 48103

©1999

JENNIFER DALE GERBER

All Rights Reserved

Approval Page

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

May 25, 1999

Date

[Signature]

Chair of Examining Committee

June 10, 1999

Date

[Signature]

Executive Officer

Steven Tuber, Ph.D.

Diana Diamond, Ph.D.

Paul Wachtel, Ph.D.

John Matthews, Ph.D.

Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

ABSTRACT

Imagining the Child: Maternal Representations of the Child
as a Function of the Quality of the Mother's Object Relations

by

Jennifer D. Gerber

Advisor: Professor Arietta Slade

This study investigated the relationship between the developmental level and quality of a woman's object relations, and the quality of her prenatal and postnatal representations of her child. Subjects consisted of first-time mothers who completed the Rorschach Inkblot Test during the third trimester of pregnancy and one or both of the following interviews: The Pregnancy Interview (n = 34) (Slade, Grunebaum, Haganir & Reeves, 1987) administered in the third trimester, and The Parent Development Interview (n = 24) (Slade, Aber, Abrams & Director, 1987) given at ten months postpartum. Rorschach protocols were scored with two object relations measures: The Mutuality of Autonomy Scale (Urist, 1977) and the Developmental Analysis of the Concept of the Object Scale (Blatt, Brenneis, Schimek & Glick, 1976). It was hypothesized that women with higher levels of object relations would elaborate positive and affectively balanced prenatal and postnatal representations of their children while women with lower levels of object relations would be more likely to have neutral or negative representations of their children both prenatally and postnatally.

Given the number of correlations performed, few significant results were in evidence. However, when the planned and post hoc analyses were considered in their entirety, several significant correlations were present. Prenatally, a mother who had access to the range of object relational experiences of self and other, from empathic and mutual to aggressive and malevolent, may represent her child more coherently. Such a mother may offer a positive, rich and enlivened representation of her unborn child in which positive and negative affects are successfully integrated. Postnatally, mothers with a higher developmental level of object relations, including a more differentiated and less symbiotic world, appear to experience more joy and less anger in their relationships with their children. When child gender was considered in the post hoc analyses, a lower number of symbiotic representations was associated with greater joy for mothers of girls, and more optimal expression of anger for mothers of boys. Results of post hoc t-tests revealed that at ten months, mothers of boys appear to be significantly more angry than those of girls.

Acknowledgments

I'm done! It is still amazing to me that I have completed my dissertation. How did a task that often felt uniquely undoable become a successful reality? I feel lucky to have had the love and support of many people who believed in me and had faith that I would make my dissertation come to life.

My chair, Arietta Slade, has had a profound impact on my graduate school career. She interviewed me for the program and gave me the opportunity to be a part of The Pregnancy Project. I loved the experience of listening to womens' thoughts about pregnancy and motherhood, watching the development of many mother-infant dyads, and of learning from Arietta and the project staff. I have also gained tremendously from the richness and complexity of Arietta's thinking about both research and clinical work. As my chair, Arietta provided much guidance and support. Her enthusiasm as she saw my dissertation taking shape, her patience as I struggled with many (many) questions, and her humor and graciousness during my defense were invaluable.

Steve Tuber and Diana Diamond provided crucial input and direction on my dissertation, and were a very significant part of my graduate school experience. Steve has had a profound influence on my thinking, particularly about what it means to be a clinician. He is a wonderful teacher who emphasizes that part of being a good therapist is being a mensch in the room. I benefited in many ways from his care and commitment to the program and to the opportunities and support he offered to me. Diana Diamond provided very thoughtful formulations and suggestions to me at the beginning stages of

writing my dissertation and continued to offer encouraging feedback and support throughout the process. Her rigorous thinking has been a model to me of a true integration of theory and clinical practice. It was my pleasure to have had Paul Wachtel as a teacher and to work closely with him during the program's admissions process. For these reasons I was very glad he was able to be one of the readers on my committee. He provided very thoughtful comments and questions during my defense. John Mathews read my dissertation with immense care. In addition to reeling in my love of commas, he was an enthusiastic and interested presence during my defense.

Many other people provided helpful assistance and support to me as I worked on my dissertation. Marc Glassman provided expert statistical advice as well as much patience, positive energy and good humor. Lisa Samstag also helpfully stepped in with helpful advice when I had statistical questions. I appreciated Daniel Rothstein's willingness to search for and share materials with me, particularly the object relations scores he and Lisabeth Weinstein Gertner completed and made available. It was a pleasure to work with Marjorie Dermer, Leslie Gibson and Francoise Graf on the scoring of The Pregnancy Interviews. Francoise (soon to be Dr. Graf!) has also been a very supportive and understanding friend during graduate school and especially this process. Catherine Monk provided much encouragement and support during this year and made very helpful comments on an early draft. She also made it possible for me to access much needed journals in an environment conducive to serious work. Very special thanks go to Annelie Hartmann who was an incredibly patient and generous guide to me as I

wrote and completed my dissertation. She offered her help on many aspects of my dissertation and calmly answered numerous questions! Two of my supervisors, Sylvia Lester and Lauren Levine were especially helpful to me, offering support and perspective as I formulated my thoughts and negotiated the dissertation process.

Abbie Wolfson Sanger contributed amazing long-distance support and friendship. Our weekly 9 a.m. dissertation “meetings” provided much-needed structure in an otherwise chaotic process. Abbie truly helped me figure out how to persevere and accomplish this task. She is a very caring and committed friend. Renee Sicalides, my fellow intern and lover of streudel, asked critical questions, gave very useful feedback and provided much needed levity during the process of writing my dissertation. Natalie Fisher was my first friend and confidante in the program (I still recall the first time we really laughed together!). As she said, this has been a very long journey and I’m so glad she has been a part of it. Marina Micari was also a terrific long-distance supporter. She supplied great friendship, understanding and encouragement, reminding me I had fans in Minneapolis! Laurie Weber offered a generosity of friendship and spirit to me during this project and many others. Her enthusiasm, support and laughter made stressful moments bearable and successful moments more celebratory. I appreciate her willingness to read many drafts of my results and discussion sections, providing very insightful and reassuring comments, as well as her offer to provide musical back-up during my defense! I have had the great pleasure and good fortune of being Ellie Gelman’s buddy for six years. A buddy in the truest sense of the word, she is a friend who I adore and count on

for so many things. She read a very early version of my introduction when my ideas were still vague and helped me clarify and focus my writing. She has seen me through this year as well as many life events with amazing thoughtfulness and caring.

I have benefited enormously from my relationship with Willa Cobert. I thank her for being with me, sharing in so many areas of my life and for doing so with incredible care and openness. Her encouragement to make this work my own was a crucial component in my ability to focus on and complete my dissertation.

My parents, Joanna and Lane, encouraged me to use this year to work and *be done*, and helped make it possible. While they sometimes gently asked (or directly nudged) me about my progress, they also wanted to make sure I was taking care of myself (are you doing fun things too?) and provided plenty of support. I know they are very proud of me and excited to welcome another Dr. Gerber to the family. Describing my feelings about them and what they mean to me is certainly beyond the scope of this section, however, they both imparted to me the profound belief that the most important thing in life consists of the joy and meaningfulness that comes from relationships. I feel an innate connection with my mom that has manifested itself in the deepest shared laughter. My father listens to me with the greatest care and knows phone conversations have natural silences that reflect understanding and togetherness. My brother Matt has a natural enthusiasm (Go Jenn!) that I love. He always came through when this process needed a boost of energy and candor. My grandparents, John and Janice Netzký, who provided support throughout my education, can now rest easy that I am done - I know

they're proud. My new family, the Goldsteins, have generously welcomed me to the fold, sharing love and support with their new daughter and sister.

My husband Jason provided incredible love, support and patience and a belief in me that sustained me during this long and arduous task. He edited, typed and copied with me at all hours of the day and night, as well as calmed, cajoled and celebrated with me with great thoughtfulness and love. When the final draft of my dissertation was spiral bound at midnight, he held it with such excitement and respect that I finally knew this accomplishment was meaningful and real. He has brought a whole new kind of spontaneity to my life and makes me laugh in a way I didn't even know I needed to. I love you sweetheart and dedicate this dissertation to you. You have filled my life with many things, but most of all with joy. I look forward to the future we are imagining together.

TABLE OF CONTENTS

	Page
<u>CHAPTER ONE</u>	
INTRODUCTION	1
<u>CHAPTER TWO</u>	
LITERATURE REVIEW	11
Psychoanalytic Theories of Pregnancy	11
Pregnancy and Maternal-Fetal Attachment: Empirical Findings	16
Object Relations Theory: Formation & Implications of Representations	18
Assessing Object Relations: Two Measures for the Rorschach	28
Attachment Theory: Maternal Representations of the Child	34
Assessing Parental Representations: Two Interview Measures	45
<u>CHAPTER THREE</u>	
METHODOLOGY	53
Subjects	53
Setting	53
Procedures	54
Measures	54
MAIN HYPOTHESES	65

	Page
<u>CHAPTER FOUR</u>	
RESULTS	67
Subjects	67
Study Criteria and Group Composition	68
Statistical Considerations and Descriptive Analyses of Variables	69
Testing the Main Hypotheses	73
Post Hoc Analyses	80
<u>CHAPTER FIVE</u>	
DISCUSSION	84
Introduction	84
Maternal Object Relations and Coherence of Prenatal Representation	88
Symbiotic Responses on the MOAS and Postnatal Representations of Joy and Anger	95
Symbiotic Responses and Gender Differences	100
Developmental Level of Object Relations and Maternal Anger	102
Limitations of Study	107
Significance and Future Research	109
<u>APPENDICES</u>	
Appendix A - The Pregnancy Interview	112
Appendix B - The Parent Development Interview	120
<u>REFERENCES</u>	130

LIST OF TABLES

		Page
Table 1	Group Composition	68
Table 2	Descriptive Statistics of MOAS Scale Variables	71
Table 3	Descriptive Statistics of DACOS Scale Variables	71
Table 4	Descriptive Statistics of Pregnancy Interview Variables	72
Table 5	Descriptive Statistics of Parent Development Interview Variables	73
Table 6	Correlations Between the MOAS Scale and The Pregnancy Interview	75
Table 7	Correlations Between the DACOS Scale and The Pregnancy Interview	76
Table 8	Correlations Between the MOAS Scale and The Parent Development Interview	78
Table 9	Correlations Between the DACOS Scale and The Parent Development Interview	79
Table 10	Correlations Between the MOAS Scale Range and The Parent Development Interview	81
Table 11	Correlations Between Symbiotic Responses on the MOAS Scale and The Parent Development Interview for Mothers of Girls and Mothers of Boys	82
Table 12	T-Tests for Gender Differences in Maternal Representation of Anger on The Parent Development Interview for Mothers of Girls and Mothers of Boys	83

CHAPTER ONE

INTRODUCTION

What does the baby see when he or she looks at the mother's face? I am suggesting that, ordinarily, what the baby sees is himself or herself. In other words the mother is looking at the baby and *what she looks like is related to what she sees there...*

I can make my point by going straight over to the case of the baby whose mother reflects her own mood or, worse still, the rigidity of her own defenses. In such a case what does the baby see? (Winnicott, 1967, p. 112).

What does the baby see? D.W. Winnicott (1967) suggests that mothers serve as mirrors for their infants, that what a baby sees in her mother's face is a reflection of what the mother sees in her baby. What does a mother see in her baby? And when does this "seeing" begin? Several writers have posited that a baby begins to "look like" someone to the mother before the infant is even born (Ballou, 1978; Benoit, Parker & Zeanah, 1997; Condon, 1987; Lieberman, 1997; Slade & Cohen, 1995; Trad, 1990; Zeanah, 1990). That is, a pregnant woman's mental representation of her child and of their emerging relationship begins while the child is *in utero*, if not before (Stern, 1995).

Expectant mothers describe varying fantasies and feelings about their relationship to their unborn baby. The vignettes that follow illustrate some of the range of representations experienced prenatally. During her third trimester of pregnancy, when Melissa was asked whether she had a relationship with her baby yet, she quickly responded, "I do. I do. . . I have moments of feeling really connected to this little person. We're going to have a real bond." Elizabeth, however, was less sure, "Um, ah, let's see.

I guess I'd like to think I do. I always wonder who it is. I look down at my belly and kind of say, 'Who are you?'. . . I guess maybe that suggests that I'd like to have a relationship and look forward to one but I don't feel like I have one yet." When Julie was asked whether she had a relationship with her unborn child she replied, "Uh, no. That makes me sad but I don't. . . I don't picture the baby. . . I don't see it at all."

These three women, all interviewed during the third trimester of pregnancy, describe strikingly different experiences and fantasies of their relationship to their "imagined" baby. Melissa already feels a sense of connection to her unborn child. She experiences the baby as separate from herself but also stresses the "bond" she will share with this "little person." Elizabeth wonders who her baby is. She hopes to have a relationship with her child but notices that she does not yet feel the connection for which she yearns. Julie is clear that she does not feel a relationship to her unborn child and admits that she does not "see" the baby at all.

These examples illustrate some of the range and differences in mothers' prenatal representations of their relationship with their child and the varying degree to which feelings and fantasies about their unborn baby could be expressed. Clearly these women differ in the degree to which they have brought their child "to life" in their mind and the quality of connectedness they experience towards their unborn child. In each case, the unborn baby has begun to "look like" someone to the mother, although in the case of Elizabeth, "seeing" her baby is characterized by the very absence of any vision of the baby at all. How do we account for the varied quality and richness of these prenatal representations? What makes it possible for themes of intimacy and connection to be

expressed in Melissa's prenatal representation while Elizabeth and Julie's representations reflect different degrees of disconnection? This study will investigate some of the possible determinants for these differences.

As the expectant mothers described above illustrate, a woman is constructing an internal representation of her baby, of herself as a mother, and of their relationship, before the child is a reality. These prenatal representations of the "imagined baby" and mother-child relationship form the earliest beginnings of a mother's expectations of her "real" child and their future relationship. Such prenatal representations are thought to influence the nature of the mother-child relationship after the child is born (Ballou, 1978; Benoit, Parker & Zeanah, 1997; Condon, 1987; Lieberman, 1997; Slade & Cohen, 1995; Trad, 1990; Zeanah, 1990).

This study will examine the extent to which a mother's own object-relational world, specifically her representations of self and other, contributes to the ways in which she comes to represent her baby before and after she gives birth. How does the developmental level and quality of a mother's object relations affect her prenatal and postnatal representations of her child? Do patterns of object-relations influence parental representations of babies before and after they are born? Exploring the object relational capacities of mothers such as Julie, Melissa, and Elizabeth may help us understand their varied prenatal relationships to their babies, and their postnatal descriptions of both their children and themselves as parents.

The theoretical bases and measures for this research come from two areas: object relations theory and attachment theory. The significance of mental representations of self

and other on one's capacity to form relationships is at the forefront of both theories. Each emphasizes the process by which experiences with early caregivers are internalized and affect a child's, and later an adult's, expectations, perceptions, and range of feelings about themselves and others. Furthermore, both theories have examined the significance of internal representations for parents, especially mothers, and the ways in which representations can guide the quality of the developing parent-child relationship and inhibit or promote the child's optimal development.

Several of the most prominent object relations writers have made fundamental contributions to our understanding of the mother-child relationship, focusing on the ways in which a mother's internal world would affect, and at times limit, the quality of her connection to her child. In the first example, Winnicott envisions a process in which a baby sees his own reflection in the mother's face because the mother serves as a mirror in which the baby begins to see himself. Clearly a mother's own intrapsychic limitations, her "mood" or "rigid defenses," can compromise her ability to see her child clearly and can lead to a view of her child that is distorted or over determined.

Margaret Mahler (Mahler, Pine & Bergman, 1975) richly illustrates her theory of separation-individuation with examples of dyads who successfully negotiate this process, as well as those in which the mothers' own issues preclude the optimal development of their relationship with their child. She analyzes the mothers' needs to impose their own view of the child and the subsequent effects on the child's development and the internalization of the mother-child relationship.

In addition to describing the effects of the quality of a mother's object relations on her relationship with her child, Winnicott and Mahler were among those object-relations theorists exploring the formation and significance of object representations on the development of the self and the capacity for relationships with others. Writers from the object-relations tradition believe internal representations incorporate drive development, unconscious fantasy, and aspects of the "real" mother-child relationship (in varying degrees). Experiences of self and other in the internal and external world are thought to influence each other to form representations that become increasingly mature and complex over time. Aspects of such mature and integrated representations include the capacity to feel autonomous and differentiated yet empathically aware of and connected to others. Researchers have constructed assessment measures to describe the quality of a person's object representations (Blatt, Wein, Chevron & Quinlan, 1979; Coonerty, Diamond, Kaslow & Blatt, 1987; Krohn & Mayman, 1974; Mayman & Farris, 1968). Two such measures will be utilized in this study: the Mutuality of Autonomy Scale (MOAS) (Urist, 1977) and the Developmental Analysis of the Concept of the Object Scale (DACOS) (Blatt, Brenneis, Schimek & Glick, 1976).

Attachment theory has focused on the role of internal representations in the development and transmission of patterns of attachment. John Bowlby (1969, 1982), the founder of attachment theory, believed that a child is biologically motivated to seek safety and security from his or her caregiver and that "internal working models of attachment" develop out of these early experiences. These internal representations of attachment reflect the nature and quality of the parenting received and influence the ways

in which the child anticipates care and responsiveness in future relationships. Bowlby's exploration of the ways in which children and parents become attached to each other has inspired the development of empirical measures to explore the nature and complexities of parent-child attachment.

The connection between parental representations of attachment and the quality of a child's attachment to his or her parents has been well-documented (Benoit & Parker, 1994; Fonagy, Steele & Steele, 1991; Levine, Tuber, Slade & Ward, 1992; Main & Goldwyn, 1995; Main, Kaplan & Cassidy, 1985; Ward & Carlson, 1995; Zeanah, Benoit, Barton, Regan, Hirschberg, & Lipsitt, 1993). This research indicates that the quality of a mother's representation of her own caregivers strongly predicts the quality of her child's attachment to her.

Bowlby also came to believe that just as adults have representations of their own caregivers and children have representations of their parents, so too do parents develop representations of their children. Attachment researchers have recently turned their attention to parental representations of the child and the parent-child relationship, exploring the link between parental representations developing before and after the child is born, and the quality of the actual parent-child relationship (Aber, Belsky, Slade & Crnic, in press; Benoit & Parker, 1994; Fonagy et. al., 1991; Slade, Belsky, Aber, Phelps, in press; Zeanah et. al., 1993). Several teams of researchers (Aber, Slade, Berger, Bresgi & Kaplan, 1985; George & Solomon, 1993; Slade, Haganir, Grunebaum & Reeves, 1985; Zeanah, Benoit, Hirshberg & Barton, 1993), have created interviews to explore parental representations of children in order to understand when these representations develop,

what contributes to their quality and how they correspond to measures of infant and adult attachment. Two such interviews will be used in this study: The Pregnancy Interview (PI) (Slade, Grunebaum, Haganir & Reeves, 1985), and The Parent Development Interview (PDI) (Slade, Aber, Abrams & Director, 1987).

Both attachment and object relations theories explore how parents come to view and understand their children and the factors that may limit the parent-child relationship. Recent research has investigated the theoretical and empirical relationship between object relations measures of mental representation and attachment measures (Diamond & Blatt, 1994; Fishler, Sperling & Carr, 1990; Levine & Tuber, 1993; Slade & Aber, 1992). Levine, Tuber, Slade & Ward (1991) examined adolescent mothers' mental representations and their infants' security of attachment. Using the Krohn Object Representational Scale (Krohn & Mayman, 1974) to assess the level of object-relations of the adolescents and the Adult Attachment Interview (AAI) (George, Kaplan, & Main, 1985) to determine the nature of the adolescent's attachment status to her own mother, Levine and colleagues found that adolescents' attachment status and object representations were highly related. Both were also associated with infant security of attachment as measured by the Strange Situation (Ainsworth, Blehar, Waters & Wall, 1978), an indicator of a child's attachment to the parent. Levine's study concluded that both of the measures of mothers' mental representation were effective in predicting mother-infant attachment. In a further discussion of this research, Levine and Tuber (1993) concluded object relations and attachment measures contribute related yet distinct assessments of mental representations.

This study focuses on the extent to which a woman's object relational capacity affects her view and understanding of her baby before and after she gives birth. Clearly there are fundamentally different factors that contribute to a mother's prenatal and postnatal representation of her child. The representation a mother begins to create while pregnant reflects the fantasies of her own internal world. Though she has likely heard her baby's heartbeat and seen a sonogram picture, her child is still "inside" of her, and thus what she imagines of her baby is generated largely by her own projections. Condon (1993) remarks: "From a theoretical perspective, parental-foetal attachment provides an opportunity to study the development of attachment in 'pure culture,' uncontaminated by factors such as infant temperament and the complexities of the postnatal environment" (p. 168). He concludes that the fetus is a "recipient *par excellence* of projection" and that parents initially become attached to the representation of the child they themselves have created (p. 168, italics in original).

The postnatal representation of the child, however, incorporates a mother's experiences of being a mother to her "real" baby. Many factors contribute to her relationship with her child in the first months and year of life, including her child's health and temperament, her own psychological transition to mothering, the degree of support she receives from her husband and others, and many other potential issues involving child care and career. All of these, in addition to a mother's own internal world, contribute to the quality of the postnatal representation she is building of her child and their relationship. While the prenatal and postnatal representations reflect profoundly different experiences with one's child, both may be influenced by a woman's own internal

representations of self and other. It is the aim of this research to explore to what degree the quality of maternal object relations contributes to both representations, prenatal and postnatal.

Women included in this study consist of first-time mothers who participated in The Pregnancy Project, a longitudinal study of mother-infant attachment, directed by Arietta Slade, Ph.D., at the City College of the City University of New York. Of the participants in this research, thirty-four primiparous women were given both the Rorschach Inkblot test and The Pregnancy Interview (PI) (Slade, Haganir, Grunebaum & Reeves, 1985) in their third trimester of pregnancy. Twenty-four of these women were later given The Parent Development Interview (PDI) (Slade, Aber, Abrams & Director, 1987) when their children were 10 months old. Through an analysis of the Rorschach with two object relations measures, the Mutuality of Autonomy Scale (MOAS) (Urist, 1977) and the Developmental Analysis of the Concept of the Object Scale (DACOS) (Blatt et al, 1976), this study will explore the relationship between the developmental level and quality of a woman's object relations, as measured by the Rorschach, and the quality of her prenatal and postnatal representations of her child, as measured by the PI and the PDI respectively.

This research hypothesizes that women who have higher levels of object relations, that is, who experience themselves and others as autonomous, and yet capable of intimacy in relationships, will have a greater capacity to feel an intimate and differentiated connection to their child, both prenatally and postnatally. Women with lower levels of object relations, who lack a cohesive and differentiated sense of

themselves and others and struggle to feel close to others in relationships will have a more limited capacity to feel positively related to their child both prenatally and postnatally.

The literature review supporting this proposed study begins with a summary of the psychoanalytic theories and psychological tasks of pregnancy and empirical findings on maternal-fetal attachment. This is followed by a discussion of the formations and implications of object representations and related assessment measures. Lastly, I will present contributions from attachment theory and research that focus on maternal representations of the child. Clinical literature on infant-parent psychotherapy will be included as support for the significance of parental representations.

CHAPTER TWO

LITERATURE REVIEW

Psychoanalytic Theories of Pregnancy

The process of becoming a mother begins during pregnancy, as an expectant woman begins to feel the earliest connection to her child and anticipates their relationship. Early psychoanalytic writers focused on the internal conflicts that could prevent a woman's healthy adaptation to pregnancy and motherhood, and on the psychological reorganization pregnancy requires (Deutsch, 1945; Benedek, 1959, 1970; Bibring, 1959, 1961). During pregnancy a woman's unresolved conflicts from earlier developmental stages can arise and be successfully worked through and resolved, or can intensify, prohibiting the necessary degree of intrapsychic integration and potentially leading to later difficulties in the mother-infant relationship. A woman's identification with and separation from her own mother was seen by these theorists as an integral stage of becoming a parent, and writers noted that feelings and fantasies about the fetus often reflected unresolved issues with a woman's own mother. The experience of pregnancy was understood to be a meaningful indicator of a woman's developing relationship with her unborn child and her expectations of mothering.

Deutsch (1945) wrote extensively on the relationship between the physical and psychological experiences of pregnant women as they reflected the presence or absence of early unresolved developmental conflicts. She hypothesized that the physical demands

of pregnancy would be intensified if a woman was not emotionally prepared for motherhood and experienced unresolved conflicts from earlier developmental periods of her life. Deutsch also emphasized that if a woman was still struggling with issues of dependence towards her own mother, she might well struggle to accept her unborn child's dependence on her. In such a case, the embryo would become "psychically what it is biologically, an enemy exploiting the maternal organism" (p.131). Deutsch argued that if a woman could identify with her unborn child as part of her own self, she can come to "transform the 'parasite' into a beloved being" (139). She notes that this is not always the case, and that the fetus can come to represent negative aspects of the self, or can be seen as threatening the mother's own development. Deutsch's writings assume that a woman's internal world, and the extent to which earlier conflicts have been successfully worked through, plays a fundamental role in how she comes to view her pregnancy and her child.

Bibring (1959, 1961) and Benedek (1959, 1970) both viewed pregnancy as a period of maturational crisis requiring a resolution of earlier intrapsychic conflicts. Bibring (1959) observed the surprising degree to which pregnant women, regardless of their psychological adaptation, displayed a level of regression and primitive defenses usually associated with more disturbed patients, and concluded that pregnancy was a "period of crisis" for all women, (regardless of their level of psychological health). She noted that when interviewed regarding their experiences of pregnancy, many of these women displayed "magical thinking, premonitions, depressive reactions, primitive anxieties, introjective and paranoid mechanisms, frequently associated with the patient's

relation to their own mother...” (p.115). She attributed this phenomenon to the re-emergence of unresolved conflicts from earlier developmental phases and a partial reliance on more regressive defenses.

Bibring (1961) explicated the optimal prenatal re-organization, explaining that 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” (pp.16-17). Bibring outlined the psychological process by which the pregnant woman comes to successfully merge with and then separate from her baby, ideally culminating in a mother-child relationship that is both intimate and yet differentiated. Initially the fetus is incorporated as a narcissistic extension of the woman. As the woman experiences the fetus’ ability to move independently, however, the fetus is recognized as a separate and distinct object. Bibring concludes that if this process proceeds smoothly, the quality of the relationship will be of a “freely changeable fusion...of narcissistic and object-libidinal strivings, so 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” (p.22).

Benedek (1970) identified pregnancy as a “critical phase” in the development of women, arguing that the “integrative task of pregnancy and motherhood - biologically, psychologically, and realistically - is much greater than a woman has ever faced before” (p.143). Benedek discussed the role of primary narcissism in pregnancy, referring to this as a pregnant woman’s “wellspring of her motherliness” (p.141). Such narcissistic and libidinous feelings towards one’s pregnant body and developing child allow for positive

and hopeful fantasies about one's capacity for mothering and loving one's child.

Benedek noted that fantasies during pregnancy reflect identifications with different aspects of the pregnant woman's self, and can be problematic if the fetus is identified with the "bad, aggressive or devouring" aspects of the self, and not the "loving or loved self" (p.147).

All of the above writers acknowledge the psychological importance of a pregnant woman's identification with her own mother. This area of inquiry was expanded upon by later writers such as Ballou (1978), Pines (1982), Leon (1986), and Lester and Notman (1988). Pines (1982) notes the potential for unresolved feelings towards one's mother to become heightened during pregnancy, and hypothesizes that the fetus can receive projections based on these feelings: "The pregnant mother's ambivalence towards her unborn child may reflect earlier intense ambivalent feelings towards her own mother" (p.318). Pines argues that pregnancy requires a deeper level of identification with and separation from one's own mother. Lester and Notman (1988) discussed their work with several pregnant analysands and concluded that prenatal fantasies and fears of the baby were based on representations of a woman's maternal object.

Trad (1990) acknowledged that the "physiological and psychological transformations experienced by women while pregnant exert a significant impact on the relationship forged with the infant after birth" (341). Trad discussed five case studies of pregnant patients. The dreams and fantasies of these pregnant women were analyzed as they reflected the developing affective relationship to their babies in utero. Trad found

that themes of ambivalence, overidentification, regression, hostility, and separation were inherent in the psychological adjustment to pregnancy and impending motherhood.

Trad also found that the capacity to integrate and symbolically represent these intense emotions differentiated the women from each other. Those who could acknowledge or repress their “negative” feelings, such as fear, anger, or loneliness, were less likely to incorporate these feelings into their relationships with their children. Women whose dreams reflected explicit hostility or ambivalence, that is, content that was not successfully “dissociated symbolically from the dreamer,” (p.359) were at risk of inflicting their emotions onto their children in more unmodulated and primitive ways. Trad suggests that intrinsic to the transformation to motherhood is the emergence and expression of intense and conflicting feelings. The degree to which these feelings are recognized and symbolized affects the ways in which they may be incorporated in the mother-child relationship.

These writers describe the intrapsychic reorganization required during pregnancy, and the likelihood of unresolved issues reemerging during this time. They acknowledge the complexity and intensity of an expectant woman’s feelings and identifications as she attempts to re-work lingering issues, specifically around her representation of her own mother. These works acknowledge that a woman’s relationship with her parents, and the internal representations of these relationships, affect her developing representation of her baby and herself as a mother.

Pregnancy and Maternal-Fetal Attachment: Empirical Findings

Psychoanalytic theory and clinical observations suggest that the relationship between a woman and her unborn baby is highly significant, and may impact the postnatal mother-infant experience. Few empirical studies, however, have focused on the factors influencing maternal-fetal attachment.

Leifer's study (1977) was one of the first to explore the intrapsychic changes intrinsic to pregnancy and early motherhood, and to examine both a mother's prenatal and postnatal attachment to her child. Nineteen prospective mothers were followed from early pregnancy through 7 months postpartum. During pregnancy, the development of affective involvement with the fetus was assessed by an Attachment to the Baby Checklist given during each trimester. A Child-Trait Checklist was also administered during pregnancy and postpartum. Leifer concluded that the extent of a mother's emotional involvement with her unborn child as measured during the third trimester of pregnancy was predictive of a mother's feelings towards her baby after birth. Leifer also found that during pregnancy, mothers with strong emotional ties to their unborn child experienced significant anxiety regarding the fetus, while mothers judged less attached expressed greater anxiety regarding themselves.

Condon and his colleagues have explored the sequelae of prenatal emotional attachment during pregnancy (Condon & Dunn, 1988; Condon, 1993; Condon & Corkindale, 1997). Condon & Corkindale (1997) underscore the clinical and theoretical importance of understanding the correlates of prenatal attachment. They suggest the relationship between a prospective mother and her unborn child "represents the

development of the earliest, most basic form of human intimacy involving an object characterized by a curious admixture of fantasy and reality” (p.360).

Condon (1993) developed a self-report measure, the Maternal Antenatal Attachment Scale (MAAS), to examine both the quality of maternal-fetal attachment and the intensity of a mother’s preoccupation with the fetus. In the most recent research utilizing this scale (Condon & Corkindale, 1997), significant differences were found in the depth of maternal-fetal attachment in a sample of 238 women in the third trimester of pregnancy. Maternal depression and lack of social support were two factors that limited maternal-fetal attachment during pregnancy. Although no data were yet available regarding the link between prenatal emotional attachment and postnatal mother-infant relationship, results of a previous study (Condon & Dunn, 1987) did suggest such a conclusion. This research, though limited by the use of retrospective self-report measures, found that parents who were emotionally attached to their unborn child reported high levels of postnatal attachment, and thus provides support for Leifer’s conclusion. As would be expected, parents with a limited emotional relationship to their child prenatally continued to report low degrees of attachment to their baby after birth.

The majority of additional research on maternal-fetal attachment has been conducted using the Maternal-Fetal Attachment Scale (MFAS) (Cranley, 1981). This scale includes five areas, including: giving of self, attributing characteristics to fetus, role taking, differentiation of self, and interaction with the fetus. Although this scale has been widely used, research in the nursing literature reports inconsistent and counterintuitive

findings using the MFAS, and the validity of the measure has been questioned (Muller, 1993; Zachariah, 1994).

Object Relations Theory: Formation & Implications of Representations

In the earlier discussion of pregnancy, writers considered the effect of a pregnant woman's internal representations, specifically those of her self and her own mother, on her developing representation of her unborn child and the mother-child relationship. These writers suggest that a mother's own object representations guide her fantasies and feelings about her unborn baby, contribute to the prenatal representation she is developing of her child and their relationship, and may effect her relationship with her child after it is born.

This section will explore the formation and significance of object representations on the development of the self and the capacity for relationships with others. In addition to reviewing essential contributions to the evolution of theories of self and object representation, clinical observations on the effects of early object development on adult personality organization and character pathology will be highlighted. The discussion of object representations reflects specific interest in the development of an autonomous, separate self, the potential for connecting and caring about others, and the integration of drives and affects.

Of primary importance to object-relations theory is the significance of object representations on the development of the self and the construction of specific relationships with others. Mental representations of self and other are thought to operate

unconsciously, become increasingly complex and stable over time, and influence how a person organizes internal and external experiences. Urist (1981) argues that “In the experiencing of ‘real’ relationships between self and others in the external world, the individual processes and registers present experience in the context of the ways in which past experience has been organized” (p. 821). However, object-relations theories differ in explaining *how* past experiences become organized, and to what degree drives, fantasy, and the external world contribute to the formation of these mental representations.

The evolution of object-relations theory begins with Freud (1940) and his writings on the role of objects in the formation of psychic structures (Ogden, 1986). To illustrate Freud’s view of mental representations, many writers (Blatt & Lerner, 1981; Buckley, 1986; Ogden, 1986; Sandler & Rosenblatt, 1962) underscore Freud’s discussion of the formation of the superego. In the following significant passage, Freud (1940) suggests that an external object can be incorporated into the ego through the process of identification: “A portion of the external world has, at least partially, been abandoned as an object and has instead, by identification, been taken into the ego and thus become an integral part of the internal world. This new psychical agency continued to carry on the functions which have hitherto been performed by the people (the abandoned objects) in the external world” (p. 205). Freud argues that incorporating specific external objects is intrinsic to the formation of permanent psychic structures.

In Freud’s theory, objects (or parts of objects) are not only critical to the development of such psychic structures, they are of primary importance to facilitate the discharge of libidinal and aggressive drives. As Freud (1940) explains: “A child’s first

erotic object is the mother's breast that nourishes it; love has its origin in attachment to the satisfied need for nourishment." To Freud, the child first becomes connected to his mother's breast, the part of her that can satisfy his hunger, and only later to his mother as a person. The child's need for gratification motivates his attachment to his mother, but at least initially, this attachment is not the central component of the relationship. As Mitchell and Black (1995) suggest: "For Freud, the aim of the impulse was discharge; the object was the accidentally discovered means toward that end" (p. 91). The eventual ability to connect to the mother as a whole object occurs within the context of drive development and completion of the psychosexual stages (Greenberg & Mitchell, 1983).

Joseph Sandler and his colleagues began by incorporating and expanding the concept of representations into Freud's drive/structural theory (Sandler and Rosenblatt, 1962), but eventually came to emphasize the critical role of objects, not drives, in psychological development (Sandler & Sandler, 1978). In an early article, "The Concept of the Representational World," (Sandler and Rosenblatt, 1962), Sandler discussed the importance of objects for drive gratification, but as the article's title suggests, he clearly believed a child's representations of herself and others provided the organizational paradigm for the child's experiences.

Building on the work of Piaget (1937), and Werner (1940), Sandler was interested in the form and structure of the representations themselves, a critical contribution that led to further theoretical discussion and empirical research (e.g.; Blatt, Brenneis, Schimek & Glick, 1976; Frank, 1995). He argued that representations were a function of drive, fantasy, and relationships with objects in the external world, that became increasingly

organized, complex and stable psychic components of the internal world. Sandler's conceptualization brings the child's representation of herself and her subjective experiences into sharper focus, specifically, how a child represents her internal and external experiences to herself (Greenberg & Mitchell, 1983). Eventually he came to believe that a particular child's experiences with her specific mother were critically important to the formation of her representational world, and that there exists a "given, inborn basis for the child's early responses to external objects" (Sandler & Sandler, 1978, p. 286) that were not solely motivated by drives.

Melanie Klein's work also began with Freud's formulations, and although she envisioned herself as one of Freud's foremost disciples, her elaborations of the child's internal world led her to strikingly different conclusions. Klein clearly incorporated drive theory, but believed that unconscious internal objects were directly linked to the experience and expression of such drives (Mitchell & Black, 1995). Kleinian theory focuses on the infant's strategies for relating to the positive internal image of the mother given the infant's powerfully aggressive feelings generated by the death instinct (Ogden, 1986; Urist, 1981). By projecting some of his own aggression onto the image of the mother, the infant splits the images of self and other into "all good" and "all bad." This approach allows him to separate his feelings of hatred for his mother, and his feelings of being hated, while allowing him to continue to love his mother and experience himself as lovable. Ogden suggests: "The infant's splitting of his experience of his relationships with objects allows him to create a psychological sanctuary (safe from hostile and destructive feelings) within which he can feed safely, take in safely what he needs from

his mother” (p.137). Thus splitting begins as an adaptive, developmentally appropriate response.

Ultimately, however, in order for the child to experience himself and his objects as “whole,” the world of radically split internal images must be allowed to coexist within one ambivalent relationship. Intrinsic to the success of this integration of loving and hating feelings is the child’s knowledge that his loving feelings are stronger than his hate, that his destructive feelings will not destroy his mother. Klein has been criticized for her lack of focus on the “real” mother; however, her emphasis on the internal experience of the child and the achievement of ambivalence within representations of self and other is highly significant.

In contrast to Klein’s extensive focus on fantasy and the role of internal objects on the formation of representations, D.W. Winnicott (1956, 1960a, 1960b, 1967, 1969) insisted that the *real* mother in the infant’s environment played a critical role in the development of the self. He argued that it was the mother’s job to provide an environment to facilitate the emergence of the child’s authentic, spontaneous, “true self,” -- one that could retain its autonomy and individuality while forming intimate and satisfying connections with others. Winnicott believed that optimal child development occurred when the mother could accept and contain a child’s experiences and feelings, including the full range of love and hate, without retaliating. Winnicott (1956) suggests that this difficult task is initially made easier by “primary maternal preoccupation,” a state of heightened sensitivity and empathy towards one’s baby, present in the last trimester of pregnancy and early motherhood.

If the mother has *not* been, in Winnicott's (1960) terms, "good enough," and the infant has suffered maternal intrusiveness or withdrawal, a separate "false self" organization may develop to protect the integrity of the true self and maintain contact with the mother. Ogden (1986), in summarizing Winnicott's contributions, notes that the "conception of the True and False Selves represent steps in the development of an object relations theory in which unconscious aspects of the person, each with the capacity to generate meanings according to its own patterns of linkage, engage in internal relationships with one another" (p. 144). In addition to expanding object relations theory, Winnicott discusses the clinical implications of working with adults in which a false self personality is present. He suggests such patients often report feeling unreal and internally bored, as they have not had the spontaneous and authentic experiences associated with their true self.

In one of the most influential object relations models, Margaret Mahler (Mahler, Pine & Bergman, 1975) combines drive and object relations theories to describe the stages through which the child progresses in order to separate and individuate from her mother. She argues that the formation of a positive and constant internal representation of the mother is vital to this process, and facilitates the child's successful separation and autonomous functioning. Presuming from two to five months the baby is in a state of merger with the mother, the child's struggle for differentiation is central to this understanding of development.

Mahler observed the ways in which the mother-child dyad tolerates, modulates, and provides for the child's gradual separation from and internalization of her mother.

She describes the “optimal distance” a child and mother find to successfully manage the child’s wish to investigate her environment, with her need for proximity to her mother. Mahler suggests that a child’s initial delight in moving independently and exploring the world is soon accompanied by the growing realization that she is indeed separate, but still dependent upon her mother. The anger and confusion accompanying the child’s comprehension of her separateness lead to the rapprochement crisis.

The child’s ambivalence in the rapprochement crisis reflects her wish to feel autonomous and self-directed, with her fears that without the mother she is vulnerable, dependent, and alone. If the mother can contain the range of intense feelings during this stage (often directed at her) she will likely be internalized as a source that will sustain and comfort her child. With the achievement of object constancy a child’s representations of self and others reflect both intrapsychic separateness and an integration of aggressive and libidinal drives. Mahler suggests that an unsuccessful resolution of the rapprochement crisis can lead to a splitting of the good and bad representations of self and other associated with character pathology in adults.

Many other theorists have written about the role of objects in the development of the self. Otto Kernberg’s (1966, 1975, 1982) object-relational model is considered an integration of the work of Freud, Jacobson, Klein and Mahler (Mitchell & Black, 1995). Kernberg (1966) argues that the essential components of psychic structure include object-representations, self-representations, and “drive derivatives or dispositions to specific affective states” (p. 356). He proposes a three-stage model of the internalization of object relationships with corresponding psychic structures: introjection, identification and

ego identity. In later writings Kernberg (1982) suggests that affects, not drives are the primary motivating forces and that affective states link all self and other representations.

Kernberg places great emphasis upon the role and evolution of the defense mechanisms of splitting and repression in early object development and later adult psychopathology. Like Klein and Mahler, Kernberg believes that splitting serves an essential, adaptive function for the infant, protecting the ego from disparate affective experiences of self and other. With the achievement of the final stage of ego identity, however, a continuity of the self and relationships with objects is achieved and splitting is gradually replaced with repression and the tempering of aggression. Kernberg suggests that if repression does not replace splitting, primitive affective states may remain unintegrated and unmodulated, and representations of self and other will be unstable. He notes that the self-object world in adults with borderline personality organization is characterized by such defenses as splitting, idealization, and devaluation -- strategies that protect the self when representations of self and other lack boundaries and differentiation.

Heinz Kohut (1966, 1971, 1978) the founder of self psychology, postulated several separate developmental lines of the self with corresponding self-object experiences, and transferences (Baker & Baker, 1987; Mitchell & Black, 1995). Kohut was particularly interested in how early empathic failures by parents, and lack of fulfillment of the child's self-object needs, could later result in an adult's difficulties with self-regulation and self-esteem. He believed that these early deficits could produce difficulties in adulthood including: emotional instability, a lack of autonomy, and a subsequent reliance on others to provide these essential internal functions for the self.

For Kohut (1978), the development of internal structures occurs as a child's caregivers (self-objects), provide specific functions for the child that are gradually internalized and form the basis for an autonomous self with the potential to experience others as fully separate. Kohut discusses several self-object experiences, including the mirroring self-object, and the idealized parent imago. Kohut explains that the mirroring self-object must "respond to and confirm the child's innate sense of rigor, greatness, and perfection" (p. 414). By reflecting back to the child his essential wonderfulness and value, the mirroring experience allows him to develop feelings of independence, self-worth and vitality, that can gradually be sustained without the parent's presence.

In addition to providing mirroring for the child, the self-object must be someone the child can admire and "with whom he can merge as an image of calmness, infallibility and omnipotence" (p. 414). The idealized parent imago serves as an external source of calm and protection for the self that will become an internal capacity for self-soothing and self-regulation.

Kohut refers to the maturation of the child's internal capacities as "transmuting internalization" (p. 416). After the child's needs for mirroring and idealizing are empathically met by the parents, he begins to develop a sense of self that can tolerate his parents inevitable failures and misattunements. Through these failures, the child's self gains strength and independence and no longer needs the external support of his parents. Although Kohut acknowledges the need for self-objects throughout the life cycle, he emphasizes that the healthy self is not dependent upon others for self-regulation or self-esteem. When the early self-object needs have not been met, however, other adults in the

real world are experienced largely as self-objects (not separate, whole objects) providing internal structures for the self that are lacking.

As this consideration of the above writers illustrates, many theories exist to explain the formation and implications of a person's internal world of representations. The theories discussed, however, do share several common beliefs regarding the formation of healthy self and object representations, including: the integration of libidinal and aggressive drives and affects; self and object representations reflecting separateness and differentiation; and a capacity for concern and intimacy with "whole" others.

The above capacities are considered some of the developmental achievements essential to a fully mature object world (Urist, 1980). Although theories regarding how developmental arrests manifest themselves in adult psychopathology vary, all of the aforementioned writers allude to the intrapsychic and interpersonal difficulties possible if representations of self and other are impaired. Of interest to this study is the relationship between a mother's internal world, and her prenatal and postnatal representations of her child. Might a mother whose object representations are not fully integrated and differentiated represent her child quite differently from a mother who has a more fully developed object world? This study hypothesizes that a mother's fantasies and expectations of her child, as reflected in her representations before and after the child is born, will reflect the quality and developmental level of her object representations.

Assessing Object Relations: Two Measures for the Rorschach

Projective tests such as the Rorschach and the Thematic Apperception Test (TAT) (Murray, 1951) have been invaluable tools of psychological assessment, providing a window into a person's inner life. How a person responds to the ambiguous blots of the Rorschach and narrates stories on the TAT have been interpreted based on psychoanalytic theory to elucidate a person's internal conflicts, defense mechanisms, reality testing, and many other aspects of psychic functioning.

With the growing interest in assessing a person's capacity for object-relatedness, new measures based on object-relations theory have been developed. Finding ways to assess the range, quality, and developmental level of a person's representations of self and other has been of interest to both clinicians and researchers for their diagnostic and prognostic value. Although much of the research in this area continues to focus on measures that can be applied to the Rorschach and the TAT, measures of object relations have been developed using early memories (Mayman & Farris, 1968), dream reports (Krohn & Mayman, 1974), and descriptions of parents (Blatt, Wein, Chevron & Quinlan, 1979).

In their review of the literature on projective assessment of object relations, Stricker & Healey (1990) acknowledge that object relations are by definition unconscious processes, and therefore can only be inferred from projective sources. When such sources as the Rorschach, dreams, or the TAT reflect human relationships, however, they argue that "it is reasonable to assume that they may tap the realm of object relations," and thus may be considered valid measures of object representations (p. 219).

Urist (1977) notes the long-standing interest in utilizing the Rorschach to understand a person's representations of self and other. In this study, two object-relations measures will be applied to the Rorschach: the Mutuality of Autonomy Scale (MOAS) (Urist, 1977) and the Developmental Analysis of the Concept of the Object Scale (DACOS) (Blatt, Brenneis, Schimek & Glick, 1976). The MOAS examines the *content* of responses to understand the degree of autonomy and reciprocity within relationships, and the impact of aggression on the interaction, while the DACOS analyses the *structural* aspects of responses to assess the developmental level of object relations.

Mutuality of Autonomy Scale

The MOAS is a 7-point ordinal scale applied to Rorschach responses of humans, animal figures, and inanimate objects, in direct or implied interaction. Designed by Urist in 1977, the MOAS has its theoretical roots in Kernberg (1966, 1975) and Kohut's (1966, 1970) writings on object relations and the development of personality structure and character pathology. The most optimal scale points (lower numbers on this reverse scale) reflect the capacity to maintain autonomy and integrity of the self while being empathically aware and related to an other. Scale point (1) the highest level of object-relations, is described by Urist (1977) as one in which separate figures are "engaged in some relationship or activity where they are together and involved with each other in such a way that conveys a reciprocal acknowledgment of their respective individuality" (p.4). The scale points then describe (2) parallel activity, (3) dependency of one or both figures on the other, (4) one figure mirroring the other, (5) malevolent control of one figure by

the other, (6) torture of one figure by another, (7) overwhelming destruction of all figures by an uncontrollable force (Urist, 1977).

Although higher scores (lower levels of object-relations) clearly reflect higher degrees of aggression, it is not aggression, per se that the scale is measuring (Urist, 1982; Tuber, 1992). Tuber (1992) explains that it is the “imbalance of the ‘battle’ between the figures that is weighed most heavily in scoring” (p. 183). Therefore an angry, competitive situation could warrant a lower, more optimal score, as long as the integrity and equality of both figures is not compromised.

Urist (1977) applied the MOAS to a sample of 40 adult in-patients with varied psychopathology, and found the scale correlated with independent ratings of object relations by staff, and an autobiographical task scored separately for quality of object relations. In a later study, Urist and Shill (1982) limited the use of the MOAS specifically to Rorschach responses describing relationships (as opposed to its original use on the entire protocol) with a sample of 60 adolescent in-patients and out-patients. Strong correlations were again found between MOAS scores on the Rorschach, and independent ratings of patients’ records using a clinical version of the MOAS scale.

The MOAS has been used with various clinical populations of adults (Blatt, Tuber & Auerbach, 1990; Stricker & Healey, 1990) to explore subgroups of borderline and schizophrenic patients (using a modified 10-point MOAS scale, Spear & Sugarman, 1984), transsexuals and borderlines (Murray, 1985), and restricting and bulimic anorexics from controls (Strauss & Ryan, 1987).

Widely utilized in research exploring object-relations in clinical samples of children and adolescents (Stricker & Healey, 1990; Tuber, 1992), the MOAS scale has been used to predict the need for later rehospitalizations (Tuber, 1983), and to describe Gender Identity Disorder in boys (Coates & Tuber, 1988; Tuber & Coates, 1989), shifts in object-relations in children undergoing surgery (Tuber, Frank & Santostefano, 1989), adolescent girls with depression (Goldberg, 1989), children with imaginary friends (Meyer & Tuber, 1989) and separation-anxiety disorder in boys (Goddard & Tuber, 1989). (Please see Tuber, 1992 for a full description of studies using the MOAS in samples of children).

Several studies have used the MOAS with normative samples of children. Ryan, Avery & Grolnick (1985) found a significant relationship between MOAS scores and teacher assessments of interpersonal behavior, student grades, and a measure of a child's internal vs. external control. Brown-Cheatham (1993) used the MOAS to distinguish between voluntary and involuntary father-absence in father-absent African-American male children. Tuber (1989) examined the MOAS scores in a normative sample of children to allow for comparisons with clinical populations. Although both boys and girls were found to have a broad range of MOAS scores (the ramifications of which will be discussed below), girls had a mean MOAS scale that was more benign, a highest single score that was more adaptive, and a lowest single score that was less malevolent than boys.

Tuber's work (1989) raises several important issues concerning the use of the MOAS scale. The first concerns his finding that children's norms include a broad range

of scores. The MOAS was designed to be a developmental scale illustrating the age-related progression from primitive levels of object-relatedness, to the attainment of autonomy and reciprocity within relationships. Tuber's study illustrating the range of self and object representations available to children, joins the literature (Goldberg, 1988; Meyer & Tuber, 1989; Tuber, 1989; Tuber, 1992; Tuber & Coates, 1989) questioning the developmental aspect of the MOAS scale. Tuber (1992) concludes "...the MOA scale should be more precisely viewed as an ordinal index of varying degrees of adaptive and maladaptive object representations and should not be viewed as a scale that places these object representations within a developmental timetable" (p.196).

While Tuber's study establishes norms for children on the MOAS scale, and acknowledges the significant differences between scores of boys and girls, there has been little research establishing norms for adults, and investigating the possible differences between scores of women and men.

Developmental Analysis of the Concept of the Object Scale

The DACOS (Blatt, Brenneis, Schimek & Glick, 1976) focuses on the structural aspects of human responses on the Rorschach, using the seven following categories: accuracy of the response, differentiation, articulation, motivation of action, object-action integration, content of action, nature of interaction. Based on writings from developmental psychoanalysis as well as cognitive developmental psychology (Stricker & Healey, 1990), Blatt created a scale to examine the developmental level of object-

relations. Specifically, to understand how representations of self and other become more accurate and complex over time.

Blatt's original longitudinal study (Blatt, Brenneis, Schimek, & Glick, 1976) examined Rorschachs of in-patients and controls at four intervals from age 11 through 30. The research found that normal development was characterized by a significant increase in the level of differentiation, articulation, and integration of human figures, and supported the developmental basis of the scale.

The DACOS has been used in research with adults (Frank, 1995; Lerner, 1991; Stricker & Healey, 1990) to analyze changes in patients' object-relations as a result of treatment (Blatt, Ford, Berman, Cook, & Meyer, 1988; Schwager & Spear, 1981), as well as to distinguish between categories of psychopathology including: narcissistic and borderline patients (Farris, 1988); restricting and bulimic anorexics (Piran, 1988; Piran & Lerner, 1988); psychotic and non-psychotic patients (Blatt & Berman, 1984; Fritsch & Holmstrom, 1990; Ritzler, Zambianco, Harder, & Kaskey, 1980); opiate addicts, neurotic, and psychotic patients (Blatt, Berman, Bloom-Feshback, Sugarman, Wilber & Kleber, 1984; Blatt, McDonald, Sugarman & Wiber, 1984); and neurotics, outpatient borderlines, inpatient borderlines and schizophrenics (Lerner & St. Peter, 1984a, 1984b).

A study (Stuart, Westen, Lohr, Benjamin, Becker, Vorus, Silk, 1990) of object relations in borderlines, depressives, and normals, found the DACOS a useful measure to distinguish between groups, as well as to illustrate particular characteristics of borderline patients' object relational world. When Stuart and colleagues correlated two variables of the DACOS (motivation of action and content of action), they found that in the borderline

sample, representations were most cognitively complex when highly malevolent. Given such results, the authors suggest analyzing cognitive and affective scales separately.

Although the MOAS and the DACOS have been shown to differentiate between many clinical syndromes in children and adults, it has been suggested (Stricker & Healey, 1990) that these scales may be measuring degree of psychopathology and not level of object-relations. Although a salient issue, the perspective for this research suggests that psychopathology by definition reflects an impairment or deficiency in the object relational world (Kernberg, 1966).

Attachment Theory: Maternal Representations of the Child

John Bowlby, a British psychoanalyst, combined psychoanalytic, developmental, and ethological theories to explore the complexities of mother-infant attachment. Bowlby's initial observations of the effects of early separations and losses of parenting figures on child development inspired him to examine the organization and parameters of a child's attachment to his mother. Bowlby's original clinical and theoretical conceptions of infant-mother attachment provided the groundwork for numerous empirical investigations and measures designed to understand and explore the intergenerational transmission of attachment.

Attachment theory currently encompasses a broad range of domains including the study of representational models of secure and insecure attachment in children and adults, and a relatively recent interest in the relationship between parental representations of the child and infant security of attachment. Understanding the sequelae of attachment

patterns has encouraged research in many other fundamentally related areas of empirical and clinical applications, for example, attachment and social development, affect regulation, psychopathology and infant-parent psychotherapy. After briefly reviewing the fundamental theory and constructs of attachment research, I will focus specifically upon parental representations of the child and related measures.

Bowlby (1958, 1969, 1973, 1982) believed that the infant is biologically motivated to seek safety and security from her mother, and that when needed, the infant possess innate behaviors to alert her and activate the “attachment behavioral system.” Such “attachment behaviors” as sucking, crying, clinging, following and smiling, increase when the infant is fearful or distressed and seeks the mother for comfort. These behaviors then recede when the mother responds and the infant feels safe and protected again. Bowlby (1958) proposed that this series of reciprocal infant-mother responses “serve the function of binding the child to mother and contribute to the reciprocal dynamic of binding mother to child” (p.155). Although the particular attachment behaviors become increasingly sophisticated as the child matures, the goal of the system remains the same: to insure proximity to the mother when necessary.

Bowlby (1982) argued that the quality and consistency of the caregiver’s responses to the child, the *real* mother-infant relationship, become organized at the representational level. This representation, the child’s “internal working model of attachment,” reflects the sensitivity and reliability of the parenting received and directs the ways in which the child anticipates responsiveness from her parent in the future.

Infant Attachment

Empirical support for Bowlby's theoretical model was provided by the research of one of his associates, Mary Ainsworth (Ainsworth, Blehar, Waters & Wall, 1978).

Ainsworth conducted both naturalistic and controlled studies of mother-infant dyads and observed that different styles and degrees of sensitivity of mothering produced distinct mother-infant attachment relationships. Her assessment paradigm, described below, provided a link between the sensitivity of the mother to the child, and the way in which the child organizes her attachment behavior.

Ainsworth developed the Strange Situation procedure (Ainsworth, Blehar, Waters & Wall, 1978) to assess the pattern of the infant's attachment to his mother. This paradigm includes a series of mother-infant separations and reunions. The infant's responses to his mother's leave-takings and particularly to her returns are analyzed. Slade & Aber (1992) explain that the Strange Situation "essentially provides a measure of the history of the mother-child relationship." Thus the child's behavior during the Strange Situation is thought to reflect her current working model of attachment, including a representation of her mother, herself, and their relationship (van IJzendoorn & Bakermans-Kranenburg, 1996). Three unique patterns of attachment were initially identified, the secure, avoidant, and resistant patterns (Ainsworth, Blehar, Waters & Wall, 1978), and most recently a fourth attachment pattern, the disorganized attachment, was recognized (Main & Solomon, 1986).

Briefly reviewed (Slade & Aber, 1992; Slade, 1996), securely attached children have come to anticipate consistent, caring responses from their mothers and seek their

maternal comfort upon reunion. Infants avoidant in their attachment have experienced mothers who are often unresponsive to their needs or rejecting of intimacy. These infants do not turn to their mothers for comfort, or attempt to avoid it if offered. Anxiously attached children have experienced inconsistency; their mothers may be available to them at times, but they are not reliable sources of reassurance and soothing. When reunited with their mothers these children exhibit ambivalent behavior; attempts for closeness with mother are combined with angry resistance to her. Children classified as disorganized have come to expect unpredictable and possibly frightening maternal responses, and become overwhelmed or even frightened when their mothers return.

Infants in the avoidant, anxious, and disorganized categories are considered “insecurely attached.” Their reunion behaviors indicate they do not anticipate their mothers will be available to comfort them and thus they do not consistently seek her presence for emotional support, even in times of stress. Examining adult attachment, specifically mothers’ own early attachment histories, has been instrumental in understanding some of the precursors to security and insecurity of infant attachment.

Adult Attachment

Adult attachment did not become a primary area of research until the work of Mary Main (Main, Kaplan & Cassidy, 1985) shifted attention from the behavioral manifestations of attachment in children, to the mental representations of attachment in adults (Slade & Aber, 1992). Main and her colleagues developed the Adult Attachment Interview (AAI) (George, Kaplan & Main, 1985) to examine the internal working models

of adults, and explore the connection between an adult's mental representation of her own childhood attachment and her child's security of attachment to her

The AAI is designed to "surprise the unconscious" (Main, 1995, p. 437) by asking a person to remember and describe relationships with early caregivers and then to illustrate with specific examples. Over the course of one to two hours, a person is asked about childhood losses and separations, the availability of caregivers in times of vulnerability and distress, and the presence of abuse and trauma. In addition, they are asked to reflect upon the impact their early experiences had on their adult development and their understanding of their parents' behaviors towards them.

After interviews are audiotaped and transcribed verbatim, narratives are classified as autonomous, dismissing, preoccupied and unresolved. Classifications reflect interview content to some extent, but particular emphasis is paid to the narrative structure and consistency of the interview. This is in keeping with Main's (1985) definition of internal working models of adult attachment as a "set of conscious and/or unconscious rules for the organization of information relevant to attachment and for obtaining or limiting access to that information...regarding attachment-related experiences, feelings, and ideations" (p. 66-67). Thus adults classified as autonomous can readily access and discuss childhood memories of caregivers, both generally and specifically, in a coherent, integrated way. They also convey a sense of valuing relationships with their parents and a capacity to reflect upon parental influences on their own development and personality.

In stark contrast to autonomously attached adults, narratives of insecurely attached adults often possess "marked inconsistencies, contradictions, dysfluencies, and

discontinuities” (Main & Goldwyn, 1995). Adults judged dismissing of attachment do not have easy access to memories of attachment relationships. They often convey a generally idealizing portrait of their relationship with caregivers despite specific examples that reflect negativity and parental rejection. Adults classified as preoccupied present an overwhelming and unintegrated narrative of their early relationships and a continued concern with attachment figures. Narratives judged unresolved reflect those of adults who experienced early traumatic experiences, including an early parental loss, sexual or physical abuse. Such interviews convey a lack of resolution regarding the affective components of the traumatic event, and a subsequently incoherent narrative.

An impressive body of research has documented the relationship between parents’ mental representations of their own early attachment experiences, as measured by the AAI, and the quality of a child’s attachment to the parent as measured by the Strange Situation. Mothers who are found to be “autonomous” in their own relationship to their parents tend to have children who are “securely” attached to them; mothers who are “dismissing” with respect to attachment tend to have children who are “avoidant”; and mothers who are rated “preoccupied” tend to have children who are “resistant.” Recently, mothers classified as unresolved often have children who are considered “disorganized.” These categories of attachment have provided the foundation of much research on the characteristics of mother-infant behavior as well as the intergenerational transmission of attachment.

In addition, research on transmission of attachment has illustrated the relationship between adult attachment assessed *prenatally* and security of infant attachment measured

at one year (Benoit & Parker, 1994; Fonagy, Steele & Steele, 1991). Fonagy and his colleagues (1991) found mothers' AAI classifications determined during the third trimester of pregnancy predicted infant-mother attachment at one year with 75% accuracy (secure vs. insecure). These conclusions were supported by Benoit & Parker's (1994) findings, in which infant strange situation classifications were strongly predicted (81% autonomous vs. dismissing vs. preoccupied) by their mothers' AAI categories during pregnancy. Such findings indicate that measures administered to mothers prenatally can be predictive of postnatal mother-infant attachment.

Parental Representations

In addition to the development of infant attachment, Bowlby was clearly interested in the mechanisms of parental attachment; the processes "binding mother to child." Bowlby (1982) came to believe that just as children manifest behaviors designed to elicit their parent's caregiving, parents possess a system of providing care to their children. This reciprocal caregiving system is thought to be organized at the representational level. That is, just as adults and children have representations of their parents, so too do parents develop representations of their children.

Attachment theory researchers have recently turned their attention to parental representations of the child and the parent-child relationship, exploring the link between parental representations developing before and after the child is born, and the quality of the actual parent-child relationship (Aber, Belsky, Slade & Crnic, in press; Benoit, Parker & Zeanah, 1994; George & Solomon, 1989, 1993, 1996; Slade, Belsky, Aber & Phelps,

in press; Slade & Aber, 1992; Zeanah, Benoit, Hirshberg, Barton & Regan, 1995). A child's attachment category is thought to reflect her expectations, perceptions, and range of feelings about herself and her caregivers. Slade et. al. (in press) suggest that parental representations serve an analogous function, for they "determine access to particular kinds of thoughts and feelings in relation to the child, and presumably function to guide parents' expectations and behaviors in the relationship" (p. 4).

Before the development of representational measures of parents' internal working models of the child, attachment research on prenatal representations of the child utilized a content analysis of infant temperament questionnaires administered to parents during pregnancy. This research suggested that parents develop subjective impressions of their child's personality characteristics prenatally, and that such perceptions of the infant possess moderate stability postnatally (cited in Benoit, Parker & Zeanah, 1997; Fava Vizziello, Antonioli, Cocci & Invernizzi, 1993; Mebert, 1989, 1991; Mebert & Kalinowsky, 1986; Zeanah, Keener & Anders, 1986; Zeanah, Keener, Anders & Vieira-Baker, 1987; Zeanah, Keener, Stewart & Anders, 1985).

Zeanah, Keener, Stewart & Anders (1985) conducted a short-term longitudinal study of first-time parents' perceptions of their infants before and after birth. They found that both mothers and fathers developed stable perceptions of their infants' temperaments prenatally. The Infant Temperament Questionnaire was administered to both pregnant women and their husbands twice in the third trimester of pregnancy and again at one and six months after birth. In the prenatal administration, parents were asked to rate their infants as they imagined them to be, in six dimensions of temperament. Three of the six

dimensions of infant temperament were found to be stable from prenatal assessment to six months postnatally.

This study also revealed that parents who rated their prenatal and postnatal baby as “more difficult” than the average baby had infants who were less responsive during feeding interactions with their mothers. Specifically, that “less optimal interactive behaviors” were more likely to be found in infants whose parents believed them to be “more difficult” in prenatal assessments. Zeanah et. al. conclude that during pregnancy, parents develop meaningful impressions about infant personality that affect parental perceptions of their postnatal infants.

In a later paper, Zeanah et. al. (1990) examined parents’ constructions of their infants’ personalities before and after birth, based on content analysis of interviews administered to the above sample. They report that descriptions of infant personalities were “remarkably vivid” before and after birth. In a prenatal interview, one woman at 36 weeks gestation gave the following description of her infant’s personality: “Quiet. I think this is a mild-mannered child -- a content child who doesn’t makes a fuss. I haven’t had any problems carrying the baby like other people have had. The baby will be secure” (p.198). While another mother’s prenatal description of her infant was: “Active. Busy. Very inquisitive. Probably, a bit, I don’t know, mischievous” (p.198). Mothers’ descriptions vividly illustrate the presence of a prenatal representation of the child.

Infant-Parent Psychotherapy

Support for the presence and significance of parental representations comes from the clinical literature on infant-parent psychotherapy. This literature provides another way of examining the impact of prenatal and postnatal representations on the range of parental attributions and affective experiences of their children (Brazelton & Cramer, 1990; Fraiberg, Adelson & Shapiro, 1975; Greenspan, 1992; Lieberman & Pawl, 1993; Lieberman, 1997; Seligman, 1994; Slade & Cohen, 1996; Stern, 1995; Stern-Bruschweiler & Stern, 1989; Zeanah, Finley-Belgrad & Benoit, 1997). Slade (1996) summarizes the significance of the literature on infant-parent psychotherapy: “clinicians working with infant-parent dyads have provided extensive evidence for links between parents’ failure to recognize and integrate the affective sequelae of childhood relationships, and the appearance of attachment and relational disturbances in the child” (p.219).

In Selma Fraiberg’s landmark paper, “Ghosts in the Nursery” (1975), she discusses the significance of maternal “ghosts,” the unintegrated memories and feelings from the past, that affect a mother’s perceptions and interactions with the child. She argues that often ghosts are successfully banished or are only infrequent visitors in the family. There are other ghosts, however, that are more possessive of parents, such that “the baby in these families is burdened by the oppressive past of his parents from the moment he enters the world” (p.165). That is, the parents’ perceptions and treatment of the child are over-determined by a rigidly held parental representation. Children in such

families are often in emotional or developmental danger, as the child becomes the recipient of the parents' unconsciously enacted dramas from their own childhood.

Certainly not all parents who experienced tragic relationships in their own early lives will transmit these experiences to their children. Fraiberg argues that it is largely when the affects associated with earlier trauma are repressed and split-off from memory that the parent-child relationship is at greater risk. One of the functions of parent-infant psychotherapy is providing a safe place for the parent to begin to acknowledge and integrate the emotional pain of their earlier experiences. She explains: "Our hypothesis is that access to childhood pain becomes a powerful deterrent against repetition in parenting, while repression and isolation of painful affect provide the psychological requirements for identification with the betrayers and the aggressors" (p.195).

In Fraiberg's work, and that of later theorists and clinicians Alicia Lieberman and Jeree Pawl, understanding the role of maternal representations is essential to interrupting the transmission of traumatic relationships. Lieberman (1997) notes that although babies can become the objects of wishes and dreams, and come to represent the best in parents, they can also represent parents' unresolved conflicts, become carriers of unconscious fears, and transmit intrapsychic impulses and secrets. Although Lieberman conceptualizes maternal attributions as reflections of a mother's internal working model of attachment, she includes and supports the use of psychoanalytic concepts of fantasy and projective identification in her analyses of mother-infant relationships.

In working with dyads in infant-parent psychotherapy, Lieberman has focused on the negative maternal attributions that can lead to maternal misinterpretations of infant

behavior. Lieberman (1997) describes the presence of negative maternal attributions in evidence even prenatally. She cites the case of one mother who experienced feelings of depletion and a preoccupation with her own appetite and hunger. During pregnancy, this mother described her unborn baby as “demanding” and “devouring of every bit of energy” (p. 283). When her daughter was two days old, the mother described the baby as “very greedy.” This mother misjudged her baby’s healthy appetite as greediness and voraciousness, and manifested significant difficulties feeding her daughter. If the baby cried while the mother herself was eating, the “greedy” child often waited long stretches before she was fed. As Lieberman describes: “By then the child was often so overwrought and disorganized that she could not be calmed down and choked on the milk the mother tried to feed her” (p. 285). In such a case, infant-parent psychotherapy aims to help the mother understand and identify her own unresolved needs and her subsequent projection of greediness on to her child.

Assessing Parental Representations: Two Interview Measures

Recently, several research groups have created interviews designed to measure and classify parental representations of the child, including: The Caregiving Interview (George & Solomon, 1993), The Pregnancy Interview (PI) (Slade, Haganir, Grunebaum & Reeves, 1985), The Parent Development Interview (PDI) (Aber, Slade, Berger, Bresgi & Kaplan, 1985) and The Working Model of the Child Interview (WMCI) (Zeanah, Benoit, Hirshberg & Barton, 1993). Although conceptually distinct, all of these interviews explore facets of parental representations. Significant contributions from this

body of research are reviewed below before considering the measures to be used in this study.

Zeanah & Benoit developed the WMCI interview. This one-hour interview asks parents to describe the characteristics and personality of their child, qualities of their relationship, and reactions to their child's behavior in a variety of situations. A parent's representation of the child is classified as balanced, disengaged, or distorted, based on eight rating scales: richness of perception, openness to change, intensity of involvement, coherence, caregiving sensitivity, acceptance, infant difficulty, and fear for safety. Secondary scales assess the range of affect expressed by the parent during the interview.

In a recent attachment study of mothers' prenatal representations of their infants, Benoit, Parker & Zeanah (1997) administered the WMCI to women once during pregnancy and twice postnatally. Infant attachment status was also assessed at 12 months using the Strange Situation. Results indicated that maternal representations of infants (as measured by the WMCI) remained stable over a period of 12 months. In addition, there was substantial concordance (74%) between mothers' WMCI category (Balanced, Disengaged, Distorted) and infant attachment classification as measured by the Strange Situation. Benoit concluded that mothers' descriptions of their infants during pregnancy are predictive of infant security of attachment after birth. These results are also in keeping with studies in which parents' prenatal AAI classifications predict infant security of attachment at age one year (Benoit & Parker, 1994; Fonagy, Steele & Steele, 1991). This research reflects the stability of parental representations of attachment assessed

prenatally, and the concordance between WMCI classifications and infant security of attachment.

George & Solomon (1989, 1993, 1996) developed The Caregiving Interview (1993), an adaptation of the Parent Development Interview (Aber, Slade, Berger, Bresgi, & Kaplan, 1985), for assessing parental representations. They propose that a parent's caregiving system is a "*mature* transformation" of an adult's attachment system and have utilized the interview to explore the relationship between parental representations, and adult and infant attachment status (Solomon & George, 1996, italics in original). During this interview parents are asked about a range of issues, including to describe themselves as parents, to discuss the affective components of their relationship with their child, and their experience of separations from their child. Four scales determine the nature of the parent's representation of themselves as a caregiver: secure base, rejection, uncertainty and helplessness. In a recent study of 32 mothers of children age six, George & Solomon (1996), found a significant relationship between ratings of caregiving representations, child attachment, and adult attachment.

Slade and her colleagues have investigated the correlates of parental representation during pregnancy and early childhood with two interviews: The Pregnancy Interview (PI) (Slade, Haganir, Grunebaum & Reeves, 1985) and The Parent Development Interview (PDI) (Slade, Aber, Abrams & Director, 1987). Because these measures will be utilized in this study, they are discussed in detail below, followed by corresponding research.

The Pregnancy Interview

The Pregnancy Interview is a 43-question semi-structured audiotaped interview administered to women in their third trimester of pregnancy. Over the course of one to two hours, women are asked about their affective experience of pregnancy, their fantasies about their unborn baby, and their feelings when they imagine being a mother to their child. Through their narratives, women communicate the degree to which they have established a relationship to their babies in utero, and have allowed themselves to fantasize about their unborn child. The interview asks them when they first “really believed” there was a baby growing inside of them, whether they feel they have a relationship to their baby yet, and what they imagine their baby to be like. They are also asked about their feelings regarding their baby’s dependence on them, and how they feel about responding to their baby’s needs.

While many of the initial questions are designed to determine the quality of a woman’s prenatal representations of the “imagined baby,” later questions are aimed at her expectations of her relationship with her child after she gives birth. Women are asked how comfortable they feel about taking care of their baby once it’s born, and what they imagine the early months with their baby will be like, including imagining the most pleasurable and most difficult times with their baby. They are asked about their thoughts about breast-feeding or bottle-feeding, as well as their plans for caretaking after the baby is born. In this way, the mother is asked for both her general affective impressions as well as her specific decisions regarding care of her baby. In addition, they are asked to

reflect on the ways parenthood may affect their marriage and whether their imminent motherhood has had any affect on their current relationship with their own mother.

Slade (1995) presented findings in which the PI was utilized in a study of 50 mother-infant dyads (a subset of which is analyzed in this study). Women in this study were given the PI and AAI during the third trimester of pregnancy. Mothers and infants were videotaped in face to face interaction at 4 months and free play at 10 months. The Strange Situation was administered at 14 months.

Results indicated that mothers AAI classification (secure vs. insecure) corresponded with several aspects of their representation of the child, measured by the PI. Secure mothers presented representations that reflected a significantly more positive and intimate relationship with their child than insecure mothers. Secure mothers also conveyed an ability to balance their own needs with those of their child, while insecure mothers stressed their own needs and an inability to integrate the needs of their child. Although there were significant differences in the quality of elaboration between secure and insecure mothers, the quantity of elaboration was not significantly different. This finding suggests that perhaps insecure mothers conveyed an elaborate and yet negative representation of their child.

The Parent Development Interview

The PDI is a 45-question semi-structured audiotaped interview designed to understand a parent's representation of their relationship with their child. The interview was originally developed for parents of toddlers (Aber, Slade, Berger, Bresgi & Kaplan,

1985) and has been adapted for use with the parents of infants (Slade, Aber, Abrams & Director, 1987). The interview is administered over the course of one and a half to two hours.

The PDI for infants focuses on five main areas of a parent's understanding of their child and of their relationship, as well as questions related to the parents relationship with their spouse. The major dimensions of inquiry include: A. View of the relationship, B. The affective experience of parenting, C. Parental reactions to typical infant situations, D. Separation, and E. Changes in the marriage since the birth of the baby. The interview begins by focusing on the parent's representation of the child. The parent is asked to describe their child, to describe themselves as a parent, and then to think about the ways their child is both like and unlike them. The parent is then asked to choose five adjectives that they feel reflect the relationship between themselves and their child, and to give examples that illustrate these adjectives.

The PDI also focuses on the parent's most joyful and connected moments with the child, asking specifically about times when the parent feels intensely happy as a parent and times when they and their child really "click." These are followed by questions about the painful or difficult aspects of the parent-child relationship, as well as times when the parent may feel particularly needy, angry, or guilty.

During a later section of the interview the parent is asked to reflect on their understanding of their child's feelings and behavior, as well as their relationship with their child. Parents are asked how they figure out what their child wants or is feeling, and whether there are times they do not understand their child at all. The interviewer asks

about both child and parent responses to typical toddler situations and separations. Parents are asked how the experiences with their own parents may influence their parenting, particularly ways in which they wish and worry they are like or unlike their own parents. Finally, the interviewer asks about how the marital relationship has been affected by having a nearly one year old baby, and ways in which the couple share involvement with the baby and negotiate conflict.

Slade (in press) utilized the PDI in a study of parental representations, adult representations of attachment, and mothering behaviors in 125 mothers and their firstborn sons. The PDI was administered when sons were fifteen months old, the AAI when sons were 12 months old, and mothering behaviors observed at 15 and 21 months. Results of this research indicated a significant relationship between AAI classifications, PDI dimensions, and observed mothering. Specifically, mothers classified as autonomous on the AAI had the highest scores on affective dimensions of the PDI related to the representation of joy-pleasure and overall coherence. The behavior of these mothers were also observed to be more positive with their sons. In contrast, mothers whose AAI classification was dismissing of attachment scored highest on the anger dimension of the PDI and evidenced more negative mothering behaviors with their sons.

Such findings substantiate the link between adult representations of attachment, representations of the affective experiences of the parent-child relationship, and observed mothering behaviors. That is, the quality of a mother's representation of her own attachment experiences and her relationship with her child correspond to the quality of her parenting behaviors. These findings are in keeping with the belief held by attachment

researchers that representations reflect access to thoughts and feelings that guide the sensitivity of actual parenting behaviors (Slade et. al., in press).

.



CHAPTER THREE

METHODOLOGY

Subjects

Subjects in this research were all participants in “The Pregnancy Project,” a longitudinal study of maternal-infant attachment for first-time mothers, under the direction of Arietta Slade, Ph.D. Sixty-six women, ages 25-40, entered the project during their third trimester of pregnancy and were followed until their infants were 28 months old. Subjects included in this particular study are a subset of the total group, numbering 38. These participants were white, middle-class women from the New York area, who were currently married or in cohabiting relationships with the father of their child. Women were recruited through local Lamaze classes, private gynecologists’ offices, advertisements in parent newspapers, and flyers posted in maternity stores.

Setting

The Pregnancy Project was conducted in a laboratory at the City College of the City University of New York. The lab was equipped with a camera room, an adjoining playroom with a one-way mirror, a comfortable interview room, and an additional large playroom. Subjects received \$20 for each of their visits. Data were collected by female doctoral and masters level students in the department of clinical psychology at the City College.

Procedures

Women in The Pregnancy Project were seen three times prenatally, during their third trimester of pregnancy, and four times postnatally, when their babies were 4, 10, 14, and 28 months old. Data for this study were collected during the first and second visits of the pregnancy phase (28-32nd weeks of pregnancy), and the second visit of the postnatal phase (when the babies were 10 months old). The Pregnancy Interview (Slade, Haganir, Grunebaum & Reeves, 1985) was administered during the first prenatal visit, the Rorschach Inkblot Test was administered during the second prenatal visit, and The Parent Development Interview (Aber, Slade, Berger, Bresgi & Kaplan, 1984) was administered to mothers during the second postnatal visit.

Measures

Two interview measures are to be included in this project, each with a corresponding coding system: The Pregnancy Interview (PI) (Slade, Haganir, Grunebaum & Reeves, 1985) and The Parent Development Interview (PDI) (Aber, Slade, Berger, Bresgi & Kaplan, 1984); and The Pregnancy Interview Coding System (Slade, Dermer, Gibson, Grab, Grunebaum, Reeves & Sitrin, 1992, Revised 1994) and the Parent Development Coding System (Slade, Aber, Cohen, Fiorello, Meyer, DeSear, & Waller, 1992). The two object relations measures to be applied to Rorschach responses include: the Mutuality of Autonomy Scale (MOAS) (Urist, 1977) and the Developmental Analysis of the Concept of the Object Scale (DACOS) (Blatt, Brenneis, Schimek & Glick, 1976).

The Pregnancy Interview

As described above, The Pregnancy Interview is a 43-question semi-structured audiotaped interview administered during the third trimester of pregnancy. Over the course of one to two hours, a woman is asked about her affective experience of pregnancy and the process of becoming a parent. The interview focuses on the degree to which she feels connected to her child prenatally, and her expectations of her relationship with her child after it is born. In addition, she is asked to reflect on herself as a mother, and to think about the ways in which parenthood may affect her marriage.

The Pregnancy Interview Coding System

A coding system was developed for the Pregnancy Interview by Slade and her colleagues at City University (Slade, Dermer, Gibson, Graf, Grunebaum, Reeves & Sitrin, 1994). After the interviews are transcribed verbatim, the narratives are analyzed along three major dimensions, each of which includes several codes, as listed below:

- I) Developing Representations of the Baby
 - 1a) Affective tone of prenatal representation
 - 1b) Affective tone of postnatal representation
 - 2) Elaboration of Baby In-utero
 - 3) Content of fetal representation
 - 4) Quality of relatedness.

- II) Parental Representations
 - 5) Parental confidence and competence
 - 6) Acceptance of baby and self needs.

III) State of Mind

- 8) Coherency of representation
- 9) Lack of resolution of mourning-miscarriage.

All of the codes use a 9-point scale (except #4 which uses a 5-point scale).

This study focuses on codes that explore the mother's developing representation of her unborn baby and anticipated child, her internal working model of herself as a parent, and her state of mind with respect to these representations. The five codes to be included in the analyses of the interviews include: Affective Tone of Prenatal Representation, Affective Tone of Postnatal Representation, Quality of Relatedness, Acceptance of Baby and Self Needs, and Coherency of Representation.

Based on the quality of a mother's affective tone of her descriptions of her unborn baby and anticipated child, her Prenatal and Postnatal Representations will be assessed using a scale from (1) High Negative to (9) High Positive. A mother's fantasies about spending time with her child, specifically the ways she imagines feeling connected to her son or daughter, will be used to ascertain the Quality of her Relatedness. The range of this scale is from (1) High Independent to (5) High Intimate, with the category N/A reserved for mothers whose descriptions do not fit the scale or cannot be determined.

The extent to which a mother accepts and anticipates balancing her needs and those of her infant provide information for the Acceptance of Baby and Self Needs scale, scored from (1) Inability to Accept Own Needs/Overemphasis on Baby Needs to (9) Inability to Accept Baby's Dependence/ Overemphasis on Self Needs. Finally, a

mother's ability to integrate her many feelings and thoughts about pregnancy and imminent motherhood will be used to assess the Coherency of Representation scale, ranging from (1) Highly Incoherent to (9) Highly Coherent.

The Pregnancy Interview is in the early stages of establishing reliability and validity. From analyses of Slade's sample of first-time mothers, the Pregnancy Interview was found to strongly differentiate between securely and insecurely attached mothers (as measured by the AAI) in their prenatal representation of their babies. Although further utilization of this measure is necessary in order to confirm its reliability and validity, this finding strongly supports the Pregnancy Interview's potential as a measure of the quality of a pregnant woman's prenatal attachment to her baby. These results were presented at the biennial meetings of the Society for Research in Child Development, and entitled, "Prenatal Representation, Dyadic Interaction and Quality of Attachment" (Slade, Dermer, Gerber, Gibson, Graf, Siegel & Tobias, 1995). This research will contribute to the early studies of The Pregnancy Interview, testing its validity as a measure of a mother's internal working model of herself as a parent.

The Pregnancy Interviews were coded by three doctoral level clinical psychology graduate students who were blind to the hypotheses of this research. Reliability coefficients for the variables range from .76 to .93 with a mean of .88.

The Parent Development Interview

The Parent Development Interview (PDI) is a 45-question semi-structured audiotaped interview designed to understand a parent's representation of their

relationship with their child. The interview was originally developed for parents of toddlers (Aber, Slade, Bresgi, Berger & Kaplan, 1985) and has been adapted for use with the parents of infants (Slade, Aber, Abrams & Director, 1987). The PDI for infants focuses on a parent's understanding of their child's feelings and behaviors, of their affective experience of parenting, and of their relationship with their partner since the birth of their baby. The interview is administered over the course of one and a half to two hours.

The Parent Development Interview Coding System

The PDI Coding System (Slade, Aber, Cohen, Fiorello, Meyer, DeSear, & Waller, 1992) is used to analyze verbatim transcripts of the PDI. Slade and colleagues (in press), note that unlike Zeanah and Benoit's classification of parental representations of the child, and George and Solomon's classifications of the representation of parenting, the PDI assesses the mother's representation of her relationship with her child, and is coded dimensionally. The three general categories included in the coding system, Parental Affective Experience, Child Affective Experience, and Quality of Representation, each have specific components as illustrated below:

- I. Parental Affective Experience codes
 1. Anger
 - a. Overall degree
 - b. Parental acknowledgment
 - c. Parental modulation
 2. Neediness

- 3. Separation Distress
 - a. Overall degree
 - b. Parental acknowledgment
 - c. Parental modulation
- 4. Guilt
 - a. Overall degree
 - b. Parental acknowledgment
- 5. Joy/Pleasure
- 6. Competence/Efficacy

II. Child Affective Experience

- 7. Anger
- 8. Dependence/Independence
- 9. Separation Distress
- 10. Joy/Pleasure

III. Quality of Representation

- 11. Coherence
- 12. Richness of Perception

The PDI codes to be used in this proposed study include the Parental Affective Experience Codes examining Anger and Joy/Pleasure; the Child Affective Experience Codes of Anger and Joy/Pleasure; and the Quality of Representation code of Coherence. These codes will provide an extensive picture of a parent's affective experience, their ability to recognize the affective experience of their child, and the overall quality of these representations.

The Anger code has three components: Overall Degree to which a parent is angry in their relationship with their child, scored from (1) Little to (3) Considerable; Parent's Acknowledgment of anger within the parent-child relationship, scored from (1) Denial to (9) Extreme Preoccupation; and Parental Modulation of angry feelings, scored from (1) Tight Behavioral Control - No Outbursts to (9) Extreme Outbursts. The Parental

Affective Experience code of Joy/Pleasure reflects the parent's ability to experience these feelings with their child, and is scored from (1) Minimal Acknowledgment of Joy or Pleasure to (9) Full, Rich Acknowledgment of Joy or Pleasure.

The Child Affective Experience codes of Anger and Joy/Pleasure are scored on a 9-point scale used to assess the parent's understanding of and representation of the child's affective experiences. A parent's descriptions of their child's feelings and behaviors are utilized for the following codes: Child Anger, ranging from (1) No Anger to (9) High/Extreme Anger, and Child Joy/Pleasure, ranging from (1) None to (9) High.

The Quality of Representation code reflects the degree to which the parent offers a logical and descriptive representation of their child. The Overall Coherence code was developed by Zeanah (1989) after the Coherency of Record Scale developed by Main and Goldwyn (1984) for the Adult Attachment Interview. The PDI utilizes this scale to measure the extent to which a parent's representation of their child is well-organized and integrated, rated on a scale from (1) Highly Incoherent to (5) Highly Coherent.

Reviewed above are articles documenting the reliability and validity of the PDI. The PDI's reliability and validity have been established through work by Arietta Slade, Ph.D. at City University, J. Lawrence Aber, Ph.D. at the Columbia University School of Public Health, and Jay Belsky, Ph.D. at the Pennsylvania State University. Each of these researchers has worked independently and in collaboration to create a measure that can assess parental representations of the child. Reliability coefficients range from .80 - .95, with a mean of .87 (Slade, Belsky, Aber & Phelps, in press).

Mutuality of Autonomy Scale

The Mutuality of Autonomy Scale (MOAS) (Urist, 1977) analyses the content of Rorschach responses of humans, animal figures, and inanimate objects, in direct or implied interaction. Scale points 1 & 2 reflect the highest levels of object-relatedness, in which figures engage in mutual interaction or parallel activity while retaining their autonomy and sense of self. Scale points 3 & 4 indicate a loss of reciprocity in the relationship, and a sense of dependence and neediness of one or both of the figures. Scale points 5, 6 & 7 become gradually more violent, and reflect interactions in which the bodily integrity of the figures is threatened, violated, or ultimately overwhelmed by a source outside of their control. The following are examples of each of the scale points (Coates & Tuber, 1988; Goddard & Tuber, 1989; Tuber, 1992; Urist, 1977):

Scale Point (1)

“Two bears toasting each other, clinking glasses” (Urist, 1977);

“Two people dancing a pas de deux” (Coates & Tuber, 1988).

Scale Point (2)

“Two people sleeping” (Coates & Tuber, 1988);

“Two women doing their laundry” (Urist, 1977).

Scale Point (3)

“Two animals clinging to a telephone pole, maybe birds” (Coates & Tuber, 1988);

“Three people holding onto each other” (Goddard & Tuber, 1989).

Scale point (4)

“A woman with a cape staring at herself in the mirror” (Tuber, 1992);

“A tiger looking at itself in a beautiful lake” (Tuber, 1992).

Scale point (5)

“Belly dancers. They’re changed somebody into a skeleton” (Coates & Tuber, 1988);

“A sea monster ready to attack” (Coates & Tuber, 1988).

Scale point (6)

“Two scientists...had to shoot a bear...they have its head...as a trophy” (Goddard & Tuber, 1989);

“A leech, stuck onto that man, sucking up his blood” (Coates & Tuber, 1988).

Scale point (7)

“This is something being consumed by fire, can’t even see what it is, just the color of a raging fire” (Coates & Tuber, 1988);

“A tremendous explosion, here, that the people are running...and these are the hands and heads of the people...they’re under attack” (Goddard & Tuber, 1989).

For this study, several MOAS scores will be determined: the Mean MOAS score (M-O-R), the Highest score (H-O-R), the Lowest score (L-O-A), and the number of scale point 3 & 4 responses.

In previous studies reliability for the MOAS scale has ranged from .70 to .90 for exact agreement, and above .85 for 1-point differences (Tuber, 1989; Stricker & Healey, 1990). For this study, Rorschach protocols will be scored with the MOAS scale by two

raters, a clinical psychologist and a clinical psychology doctoral student, both blind to the aims of this research. Their reliability has ranged from .96 agreement for 1-point differences, and .87 agreement for exact matches.

The Developmental Analysis of the Concept of the Object Scale

The Developmental Analysis of the Concept of the Object Scale (DACOS) (Blatt et al., 1976), focuses on the formal and structural characteristics of human responses on the Rorschach. Unlike the MOAS scale, which concentrates exclusively on the content of the response, the DACOS examines developmental levels of object representation by analyzing seven categories of the response (Blatt et al, 1976; Blatt & Lerner, 1983):

1. Accuracy of the response
Form Level
2. Differentiation
Quasi-human detail, human detail, quasi-human response, human response
3. Articulation
Perceptual characteristics: size or physical structure, clothing or hairstyle, and posture
Functional characteristics: sex, age, role, specific identity
Degree of articulation
4. Motivation of action
Unmotivated, reactive or intentional
5. Object-action integration
Fused, incongruent integration, nonspecific integration, and congruent integration
6. Content of action
Malevolent or benevolent

7. Nature of interaction

Active-passive, active-reactive, active-active

The DACOS is used by determining a weighted score for each category. After adjusting for the number of scorable responses, summary scores will be calculated for each Rorschach protocol. These scores include:

1. OR+: The weighted scores for all human and humanlike Rorschach responses of good form level.
2. OR-: The weighted scores for all human and humanlike Rorschach responses of poor form
3. SumDACOS: The sum of the above two scores, reflecting the general developmental level of the protocol.

Reliability for the DACOS ranges from 75 percent to 96 percent, with averages falling “in the upper-80s to mid-90s range” (Stricker & Healey, 1990).

For this study, Rorschach protocols were scored with the DACOS by two doctoral students in clinical psychology both blind to the hypotheses of this proposed study. Their reliability on the DACOS ranged from .80 to .97, with a mean of .88.

MAIN HYPOTHESES

In this study it is predicted that maternal levels of object relations will be related to the quality of prenatal and postnatal representations of the child in the following manner. Women with higher levels of object relations will be able to elaborate positive and balanced early representations of their unborn children and will feel a developing relationship with their child prenatally. They will be able to describe well-developed prenatal fantasies that reflect both their excitement and fears about being a mother to their unborn baby. Women with higher levels of object relations will allow themselves flexible fantasies, that is, freedom to imagine a baby and a relationship with a baby without rigidly investing the baby with particular qualities or expectations. Their postnatal descriptions of their 10-month-old children will reflect an affectively rich representation of a largely positive, but again balanced portrayal of their relationship with their child.

Women with lower levels of object relations will be more likely to have negative or vague elaborations of their unborn children and a lack of affective connection to their child prenatally. For mothers with negative elaborations, their fantasies may be detailed, but will likely reflect ways in which they already feel resentful of or intruded upon by their unborn child. The prenatal representations of these mothers may reflect particularly negative fantasies about their unborn baby. In their descriptions of their children at 10 months, the representations of mothers with lower levels of object relations will be generally negative, conveying that they are struggling to feel positively affectively involved in their relationships with their children.

Hypotheses

1a) The MOAS scale will predict to the affective tone of the mother's prenatal representation, to the mother's capacity to imagine a relationship with her baby, and to represent the relationship in a coherent way.

1b) The DACOS scale will predict to the affective tone of the mother's prenatal representation, to the mother's capacity to imagine a relationship with her baby, and to represent the relationship in a coherent way.

2a) The MOAS scale will predict to the quality of the mother's postnatal, affective experience, as well as to the mother's representation of her child's affective experience, and to the overall coherency of the representation.

2b) The DACOS scale will predict to the quality of the mother's postnatal, affective experience, as well as to the mother's representations of her child's affective experience, and to the overall coherency of the representation.

CHAPTER FOUR

RESULTS

This chapter begins with a brief summary of the demographic characteristics of the sample followed by a review of the study criteria and group composition. Before the examination of the quantitative results testing the four main hypotheses, descriptive statistics of the four measures utilized in this study are reviewed. The chapter concludes with the presentation of the post hoc analyses.

Subjects

Thirty-eight women pregnant with their first child were included in this study, a subset of the total group of sixty-six women who participated in The Pregnancy Project. The women in this subset ranged in age from 24-37 years, with a mean age of 31. As noted previously, this was a predominantly white, highly educated, middle class sample. Only one of the women in this subset was not white. Eighty-five percent of the women had completed college, and 57 percent had begun or completed graduate training. The majority of women worked as professionals, or in service, business, or the arts.

All of the women were married to or cohabiting with the father of their child when these measures were administered. Eight of the women had experienced a miscarriage prior to this pregnancy. Three of the women knew the sex of their baby before delivering.

Twenty-one girls and 17 boys were delivered to the women in this subgroup.

Table 1
Group Composition

Subjects who completed Rorschach	Group A: Rorschach & PI	Group B: Rorschach & PDI	Subjects in both Groups A & B (Rorschach, PI & PDI)	Subjects in Group B only (Rorschach & PDI)
n = 39	n = 34	n = 24	n = 20	n = 4

subgroup. All of the babies and mothers were in good health postnatally, with only minor problems reported.

Study Criteria and Group Composition

In order to meet the criteria for this study, subjects must have completed the Rorschach Inkblot Test administered during the third trimester of pregnancy, and one of two interviews, The Pregnancy Interview (PI), also administered in the third trimester, or The Parent Development Interview (PDI), given at 10 months postpartum. Of the 66 women in The Pregnancy Project, 39 women completed the Rorschach prenatally. Of these 39, 34 also completed the PI in their third trimester of pregnancy. Hypotheses 1a and 1b refer to analyses conducted with data from these 34 subjects (referred to as Group A). The composition of Group B is somewhat smaller and includes those women who completed the Rorschach and the PDI, numbering 24. Due in large part to subjects' relocation out of the New York area, only 20 of the 34 women in Group A also completed the PDI. Four of the 39 women given the Rorschach did not complete the PI prenatally

but did participate in the PDI at 10 months postpartum. These 4 women are included only in Group B. Hypotheses 2a and 2b refer to the data collected from these 24 women. Thus of the original 39 women who completed the Rorschach, 20 women were given both the PI and PDI and are therefore included in the analyses of all four hypotheses. (See Table 1 above for a summary of the group composition).

One subject in Group A (who was not also in Group B), was determined to be a statistical outlier and was removed from the analyses of Group A. Her responses were considered extreme when descriptive analyses were conducted on the variables. Therefore the composition of Group A was reduced to 33 subjects.

Statistical Considerations and Descriptive Analyses of the Variables

In order to conduct linear correlations between the Mutuality of Autonomy Scale (MOAS) (Urist, 1977) and the Developmental Analysis of the Concept of the Object Scale (DACOS) (Blatt et al., 1976) and those of the PI and PDI, all of the scales must respond to linear interpretation. To expedite the interpretability of the measures, those scales with an optimal scale point in the middle and not the apex were “folded over.” Those scales that were folded over include the Acceptance of Baby and Self Needs scale of the PI, and the Parental Acknowledgment of Anger, Parental Modulation of Anger, and Child Anger scales of the PDI. Folding these four scales made linear correlations possible and provided more accurate interpretations of the measures.

Four sets of two-tailed correlations were planned. The four scales of the MOAS and the three scales of the DACOS were each correlated with the five scales of the PI.

The same correlations using the MOAS and DACOS were also conducted with the seven scales of the PDI. Given the exploratory nature of this study, the p value for rejecting the null hypotheses was set at .10. Distinctions will be made, however, between results significant at the .05 level and those at the .10 level.

After the appropriate variables were folded over, descriptive analyses of the predictor variables (MOAS scale and DACOS) and outcome variables (PI and PDI) were conducted. Descriptive statistics are presented in Tables 2 - 5. The mean, standard deviation, minimum and maximum scores, and degree of skewness are included. Tables 2 and 3 present descriptive statistics of the MOAS and DACOS variables. The results indicate that for the majority of variables, the skewness values of the two object relations measures fall between -1.5 and +1.5, and therefore meet criteria for normal distribution. One scale of the MOAS scale did exceed the +1.5 level of skewness. Overall, however, the object relations measures are reasonably consistent with a normal distribution and can be analyzed with correlational statistics.

Table 2**Descriptive Statistics of MOAS Scale Variables (N = 34)**

MOAS Scale	Mean	SD	Skewness	Minimum Value	Maximum Value
H-O-R Most Adaptive	1.21	.58	3.55	1.00	4.00
L-O-R Least Adaptive	5.26	1.20	-.94	2.00	7.00
M-O-R Mean Score	2.93	.78	.40	1.62	5.00
3 & 4 Symbiotic Responses	2.42	1.83	.65	.00	7.00

Table 3**Descriptive Statistics of DACOS Scale Variables (N = 34)**

DACOS Scale	Mean	SD	Skewness	Minimum Value	Maximum Value
OR +	68.05	36.49	.760	15.00	157.00
OR -	9.68	12.06	1.33	.00	41.00
Sum DACOS	58.37	35.47	.27	-17.00	133.00

Tables 4 and 5 report the descriptive statistics on the two outcome variables, The Pregnancy Interview (PI) and The Parent Development Interview (PDI). The skewness values for these variables conform to the -1.5 to +1.5 range, indicating consistency with a normally distributed sample and appropriateness of correlational analyses. It is also evident from the minimum and maximum values noted that the continuum of scores available were utilized to code subjects' responses. These data lend validity to the rating scales of the interview measures.

Table 4
Descriptive Statistics of Pregnancy Interview Variables (N = 34)

Pregnancy Interview	Mean	SD	Skewness	Minimum Value	Maximum Value
Prenatal Affective Tone	5.30	1.81	-.28	2.00	8.00
Postnatal Affective Tone	4.79	.1.76	.23	2.00	8.00
Quality of Relatedness	3.05	.93	-.11	1.00	5.00
Acceptance of Baby & Self Needs	3.27	.94	-.83	1.00	5.00
Coherency of Represent.	4.79	1.60	.42	2.00	8.00

Table 5
Descriptive Statistics of Parent Development Interview Variables (N = 20)

Parent Develop. Interview	Mean	SD	Skewness	Minimum Value	Maximum Value
Anger-Parental Degree	2.20	.65	-.20	1.00	3.00
Anger-Parental Acknow.	4.28	1.56	.24	1.00	7.00
Anger-Parental Modulation	3.64	1.52	-.02	1.00	6.00
Parental Joy/Pleasure	5.88	1.51	-.25	3.00	9.00
Child Anger	4.36	1.25	.07	2.00	7.00
Child Joy/Pleasure	5.80	1.41	-.58	3.00	8.00
Coherency of Represent.	3.08	.93	-.45	1.00	5.00

Testing the Main Hypotheses

Hypothesis 1a): The MOAS will predict to the affective tone of the mother's prenatal representation, to the mother's capacity to imagine a relationship with her baby, and to represent the relationship in a coherent way.

Hypothesis 1a predicted that the four MOAS variables would be related to the five Pregnancy Interview variables. The MOAS variables included: 1) Highest score (H-O-R), referring to the single most adaptive response, 2) Lowest score (L-O-A), referring to the single least adaptive response and, 3) Mean MOAS score (M-O-R) and 4) the number of scale point 3 & 4 responses, referring to symbiotic responses. The Pregnancy Interview codes included: 1) Affective tone of the prenatal representation, 2) Affective tone of postnatal representation, 3) Quality of Relatedness, 4) Acceptance of Baby and Self Needs, and 5) Coherency of Representation.

In the two-tailed correlation performed using the MOAS scale and The Pregnancy Interview, one significant result was found to support the hypothesis. All results are presented in Table 6. The finding, which just missed significance at the .05 level, was the negative correlation between the single most adaptive score on the Rorschach (H-O-R) and the level of coherency of representation on The Pregnancy Interview ($r = -.33$, $p = .06$). This result suggests a relationship between the single most adaptive MOAS score and a higher level of coherency of the prenatal representation on The Pregnancy Interview. Specifically, this finding suggests that pregnant women whose object relational world includes the capacity to experience a separate and fully related relationship with another person may have a moderately greater capacity to describe their prenatal child in a more fully developed, thoughtful, and organized way. While it is important to consider the possible theoretical meaning of this correlation, clearly given the number of correlations performed, and the sample size, we cannot rule out a possible random correlation.

Table 6
Correlations between the MOAS scale and The Pregnancy Interview (N = 33)

MOAS Scale	The Pregnancy Interview Variables				
	Prenatal Affective Tone	Postnatal Affective Tone	Quality of Relatedness	Acceptance of Baby & Self Needs	Coherency of Represent.
H-O-R Most Adaptive	-.18 (33) P = .32	.05 (33) P = .79	-.07 (33) P = .67	.04 (33) P = .81	-.33+ (33) P = .06
L-O-A Least Adaptive	.07 (33) P = .71	.19 (33) P = .29	.04 (33) P = .83	.13 (33) P = .46	.21 (33) P = .24
M-O-R Mean score	-.04 (33) P = .88	.10 (33) P = .60	-.11 (33) P = .51	.07 (33) P = .68	-.12 (33) P = .50
3 & 4 Symbiotic responses	.02 (33) P = .90	.01 (33) P = .96	-.01 (33) P = .94	.03 (33) P = .88	-.06 (33) P = .75

+ p < .10 level

Hypothesis 1b): The DACOS scale will predict to the affective tone of the mother's prenatal representation, to the mother's capacity to imagine a relationship with her baby, and to represent the relationship in a coherent way.

Hypothesis 1b predicted that the five Pregnancy Interview variables listed above would be related to the three DACOS variables, including: 1) OR+, the weighted scores for all human and humanlike Rorschach responses of good form level, 2) OR-, the weighted scores of poor form level, and 3) SumDACOS, the sum of the above two scores, reflecting the general developmental level of object relations of the protocol.

Two-tailed correlations were performed and revealed no significant relationships, as evidenced in Table 7. The hypothesis that mothers' developmental level of object relations would be related to their affective tone of their prenatal representation of their baby, their ability to imagine a relationship with their baby, and the level of coherence of their prenatal representation was not confirmed.

Overall, the correlations between The Pregnancy Interview variables and both the MOAS scale and the DACOS were insignificant, and the hypotheses largely unsupported.

Table 7
Correlations between the DACOS Scale and The Pregnancy Interview (N = 33)

DACOS Scale	The Pregnancy Interview Variables				
	Prenatal Affective Tone	Postnatal Affective Tone	Quality of Relatedness	Acceptance of Baby & Self Needs	Coherency of Represent.
OR +	-.10 (33) P = .59	-.02 (33) P = .90	.14 (33) P = .41	-.10 (33) P = .60	.08 (33) P = .66
OR -	.14 (33) P = .44	.17 (33) P = .34	-.08 (33) P = .62	-.16 (33) P = .38	.08 (33) P = .67
Sum DACOS	-.14 (33) P = .44	-.08 (33) P = .68	.11 (33) P = .50	-.14 (33) P = .44	.05 (33) P = .77

Hypothesis 2a): The MOAS scale will predict to the quality of the mother's postnatal, affective experience, as well as to the mother's representation of her child's affective experience, and to the overall coherency of the representation.

Hypothesis 2a refers to correlations that include the 7 factors of The Parent Development Interview, including: 1) Overall degree of Parental Anger, 2) Parental Acknowledgment of Anger, 3) Parental Modulation of Anger, 4) Parental Joy/Pleasure, 5) Child Anger, 6) Child Joy/Pleasure, and 7) Coherence.

Hypothesis 2a. predicted that the above seven factors would be related to the four MOAS scale variables. Table 8 reflects the results of the two-tailed correlations performed. The findings suggest a negative trend between the number of 3 & 4 point responses on the MOAS scale, reflective of symbiotic themes, and all of the PDI factors. The strongest correlations, moderately negative, were found between those PDI factors of Parental Modulation of Anger ($r = -.41, p < .05$) and Child Joy/Pleasure ($r = -.40, p < .05$). The first finding suggests that the fewer the number of symbiotic responses given, the more optimally a mother reports she is able to modulate her expression of anger towards her child. The second suggests that the fewer the number of symbiotic responses, the more the mother represents her child as joyful.

Two other negative correlations just missed significance at the .10 level. These included the correlation between the number of symbiotic responses and parental acknowledgment of anger ($r = -.33, p = .12$) and parental joy/pleasure ($r = -.31, p = .15$). These findings suggest the possibility that the fewer the number of symbiotic responses given by a mother, the greater her capacity to acknowledge both her anger and joy in her relationship with her child.

Table 8
Correlations between the MOAS scale and The Parent Development Interview
(N = 24)

MOAS Scale	The Parent Development Interview Variables						
	Anger-Parental Degree	Anger-Parental Acknow	Anger-Parental Mod.	Parental Joy/Pleasure	Child Anger	Child Joy/Pleasure	Coher. of Rep.
H-O-R Most Adaptive	-.07 (24) P = .75	.31 (24) P = .14	.27 (24) P = .20	.15 (24) P = .48	.24 (24) P = .26	.18 (24) P = .41	.19 (24) P = .37
L-O-R Least Adaptive	-.15 (24) P = .48	.20 (24) P = .34	.06 (24) P = .78	.07 (24) P = .73	.16 (24) P = .47	.14 (24) P = .51	.17 (24) P = .44
M-O-R Mean Score	-.09 (24) P = .67	.19 (24) P = .38	.26 (24) P = .22	-.24 (24) P = .25	.09 (25) P = .67	-.14 (24) P = .52	-.02 (24) P = .93
3 & 4 Symbiotic Response	-.12 (24) P = .57	-.33 (24) P = .12	-.41* (24) P = .05	-.31 (24) P = .15	-.09 (24) P = .67	-.40* (24) P = .05	-.25 (24) P = .24

* $p < .05$

Although we must again acknowledge that these findings are quite limited in light of the number of correlations performed, these results offer support for hypothesis 2a. Specifically, the MOAS scale did, to some extent, predict to the quality of the mother's postnatal, affective experience and to the mother's representation of her child's affective experience. The results suggest there may be a moderately negative relationship between a mother's symbiotic object representations and her capacity to acknowledge and modulate her angry feelings and behaviors towards her child, as well as more fully represent her joyful feelings in her relationship with her child.

Hypothesis 2b): The DACOS scale will predict to the quality of the mother's postnatal, affective experience, as well as to the mother's representations of her child's affective experience, and to the overall coherency of the representation.

Hypothesis 2b predicted that the seven factors of The Parent Development Interview would be related to the three DACOS variables. The 7 factors of The Parent Development Interview, include: 1) Overall degree of Parental Anger, 2) Parental Acknowledgment of Anger, 3) Parental Modulation of Anger, 4) Parental Joy/Pleasure, 5) Child Anger, 6) Child Joy/Pleasure, and 7) Coherence. Results of the two-tailed correlations are presented in Table 9. Two significant negative correlations were found in support of the hypothesis including the correlations between OR- and Parental

Table 9
Correlations between the DACOS and The Parent Development Interview (N = 24)

		The Parent Development Interview Variables						
DACOS		Anger- Parental Degree	Anger- Parental Acknow	Anger- Parental Mod.	Parental Joy/ Pleasure	Child Anger	Child Joy/ Pleasure	Coher. of Rep.
OR+		-.30 (24) P = .15	.13 (24) P = .54	-.34 (24) P = .11	.15 (24) P = .49	.11 (24) P = .61	.05 (24) P = .81	.26 (24) P = .22
OR-		.11 (24) P = .60	-.17 (24) P = .42	-.45* (24) P = .03	-.02 (24) P = .93	-.10 (24) P = .63	-.09 (24) P = .69	.05 (24) P = .81
Sum DACOS		-.41* (24) P = .05	.24 (24) P = .27	-.19 (24) P = .37	.16 (24) P = .44	.18 (24) P = .41	.10 (24) P = .64	.28 (24) P = .18
		* $p < .05$						

Modulation of Anger ($r = -.45, p < .05$) and between SumDACOS and Parental Degree of Anger ($r = -.41, p < .05$). The first result suggests a negative relationship between a low number of Rorschach responses of poor form, and a more optimal modulation of parental anger. The second negative correlation also relates to a mother's anger towards her child, and suggests that the lower the SumDACOS score, indicative of a lower developmental level of object relations, the higher the overall degree of anger towards one's child.

Post Hoc Analysis – MOAS Scale Range

A post hoc analysis utilizing the MOAS scale was initiated to examine the relationship between the presence of a range of MOAS responses, from most adaptive to least adaptive, and the PI and PDI measures. This analysis was undertaken to understand if subjects with an object relational capacity that included a wide range of object representations, from mutual and autonomous interactions between objects to more malevolent and destructive interactions between objects, would have different prenatal and postnatal representations of their children.

The numerical range is calculated by subtracting the highest score from the lowest score, and thus reflects the continuum of MOAS scale responses of a subject. In past research on object relational capacity in adults and children (Monk, 1997; Prieto, 1997; Tuber 1989), the MOAS range score has been of interest.

Table 10
Correlations between the MOAS scale range and The Pregnancy Interview (N = 33)

MOAS scale	The Pregnancy Interview Variables				
	Prenatal Affective Tone	Postnatal Affective Tone	Quality of Relatedness	Acceptance of Baby & Self Needs	Coherency of Represent.
Range of MOAS scores	.14 (33) P = .44	.15 (33) P = .41	.06 (33) P = .71	.10 (33) P = .58	.33+ (33) P = .06
+ p < .10 level					

Table 10 reflects the results of the analysis of the range of MOAS responses and the PI. One moderate correlation was found ($r = .33$, $p = .06$) to suggest a possible interaction between the range of MOAS scores and the coherency of the prenatal representation. Mothers' whose MOAS scores reflected a greater range of responses provided moderately more thoughtful and articulate prenatal representations of their children. When this analysis was performed using the PDI, no significant relationships were found. Although it is interesting to consider the possible meaning of this result, given the overall lack of findings between the MOAS range and the PI and PDI, it is not appropriate to assign a great deal of weight to the one significant correlation.

Post Hoc Analysis -- Child Gender

A final post hoc analysis was undertaken to examine the possible role of child gender in the quality of mothers' object relations and postnatal representations of their sons and daughters at 10 months post partum. Thirteen mothers of girls and eleven

mothers of boys were included in the two-tailed correlational analyses presented in table 11. For mothers of girls, the relationship between symbiotic responses on the MOAS and PDI variables were all negative. The strongest negative correlation was the relationship between the number of symbiotic responses and Child Joy/Pleasure ($r = -.72, p < .01$). This finding suggests that the fewer the number of symbiotic responses given by a

Table 11
Correlations between symbiotic responses on the MOAS scale and
The Parent Development Interview
for mothers of girls (N = 13) and mothers of boys (N = 11)

Symbiotic Responses on MOAS	The Parent Development Interview Variables						
	Anger-Parental Degree	Anger-Parental Acknow	Anger-Parental Mod.	Parental Joy/Pleasure	Child Anger	Child Joy/Pleasure	Coherenc. of Rep.
Mothers of Girls	-.32 (13) P = .29	-.17 (13) P = .58	-.28 (13) P = .36	-.51+ (13) P = .07	-.06 (13) P = .86	-.72** (13) P = .01	-.37 (13) P = .21
Mothers of Boys	-.15 (11) P = .65	-.42 (11) P = .20	-.58+ (11) P = .06	.13 (11) P = .71	-.09 (11) P = .82	.22 (11) P = .51	-.01 (11) P = .98

** $p < .01$, * $p < .05$ level, + $p < .10$

mother, the more she represents her daughter as joyful. A second correlation that missed significance at the .05 level occurred between the number of symbiotic responses and Parental Joy/Pleasure ($r = -.51, p = .07$). This results indicates a possible moderate relationship between a low number of maternal symbiotic responses as measured by the

relationship between a low number of maternal symbiotic responses as measured by the MOAS and a greater a mother's expression of joy in her relationship with her daughter. For mothers of boys, a lower number of symbiotic responses appeared to be related to parental modulation of anger, a finding that just missed significance at .05 ($r = -.58$, $p = .06$). Mothers of boys with fewer symbiotic responses may have a moderately greater capacity to more optimally express anger with their son.

Post Hoc Analysis -- Child Gender and Maternal Anger

A final analysis related to child gender was initiated in order to examine the possible differences between maternal representations of boys and girls at ten months. T-tests for independent samples were conducted in order to compare the means for mothers of boys and mothers of girls on The Parent Development Interview. Table 12 reflects the findings related to the differences in maternal degree of anger for mothers of girls and mothers of boys. At ten months, mothers of boys were found to be significantly more angry than mothers of girls ($t = -2.65$, $df = 23$, $p < .01$).

Table 12
T-tests for Gender Differences in Maternal Representation of Anger on
The Parent Development Interview
for mothers of girls (N = 13) and mothers of boys (N = 11)

PDI Factor	Females			Males			t	df	p
	M	sd	n	M	sd	n			
Degree of Anger	1.9	.616	13	2.55	.522	11	-2.65	23	.01*

* $p < .01$, 2-tailed

CHAPTER FIVE

DISCUSSION

Introduction

This study was designed to explore the relationship between the developmental level and quality of a woman's object relations, and the quality of her prenatal and postnatal representations of her child. This research was motivated by this writer's participation in The Pregnancy Project, specifically the experience of listening to the varied responses of first-time mothers when asked to describe their children. The range of reactions to the questions and the disparity of the descriptions was striking. For some mothers the question was a welcome invitation to discuss their favorite topic: their child! They offered vivid illustrations and detailed stories that demonstrated the depth of their feelings about their child, and the challenges and complexity within their relationship. While some children literally "came to life" through their mother's portrayals, other mothers, by contrast, offered sparse, simplistic, or particularly negative accounts of their son or daughter. Describing their child and their feelings about the relationship felt difficult and potentially disorganizing. Their defenses were activated and their narratives became constricted or confused.

Clearly mothers have a varied capacity to experience and describe the range of feelings about their children and themselves as mothers. This research was undertaken to explore the differences in the richness, quality, and affective complexity of mothers' representations of their children. Specifically, what aspects of the mother's internal

world contribute to the representation she creates? Do patterns of internal object representations influence parental representations of babies before and after they are born? How does the intrapsychic world of a mother affect the ways she perceives and experiences her relationship with her child? It has been suggested that a mother whose object representations are not fully integrated and differentiated might represent her child quite differently from a mother who has a more fully developed object world.

Both object relations theory and attachment theory underscore the significance of mental representations of self and other on one's capacity to meaningfully connect and form affectively balanced relationships with others. The quality of early experiences with caregivers in the real world, in conjunction with affective development, and internal fantasy life, combine to form object representations, the templates through which one experiences the self and anticipates relationships with others.

Understanding factors that influence the development of a mother's representation of her baby and herself as a mother would contribute to our knowledge of the dyadic relationship, specifically the antecedents of a balanced representation of the child. Research has demonstrated the impact of prenatal maternal representations on a mother's level of attachment to and perceptions of her "real" baby in the postnatal relationship (Ballou, 1978; Benoit, Parker & Zeanah, 1997; Condon, 1987; Condon & Dunn, 1988; Leifer, 1977; Lieberman, 1997; Slade & Cohen, 1996; Trad, 1990; Zeanah, 1990). Maternal prenatal (Benoit, et. al., 1997; Slade & Cohen, 1996) and postnatal (George & Solomon, 1996) representations of the child have been shown to be predictive of infant security of attachment. In addition, a mother's attachment status has been linked to her

representation of her child (Slade et. al., 1995; Slade et. al., in press), and her child's security of attachment (Benoit & Parker, 1994; Fonagy et. al., 1991). This body of research supports the theory that a mother's own internal working model of attachment contributes to her representation of her child and the quality of her child's attachment to her.

The above research illustrates the links between the quality of a mother's representation of her own early childhood experiences and her prenatal and postnatal representations of her child. This study focuses specifically on how aspects of the mother's object world, as measured by the Rorschach, is linked to such prenatal and postnatal representations. The hypotheses of this study were chosen to examine the extent to which a mother's own internal world of representations, particularly those of self and other, influence the developing prenatal and postnatal representations of the child. The object relations scales utilized in this research enable us to highlight the particular patterns of self-with-other that may be related to qualitatively different maternal representations. It was thought that women with higher levels of object relations, which includes an integration of aggressive drives and affects, and an ability to experience both separateness and true intimacy with others, would have a greater capacity to elaborate positive, balanced, and coherent representations of their babies in utero, and at ten months.

This chapter discusses the possible meanings and implications of the findings reported as well as considers why the hypotheses as a whole were not more broadly supported. Given the total number of correlations performed for each of the four

hypotheses, it is important to consider the possibility of random findings, and therefore these results should be interpreted with caution. Nevertheless, the significant correlations contribute to the dialogue about pregnancy and early motherhood, as well as enhance an understanding of measures of object relations and attachment.

When the results of the main hypotheses and post hoc analyses are considered in their entirety, several noteworthy trends are present and worthy of discussion. The first concerns the impact of a positive and fully developed internal object world on a mother's capacity to coherently represent her child prenatally. The results suggest that mothers with the most integrated and balanced prenatal representations of their children had the internal capacity for positive and empathic representations. In addition, these mothers also had access to more domineering and malevolent representations. These findings raise interesting questions concerning why these particular aspects of the maternal object world may contribute to a more thoughtful and organized prenatal representation.

The second issue that is illuminated by this study is the potential relationship between a maternal object world in which symbiotic object representations do not predominate, and a greater maternal capacity to represent both the pleasurable and difficult moments of the mother-infant relationship. Planned analyses revealed that mothers with fewer dependent and mirroring responses on the Rorschach represented their children as more joyful. These mothers also reported a greater ability to manage their anger towards their child. When child gender was considered in the post hoc analyses, specific trends were evident for mothers of boys and mothers of girls. While the presence of fewer symbiotic representations increased the level of joy for mothers of

girls, it increased successful modulation of anger for mothers of boys. Results of post hoc t-tests reflected that at ten months, mothers of boys appear to be significantly more angry than those of girls. Therefore although mothers of boys may be angrier than those of girls, mothers of boys with fewer symbiotic representations more successfully negotiate their anger towards their sons.

The results of the DACOS analyses indicate possible relationships between the form level of women's Rorschach responses and aspects of their representations of postnatal anger towards their children. While the findings offer some degree of support for the hypotheses, in the context of the number of correlations performed, few interactions were found.

Maternal Object Relations and Coherence of Prenatal Representation

Apart from knowing the gender of her baby (which only three mothers in this study knew prenatally), a mother's description of her baby in utero is based largely on fantasy. Although the baby has not yet arrived, for many mothers the baby is very much alive in their minds; they imagine, talk to, and even "caress" their unborn child. Expectant mothers anticipate both their relationship with their child, and themselves as mothers. But as mentioned previously, such prenatal fantasies may take many forms. The results of this research suggest a possible link between the level of coherence of the prenatal representation, and two components of the maternal object world: the capacity for differentiated and mutual object relationships, and the ability to access a range of interactions, including aggressive and malevolent representations. While the importance

of access to the most mutual and optimal representations of interpersonal functioning may be presumed, the significance of the range of functioning may initially appear counterintuitive. And yet clearly the ability to represent some of the least mutual and most negative experiences enables mothers greater flexibility and perhaps increased tolerance for their baby's own negative states.

Recent research using the MOAS has found the range of scores to be a meaningful indicator capable of distinguishing groups of normals and controls, and has been linked to the quality of interpersonal behavior. Tuber's (1989) research indicates a broad range of MOAS scores was evident in a normative sample of children. That is, the presence of a range of object representations, from the most benevolent and empathic to the more malevolent and domineering was evident in a normal sample, and not a marker of psychopathology. Although clearly a predominance of scores at the malevolent end of the spectrum can be an indicator of psychopathology the capacity for a wide range of self and object representations appears to be one sign of relative psychological health. That is, the ability to access a range of self and object representations appears to be adaptive. The following studies offer additional insight into the possible meaning of a wider range of scores on the MOAS.

Monk's (1997) research predicted that mothers of children failing to thrive (FTT) would have limited access to a range of object representations and display more "uniform" object representations than control mothers. Monk found that indeed FTT mothers displayed a constricted range of MOAS scores, with little access to the more malevolent end of the scale. She attributed this to FTT mothers' greater difficulty

representing and integrating domineering and aggressive experiences. Monk also suggests a relationship between the object representations of FTT mothers and their AAI narratives that is in keeping with the results of this study: “Mothers of FTT children produce object representations on the Rorschach that are unidimensional, just as they show heightened idealization (or an immersion in anger) on the AAI; They [sic] do not represent the spectrum of interactions (positive and negative) just as they do not show an integration of these experiences on the AAI” (p. 89). The findings of the research in this study, specifically that an inability to represent the spectrum of object representations on the Rorschach is related to a less integrated representation on The Pregnancy Interview, offer some support for Monk’s conclusion.

In a study of the object relations of intellectually gifted children of color, Prieto (1997) found that the presence of a wide range of MOAS scores differentiated children with high and low disparity on verbal and performance scale scores of the WISC III. This finding suggested that the children in the high-disparity group had difficulty tolerating and integrating negative affective experiences of others. The presence of a wider range of MOAS scores was associated with the children in the low-discrepancy group. Prieto noted that these children were more interpersonally comfortable and confident than the children in the high-disparity group. Like Monk (1997), Prieto concludes that the high-disparity group has limited access to more complex experiences of others.

This study found that mothers with a wider range of MOAS scores represented their babies prenatally in a more coherent way on The Pregnancy Interview. Coherence is

defined as a “subject’s ability to acknowledge and integrate a wide range of affects associated with both her representation of being pregnant and impending motherhood” (Slade et al., 1995). A woman’s level of coherence is also conveyed in the structure and fluency of her narrative. The differences between the level of coherence of two subjects, Sharon and Laura, illustrate the importance of a wider range of MOAS scores. While both mothers received MOAS scores in the most optimal range (scale points 1 & 2), Sharon had a greater range of scores, with a least adaptive score of 6 (out of a possible 7).

Laura’s object world ranged from 1-4, with little acknowledgment of the more difficult, potentially malevolent representations. Sharon received a score of 8 on The Pregnancy Interview coherence scale (ranging from 1-9, 9 being the highest level of coherence), and Laura received a score of 3 (considered incoherent). Consistent with the studies cited, which posit that a range of scores is adaptive and associated with more optimal functioning, the presence of scores at the least adaptive end of the MOAS spectrum, in conjunction with more optimal scores, seems to be related to a higher degree of coherence on the PI.

Laura approached imminent motherhood with much worry and anxiety. Even in her third trimester she was clearly concerned she had rushed into having a baby. She noted she and her husband began trying to get pregnant when she was “in love with the idea” of having a baby, but she had not been thinking of the reality of having a child. Laura’s narrative reflected her attempts to limit her prenatal fantasies; her baby was not allowed much space in her mind. She experienced her baby’s kicks as “aggravating,” perhaps because they served as a reminder of her baby’s presence, and thus of her own

anxiety. She conveyed many fears but no genuine excitement about her baby or being a mother. When asked to describe the most pleasurable moments she anticipated sharing with her child, she did not include herself in those moments -- she was absent. When asked what kinds of things she imagined about her baby right now, Laura replied, "Uhm, I don't know. Uhm, I think I tend to imagine it smaller than it is. Uhm, I don't know. I'd have to think about that one." When the interviewer asked her to elaborate, she explained: "I guess because it just seems so unreal to me to think of a live person like trapped inside my body. It seems easier to imagine it as like a fetus, more like a, you know, something sort of not quite human than, like this full-fledged baby. I mean it's not full-fledged yet, but it's, you know, every time I see a picture of what it -- how big it is and how developed it is at this stage, I'm always so shocked."

Laura's fears of motherhood included her own assessment that she "was and still can be very needy," and her expectation that she will resent and be overwhelmed by her child's needs. She imagined room for only one "very needy person." In a comparison that might have seemed amusing if it had not felt so literal, Laura likened her feelings about her baby to those of her cat: "I remember when I first contemplated getting a cat and was worried about the responsibility and the times when I won't be able to go away because there's no one to take care of the cat, you know, will it be too much of a hassle that I'll end up wanting to give it away or regret that I got it?" Laura reassured herself that just as she now loves the cat, even though it is "occasionally a hassle," the same will be true with her baby. And yet her narrative reflected her fears that her baby's needs will

dominate and be overpowering. In order to defend against such a potentially devouring object, Laura did not allow the baby to exist as a separate person.

Sharon was also anxious about motherhood, but this was balanced by a palpable enthusiasm and genuine excitement. Her baby was very much alive in her mind and she was filled with images and energy. When she saw her baby during the sonogram she imagined the baby smiled and waved at her, saying “Hiya mom!” She felt like the baby must be having a great time and mentioned the excitement of seeing his “little hands, little fingers.” In contrast to Laura, who attempted to minimize the humanness and size of her baby, and imagined the baby was “trapped” inside of her, Sharon felt her baby was already happy and interactive, and that she was providing a safe and spacious place for him to develop. Also unlike Laura, Sharon could acknowledge feeling afraid without minimizing the presence of the baby or projecting her anger and insecurities onto the baby. Sharon experienced, and therefore expressed the full range of feelings generated by pregnancy, from wonderful awe to pure worry, without minimizing her reactions or becoming disorganized. Her internal world had room for both herself and the baby.

Certainly access to positive and empathic internal representations of self and other can impact a mother’s representation of her child. As a mother has internalized her own relationships of reciprocity so can she envision a reciprocal relationship with her child. When anticipating what impact she and her child will have on each other, she can potentially draw from an internal world that has benevolent and empathic representations of self and other. And yet what distinguishes Sharon and Laura is not the lack of such

benevolent representations on the MOAS, but the integration of malevolent representations.

Although Laura has the internal potential for a positive and separate representation of her baby, the fact that she cannot safely acknowledge and accept her fears and misgivings overpowers any of her potentially positive feelings. She must minimize the baby and its impact on her. In some ways, Laura has projected aspects of her “bad self,” the aspects she hates and fears, onto her child.

Sharon’s internal acceptance of her own anxieties allow her access to a range of her own feelings and reactions regarding pregnancy and her baby. She does not have to defend against her negative affects and thus can safely experience a range of fantasies about her child. Her narrative reflects a believable and excited prenatal representation in which her fears coexist with her enthusiasm.

Sharon and Laura’s descriptions of their children also illustrate Main’s (1991, 1995) finding that the integration of a range of affects is intrinsic to a coherent narrative. According to Main and her colleagues, the essence of a coherent representation is the flexible access to both positive and negative affective experiences. When such negative affects as anger or anxiety remain unintegrated, as in Laura’s case, attempts to defend against such affects produce a narrative that becomes disorganized or constricted.

It is also interesting to notice how the two measures, the Rorschach and the PI, elicited quite different, though complementary internal processes from Laura. Laura’s Rorschach MOAS responses reflected a constricted range of self and other representations. Although she conveyed access to benevolent representations, she was

not able to access the spectrum of object representations that included aggression or malevolence. And yet the internal world she represents in her narrative on the PI reflects a world of “very needy,” potentially threatening objects (herself, her child) in which mutuality and empathy are minimized. Laura’s responses on both the MOAS and the PI reflected an unintegrated object world in which the full range of experiences cannot be represented. Perhaps because the Rorschach and the PI prompted different defensive strategies (denial on the Rorschach, anger and preoccupation on the PI), each measure reflected a particular aspect of Laura’s object world.

Symbiotic Responses on the MOAS and Postnatal Representations of Joy and Anger

In the results of the main hypotheses and post hoc analyses, the number of symbiotic object representations on the MOAS appeared to be related to the postnatal representation of the child, particularly to representations of child joy/pleasure and parental modulation of anger. Beginning with the results of the planned hypotheses, the results offer moderate support for the theory that the quality of object representations as measured by the MOAS may be related to the quality of the parents’ postnatal representation of her child’s and her own affective experience. The findings reflect an overall negative relationship between the number of symbiotic scores on the MOAS and all of the PDI variables.

The first of the two significant correlations resulting from the planned analyses relates to child joy/pleasure. Mothers whose representations of self and other were not predominantly those of mirroring and enmeshment appeared to have a moderately greater

capacity to represent their child as joyful and happy. These mothers could communicate their child's excitement and delight with evocative detail. They could take pleasure in their child's excitement, and share in it, but the child's experiences were clearly seen and felt as his or her own.

In fact, one might speculate that a degree of "separateness" is essential for being able to truly appreciate the joy of another person. A high score on the child joy/pleasure scale indicates a mother can elaborate on the specific experiences of joy of her child. Such appreciation of these experiences may not be available to her if she is not open to the unique and autonomous adventures of her child, and able to encourage them. In a Winnicottian sense, this is one expression of a mother's creating space for the kind of experiences and play associated with the development of the "true self."

The following examples highlight postnatal representations of child joy/pleasure. The first is again from Sharon, whose object world, unsurprisingly, did not include a preponderance of symbiotic representations. She scores a 7 (of a possible 9) on the child joy/pleasure scale. Sharon, who had a low number of symbiotic responses on the MOAS, provided rich examples of her son's joy as she describes the particular things that bring him pleasure. She describes her son as "very loving and happy, relatively outgoing. He is verbal and uhm very physical. He has a great sense of humor. He loves animals, loves animals. From the time he was a tiny, tiny baby he just loved animals." And in a real-life moment that echoes her prenatal fantasy of his waving to her during the sonogram, she described what it's like when she first sees him in the morning: "...you go into his room

and it's just like he's standing there 'hi, I'm so glad to see you.' And it doesn't matter that I've only had you know three or four hours of sleep, I just melt and it's worth it."

The second example is from Kathy, a mother for whom symbiotic representations are more predominant, and who scored quite low on child joy/pleasure (a 3 out of 9). Although Kathy chooses five positive adjectives to describe her relationship with her daughter, "warm, affectionate, respectful, loving and good," her examples do not speak to the pleasure inherent in these adjectives. While she is not specifically negative, her narrative feels vague and constricted. When asked to give an example of how her relationship with her daughter is "warm," she replies: "Um, we are very, we're always together. I talk to her a lot... You know I respect her as a baby and I try to be fair to her." Unsurprisingly, themes of merger and enmeshment among her mother, her daughter and herself, were ubiquitous throughout Kathy's narrative. When asked to describe a moment when she and her daughter really "clicked," she gives a confusing reply that focuses on her struggle separating from and feeling recognized by her mother, not a moment of intimacy with her daughter. Kathy has difficulty experiencing a relationship with her daughter in which she can recognize her daughter's needs as separate from her own. She cannot truly communicate a sense of closeness or joy with her daughter, or an appreciation of the moments in which her daughter feels genuinely happy.

Interestingly, the study data also suggest that mothers with fewer symbiotic responses on the MOAS reported the most appropriate control of their angry feelings towards their child. Maternal anger was expressed, but neither minimized or exaggerated. These mothers may get angry with their child at times, but do so in a way that does not

leave the child frightened. They seem to be able to maintain sufficient control over their own emotions and therefore do not overwhelm their child. When angry, these mothers label their feelings and attempt to explain to the child why they are angry in order to make the experience understandable to the child. In these mother-child relationships anger is neither denied nor minimized, nor is it frightening or destructive. The parent who is able to modulate her own angry feelings provides a relationship with her child in which there is space for the safe discussion and expression of such feelings. Of the above mothers, Kathy largely denied her feelings of anger with her daughter, and limited its overt expression within their relationship. Sharon, however, acknowledged her angry feelings and realized the importance of teaching her son that it is “okay to be angry.”

In Urist’s (1977) original conception of the MOAS scale, a score of 3 referred to dependency of one or more figures on the other. This corresponds to Rorschach responses of figures clinging, leaning, or holding onto each other in order to maintain themselves. A score of 4 reflected one figure mirroring the other. This includes the mirroring of the self, as in “A woman with a cape staring at herself in the mirror” (Tuber, 1992). Although the MOAS’ usefulness as a developmental scale has been questioned (Goldberg, 1988; Meyer & Tuber, 1989; Tuber, 1989; Tuber 1992; Tuber & Coates, 1989), the developmental theory underlying the scale is relevant for this discussion.

Scale points 3 and 4 refer to aspects of the earliest experiences of a child’s development, including the separation-individuation process (Mahler et al., 1975), and the experience of being sufficiently mirrored (Kohut, 1978). Both of these experiences are essential aspects of the optimal development of the self, and the internalization of

good objects. If a mother's repertoire of self and other representations relies heavily upon dependency and a need for mirroring from others, her capacity to see her child independent of herself may be affected. It may also prove difficult for her to provide the mirroring that her child needs. Further, if there is less differentiation between self and object, or between mother and child, the child's own experiences could be threatening to the mother, even if they are "positive." And in the case of negative affects, anger may prove disorganizing. One could speculate that mothers with a larger number of symbiotic scores may have more difficulty modulating their anger effectively because to do so would require acknowledging the separateness of the child's experience. Thus a mother who has difficulty differentiating her child's experience from her own may not be able to thoughtfully modulate her expressions of anger as readily because she is not fully able to take her child's feelings and reactions into consideration before acting.

Fonagy's work on reflective-self functioning adds to the understanding of this finding. Fonagy (1991,1995) has elaborated aspects of Main's (1991) meta-cognitive monitoring scale to focus on a person's ability to represent their own mental state and those of others. Reflective-self functioning includes the capacity to consider the motivations for the actions of others, specifically that the subjective mental states of others must be considered when understanding the behaviors of others. Slade & Cohen (1996) note that examples of reflective-self functioning can be observed in the narratives of mothers such as Sharon. Sharon exhibits an awareness of her own state of mind, its impact on her child, and the substantial differences between the degree of intentionality behind her own actions and those of her child. She can clearly separate her own feelings

and needs from those of her child, while keeping her child's feelings and needs firmly in mind. Seligman (1999) notes that a mother's ability to communicate her understanding of her child's separate, subjective experience is crucial to the development of a child's internal world: "By seeing themselves as seen in the minds of others, children come to feel affective vitality, inner coherence, and value and that it is possible to be one's own self as one is understood by and connected to others" (p. 149). A mother whose internal world is dominated by symbiotic and dependent representations of self and other may have a limited capacity to provide an understanding of her child's and her own subjective experiences.

Symbiotic Responses and Gender Differences

It is interesting to consider why the post hoc analysis of child gender suggested that a lower number of symbiotic representations was associated with greater joy for mothers of girls, and more optimal expression of anger for mothers of boys. Mothers of girls for whom enmeshed and dependent object representations did not predominate represented themselves and their daughters as significantly more joyful, while mothers of boys reported more optimal modulation of anger. (These three findings were the most robust and significant correlations in the entire analyses).

When a further analysis was conducted to determine the possible effect of the sex of the child on the postnatal representation, mothers of boys were found to be significantly more angry than mother of girls. This finding confirms that of Hermelin-Kuttner (1998) who found similar results with a slightly larger group of women from this

sample. Hermelin-Kuttner explored the relationship between maternal regression and maternal representations of the child. She also utilized The Parent Development Interview to assess postnatal representations at ten months postpartum. Her research found that mothers of boys were significantly more angry than mothers of girls, and in addition, that mothers of boys were less able to acknowledge their anger towards their sons.

It appears that when a mother has a more differentiated and less enmeshed world of object relations her representations of her son or daughter become more optimal. One could speculate that having a more differentiated sense of self mediates the expression of negative and positive affects. However, as noted previously, when the maternal object world is dominated by symbiotic representations, acknowledging the affective experience of the child, both positive and negative, becomes more difficult.

For mothers of girls, who may feel more identified with their daughters than mothers of sons, a more differentiated sense of self allowed them to appreciate and experience greater joy in their relationships with their daughters. These mothers presumably have a greater capacity to see their daughters as separate from themselves and more optimally negotiate the boundaries between themselves and their daughters. The daughters of these mothers are allowed room to feel genuinely happy and feel that their experiences are their own.

Overall mothers of ten-month old sons seem to be angrier than mothers of ten-months old daughters. For mothers of boys, however, a more differentiated sense of self allowed them to modulate their anger with their sons. Although we can only speculate as

to why the mother-son dyad appears to contain more anger at this stage, the mothers with greater boundaries and a capacity for seeing their child as separate from themselves allowed them to more optimally express their angry feelings. When the maternal world was more enmeshed and symbiotic, the capacity to modulate such intense negative affects toward their sons was less successful.

Developmental Level of Object Relations and Maternal Anger

The results of the DACOS are difficult to interpret. In the correlational analyses of the DACOS and The Pregnancy Interview, no significant correlations or trends were found. The results of the correlational analyses of the DACOS and The Parent Development Interview, however, revealed two significant results.

The first result suggested a moderate relationship between a lower number of Rorschach responses of poor form, OR-, and a more optimal modulation of maternal anger. That is, a mother who is less likely to elaborate human precepts on the Rorschach using poor form will have more modulated expressions of anger towards her child. The second result also referred to anger, specifically maternal degree of anger. This finding suggested that the lower the SumDACOS, the overall developmental level of a mother's object relations, the higher her degree of anger towards her child. In this case, a mother who struggles with a higher degree of anger may have a less healthy developmental level of object relations (reflecting more highly elaborated responses of poor form). Both of these results indicate that there may be a link between the developmental level of object relations, and the postnatal representation of the child relating to maternal degree and

expression of anger.

These results offer some support for the hypothesis that a mother's developmental level of object relations will predict to the quality of her postnatal, affective experience. What might these two findings suggest about a mother's object world and her postnatal representations of her child? Blatt and colleagues (1976) designed the DACOS to capture the degree of structural complexity and sophistication used to describe human responses on the Rorschach, so as to understand how representations of self and other become more accurate over time. As reviewed in an earlier discussion of the DACOS, Blatt's research (1976) found that normal development reflected a significant increase in the level of differentiation, articulation, and integration of human figures on the Rorschach.

Mothers who have a more complex world of object representations of self and other may more accurately perceive the motivations and reactions of others. These mothers may be able to understand their own reactions more clearly, and thus respond more thoughtfully. Implicit in both the degree and modulation of anger scales is the capacity to recognize and acknowledge one's own feelings of anger and control the amount and form in which it is directed towards one's child. It seems possible that a mother who has the internal capacity to see herself and her child with a greater degree of complexity may be more able to separate and modulate her feelings of anger towards her child.

In light of the overall lack of findings using the DACOS, a brief review of the research that has examined the quality of object relations and attachment with this sample

will be offered. Several previous studies have explored the relationship between object relations and attachment measures on this sample of pregnant women. These studies question whether the assessments of object relations provided by projective tests are comparable to those assessments obtained through narrative samples. It is suggested by the authors cited below that projective tests such as the Rorschach and the Early Memories Test may be measuring aspects of the internal world that do not necessarily correspond to those experiences assessed by attachment measures.

Rothstein (1997) focused on the connection between Adult Attachment Interview classifications (George, Kaplan & Main, 1985) and the complexity and autonomy of women's object representations. As in the present study, Rothstein utilized the MOAS and the DACOS as applied to Rorschach responses to measure quality of object relations.

The hypothesis that women classified as secure on the AAI would have more autonomous and complex object representations than insecurely attached subjects was unsupported by the results. One post hoc finding, however, indicated that women who used minimizing strategies to regulate affect (Cassidy, 1994) had a greater number of malevolent scores on the MOAS than women who maximize their affective responses. This finding was offered as one potential area in which attachment and object relations constructs may be accessing similar aspects of the internal world.

Rothstein, as in this study, did not find as many significant results as expected using the DACOS and MOAS, and suggests several possible explanations for the lack of findings. He questions whether the two object relations scales, the MOAS and DACOS, are sensitive enough to distinguish differences in a non-clinical sample such as this.

Rothstein notes that these scales have been widely used to differentiate between types of psychopathology or between “normal” and “controls,” but rarely in non-clinical studies.

Rothstein also argues that perhaps image-based representations such as the Rorschach and linguistic-based representations such as the AAI may not produce similar assessments of object representations. He speculates that “in the cognitive realm, in a normal population, it may be specifically the linguistic level of symbolization -- as opposed to the symbols in the image mode tapped by the Rorschach -- that distinguishes a secure working model of attachment from an insecure one” (p. 87). Lastly, Rothstein suggests that the experience of pregnancy may affect subjects’ Rorschach responses and produce unpredictable results.

In a study of adult attachment and early memories, Guerra (1998) also examined the relationship between the quality of subjects’ object representations and their AAI status. Object relations were assessed by applying the Krohn Object Representation Scale for Dreams (KORS, Krohn & Mayman, 1974) and the Comprehensive Early Memories Scoring System (CEMSS, Last & Bruhn, 1983), to subjects’ early memories. The KORS scale failed to differentiate the quality of object relations between secure and insecurely attached adults. The CEMSS produced counterintuitive results. When modal CEMSS scores of secure and insecure groups were compared, the insecure subjects were found to have a significantly more differentiated quality of object representations than secure women.

Like Rothstein, Guerra suggests that the unexpected results may be related to the regressive aspects of pregnancy, which would likely affect the quality of object

representations. Guerra also speculates that unlike the AAI, in which scoring is based primarily on *how* memories are recalled, the KORS and the CEMSS rely heavily upon the *content* of a subject's early memories. She also notes that the AAI emphasizes the subject's current assessment and integration of their past memories. Guerra concludes that the AAI and the KORS and CEMSS may be exploring different aspects of internal functioning, and her results suggest the possibility of having a "secure attachment status while providing memories that reflect otherwise" (p. 57).

Previous studies examining the relationship between object relations and attachment have used various measures and study designs. Rothstein (1997) notes that several such studies (Edwards, 1993; Levine et. al., 1991; Levy et al., in press) applied object relations scales to subjects' narratives, and not to projective measures. This may be an important distinction in understanding why these studies produced more significant results than Rothstein's (1997) or the present one. Projective measures are designed to elicit a degree of primary process material that may be fundamentally different from that reflected in narrative form, making it difficult to compare studies applying object relations scales to narratives and to projective measures.

Levine et al. (1991) found that applying the Krohn scale, (Krohn & Mayman, 1974) to a subject's AAI did correlate with a subject's attachment categories and to their children's attachment category. In light of the attempts of this author and recent researchers (Guerra, 1998; Rothstein, 1997) to find relationships between object relations and attachment representations with the present sample, it may be interesting to consider

whether applying object relations measures to narratives would produce more significant results.

Limitations of Current Study

Several aspects of the research design and methodology clearly limit the generalizability of this study. The size of the sample likely contributed to the lack of statistical findings, as well as to the cautionary stance we must take in interpreting the significant results that were found. A larger sample would provide greater statistical power for the analyses, and increased confidence in discussing significant findings.

It has been suggested by other researchers (Siegel, 1996; Slade et al., 1995) that it may be important to consider the motivations of the participants in the study, and to what extent this self-selected group may have produced a “skewed” sample. Participants in The Pregnancy Project volunteered their time for minimal financial remuneration during a particularly stressful period in their lives! The study required many visits over a period of two and one-half years, and was not conveniently located. The first-time mothers who participated may have been seeking support and guidance through participation in a study devoted to pregnancy. We cannot be sure to what extent this affected the composition of the group; however, it seems possible that women who were particularly anxious or preoccupied about their pregnancy and about being a mother might have been more likely to participate. Slade (1995) notes that this sample did not show expected rates of mother-infant attachment concordance. The results of the Symptom Checklist 90 (SCL-90) (Derogatis, 1977) were examined to better understand this finding and identify the degree

of psychopathology of the sample. Slade concluded that overall this sample did have a higher degree of symptomatology than a “normal” sample, and suggested these were mothers “who were somewhat disturbed and who joined the study as a means of allaying their anxiety about child rearing” (p. 8). Certainly this may have influenced the lack of findings.

Methodologically there were also several limitations to the current research. Although the object relations of adults are thought to be quite stable, assessing mothers’ object representations during pregnancy, a time of transition and reorganization, may have produced somewhat unexpected results. Although one would expect such possible shifts in representations to be a group phenomenon, and therefore still be an accurate reflection of the overall pattern of representations, this may not have been the case. Past Rorschach studies on this sample (Frank, 1992) have found the presence of striking maternal themes and images on Rorschachs administered during the third trimester of pregnancy. This may be an indication that the Rorschach protocols of expectant women reflect aspects of their impending pregnancy and transition to motherhood, material that might not be present at another time. Assessing object relations during pregnancy without Rorschachs administered before or after may have given a less than optimal view into a mother’s internal world. A related limitation is that this study did not have access to non-pregnant control subjects for further points of comparison.

As mentioned previously in the discussion of the MOAS, there has been little research establishing norms for adults. Tuber’s work (1989) revealed differences in the mean, single highest, and single lowest scores of girls and boys, suggesting there may be

such differences between women and men. No studies have addressed such a question, making it complicated to discuss the degree of “normality” of a given adult. Clearly comparisons to past research offers guidelines to interpreting a person’s constellation of MOAS scores, but more established norms would be useful.

Significance and Future Research

If we keep in mind the processes by which the self is created...[it] may be said to have its virtual beginnings with the formation of specific hopes, dreams and expectations concerning the future child in the minds of the parents, especially the mother (Kohut, 1978, p. 416).

Kohut suggests that a child is born in her mother’s mind. He argues that aspects of the maternal world, including a mother’s dreams and expectations, comprise the earliest components of her child’s self. This research was designed to understand the relationship between the richness and quality of such maternal dreams and expectations, as reflected in the prenatal and postnatal representations of the child, and the level of integration of the mother’s object relational world.

Results of this study suggest a possible connection between the object relational world of the mother and the degree of integration of her prenatal representation of her child. One of the findings of this study suggested it is not solely a mother’s capacity for positive and empathic internal representations that affect the level of coherency of her prenatal representation, but also her ability to access the more aggressive and negative aspects of her internal world. Such a range of functioning may enable her to tolerate and acknowledge her own fears and anxiety about motherhood, ultimately producing a more

coherent and balanced representation of her child.

There also appeared to be a potential relationship between a maternal object world in which symbiotic object representations do not dominate, and a greater capacity for a mother to represent the joy and anger in her relationship with her child. Gender specific results also suggested that fewer symbiotic representations increased the level of joy for mothers of girls, while it increased the optimal modulation of anger for mothers of boys.

Future research using a significantly larger and more diverse subject pool would enable a more robust investigation of questions regarding quality of object relations and maternal representations. These findings are clearly preliminary and are the result of an exploratory study. Ultimately two of the most significant applications of the present questions would involve understanding how maternal representations develop over time, and linking maternal representations to observed behavior. Differences in methods of measurement prevented comparisons between maternal representations as measured by The Pregnancy Interview, administered during the third trimester, and the Parent Development Interview, administered at 10 months postpartum. However, as the PDI was also given to mothers when their children were 28 months old, perhaps a comparison between the two PDI interviews would be possible. Such research would enable a complex investigation of the degree of change, or extent of stability of maternal representations. It would also allow for a more thorough examination of the impact of a child's gender on mothers' representations' of their daughters and sons.

Linking maternal representations to observed mothering behavior would also significantly increase our knowledge of how such representations affect the way a mother

interacts with her child. Slade's (in press) research on the relationship between maternal representations of the child measured at 15 months and observed mothering offer such a view into the development of the mother-child relationship. The continuation of research linking maternal representations with behavioral measures of mothers and children will improve our understanding of the power of maternal representations.

This study suggests that there may be links between the quality and range of a mother's object relational world and aspects of her prenatal and postnatal representation of her child. A mother's capacity for internal flexibility and differentiation between self and other appears to be related to the integration of her affective responses to her child. Prenatally, a mother who has access to the range of object relational experiences of self with other, from empathic and mutual to more aggressive and malevolent, may be able to represent her child more coherently. Such a mother may offer a positive, rich and enlivened representation of her child, in which positive and negative affects are successfully integrated. Postnatally, mothers with a higher developmental level of object relations, including a more differentiated and less symbiotic world, appear to experience more joy and less anger in their relationships with their children.

The child's self begins to take shape in his mother's mind. The fantasies and fears the mother begins to elaborate become a representation of her child and herself as a mother. The internal world of the mother, her degree of object relational differentiation and flexibility, will impact aspects of the affective quality of her representation of her child.

Appendix A

**THE PREGNANCY PROJECT:
PREGNANCY INTERVIEW**

Arietta Slade

Laurie Grunebaum

Linda Hugarir

Mary Reeves

**The City College and Graduate Center
of the City University of New York**

March, 1987

Revised October, 1987

Please do not duplicate or circulate without permission

The Pregnancy Interview

Introduction: This is the interview that is going to be about the emotional experience of your pregnancy. As you probably know, very little is known about what women think about and feel during the course of their pregnancies and our lab is very interested in finding out more about what this experience has been like for you and what kinds of changes you've been through. The whole interview will probably take us about an hour and a half.

Questions:

1. Can you start by telling me why you wanted to have children?

Prompt: Why did you want to have a child at this time in your life?

2. How did you feel when you found out you were pregnant?

Comment: Here, we are looking for the subject's affect about knowing she was pregnant in the first days and weeks. Be sure to get elaboration if necessary. For example, if subject says she was scared or excited, find out what she means by this, what was she scared or excited about.

Prompt to help subject elaborate if necessary.

3. What was your husband's (or baby's father) reaction when you became pregnant?

Prompt: What was he _____ about? (e.g. scared or excited)

In what ways was your husband's reaction to finding out you were pregnant similar to yours and in what ways was it different?

Comment: Here, we are looking for his affect about early pregnancy. Again, be sure to ask for elaboration about specific feelings.

4. **What kinds of changes have you made in your lifestyle during your pregnancy?**

Prompts: Have you had to adapt your diet, physical activity, sleep schedule, work habits or other aspects of your life?

How did you feel about making these changes?

Comment: Here we are interested both in whether subject has in fact made any changes as well as in how she feels about having had to make these changes - - - does she feel happy, deprived, etc . . . ? If the subject brings up emotional changes, explain that we'll be getting to emotional changes in a minute but for now we're specifically interested in changes in habits and patterns.

5. **Now we're going to talk some about what your pregnancy has been like for you emotionally. Have there been aspects of the pregnancy that have been emotionally difficult for you?**

Prompt (if subject does not bring it up spontaneously):

Have there been times when you've felt needy or unsupported or worried or just surprised by your emotional state?

Have you had any concerns about the well-being of your baby?

6. **How have you dealt with these feelings?**

Prompt: Is there anyone (or anyone else) with whom you can talk about your difficulties in pregnancy?

Comment: Be sure to find out how subject has dealt with her feelings of neediness, etc . . .

7. **We've just talked about the difficult feelings, what about the good feelings?**

8. Now, we're going to go back to talking about your feelings about the baby during pregnancy. When would you say you first really believed there was a baby growing inside of you? How did this affect you?

9. Would you say you have a relationship with your baby yet? How would you describe it?

Prompt: For example, do you or your husband ever talk to your baby, do you have a nickname for your baby, or are there things you imagine about your baby?

9a. What do you imagine your baby will be like?

10. Do you know the sex of the baby?

If "yes": How do you feel about it?

If "no": Do you have a preference or feelings either way?

11. Now we're going to talk about becoming a mother. Do you have a sense of your baby's dependence on you and how do you feel about this?

12. Do you have a sense of whether your baby needs anything from you now?

Prompt: How do you feel about responding to those needs?

Comment: Be sure to find out what subject feels those needs are, e.g., protection by subject, good health of subject, etc . . .

We are trying to get a sense of whether the subject can identify with and respond to the needs of her baby yet.

13. How comfortable do you feel about taking care of your baby once it's born? What do you think this will be like for you?

14. Have you thought about whether you'll bottle-feed or breast-feed your baby?

Comment: Make sure to find out why they've chosen one or the other and how they feel about their choice (i.e., certain, ambivalent, etc . . .)

15. When you think of your baby's earliest months, what do you imagine will be the most pleasurable times with your baby?

16. What do you imagine will be the most difficult times in your relationship with your baby?

17. What are your current plans for caretaking after the baby is born?
Prompt (If subject is planning to return to work): What kind of of babysitting or daycare arrangements have you thought about?

Comment: Try to get a sense of whether the subject anticipates feeling in need of help after the baby is born and whether there is anyone she can count on to help her (e.g., mother, mother-in-law, husband, etc . . .)

18. Now, we're going to shift gears a little bit. What kinds of feelings have you had about your own mother during your pregnancy?

19. Have these feelings affected your actual relationship with your mother?

20. How do you think your early experiences of being parented have affected your feelings during pregnancy?

21. In what ways do you imagine you'll be like your mother as a parent?
In what ways do you imagine you'll be different?

22. Are there things that you're afraid you'll do as a mother that you wish you wouldn't?

23. Now we're going to talk a bit about how your marriage has been affected by your being pregnant. What's the pregnancy been like for your husband emotionally?

Prompt: How has he dealt with these feelings? Inquire further if subject doesn't mention husband's negative feelings.

24. How has your relationship with your husband been affected by your pregnancy?

Prompt: How have the two of you felt about these changes?

25. How has your sexual relationship been affected by your pregnancy?

Prompt: What's that been like for you both?

26. What kind of impact do you think having a baby will have on your marriage?

27. How do you expect your husband to be involved with the baby?

28. How well do you think your husband will be able to support you emotionally and practically in the day-to-day job of mothering?

29. Now let's talk a bit about how the two of you negotiate conflicts. When the two of you disagree about something or are angry with each other, what happens? Do you fight? Talk? Let it slide?

Prompt: Use subject's language regarding conflict. How do you fight? (Get a sense of the process of fighting.)

30. Do you think the particular way you two disagree or fight works for you? Does it make things better or worse? (If subject has -- implicitly or explicitly -- answered this in preceding question, ask this question anyway, but say something to acknowledge that the question is redundant.)
31. What kinds of things do you two come into conflict about most often?
32. How often do you fight?
33. How "serious" does it feel?
34. In what ways do you think that being a parent will change your life? How do you feel about these changes?

Prompt: What kinds of changes in your lifestyle do you anticipate having to make and what will this be like for you?

35. Has the way you think about yourself or the way you view yourself as a person changed since you've been pregnant?
- Prompt: Do you feel like a mother yet?

Interviewer: Now we're going to switch gears slightly and talk about your feelings about body changes during pregnancy. As you are probably well aware of by now, one of the most dramatic experiences of pregnancy is how much your body and your appearance change over the course of these nine months. I'd like to ask you some questions about what this experience has been like for you as well as about how you felt about your body before pregnancy and even back when you were a child.

36. How have you felt about your body and your appearance during your pregnancy?

37. How early in your pregnancy did you first notice changes in your body and appearance?

Prompts: What was it like when you first realized you couldn't wear your own clothes anymore?

When did you begin to wear maternity clothes and what was this like for you?

How did you feel about looking pregnant?

38. How has your husband's experience of your body during your pregnancy been the same as yours and how has it been different?

39. Can you remember how you felt about your body or your appearance when you were growing up? Are there any specific incidents or memories that illustrate these feelings?

Comment: If subject describes a shift in feelings about her appearance at some point in her life, find out what brought about the change.

40. Did you get any sense of how your parents or anyone else in your family felt about the way you looked when you were growing up? Can you remember any specific incidents that illustrate this attitude?

41. How do you think your feelings about your appearance when you were young have affected the way you feel about your body as an adult, especially now during pregnancy?

42. I'd like to finish up the interview by asking you how satisfied you've been, overall, with your pregnancy? Is there anything you would have wanted to be different?

43. Is there any other aspect of your pregnancy that has been important to you that we haven't asked you about?

THANK YOU VERY MUCH !

PARENT DEVELOPMENT INTERVIEW

1

THE PREGNANCY PROJECT

PARENT DEVELOPMENT INTERVIEW - INFANCY

Arietta Slade

J. Lawrence Aber

Sari Abrams

Lisa Director

This interview has been adapted from the original Parent Development Interview, developed at the Barnard College Toddler Center by J. Lawrence Aber, Arietta Slade, Brenda Berger, Ivan Bresgi and Merryle Kaplan. Please do not use without the express written permission of one of the two senior authors. This may be obtained by writing Arietta Slade, c/o the Psychological Center, NAC 8/130, The City College, 138th Street and Convent Avenue, New York, NY 100031.

A. VIEW OF THE RELATIONSHIP

1. Could you describe (your child) to me?
2. And now, can you describe yourself as a parent.
3. Parents often notice similarities and differences between themselves and their children. How do you think (your child) is both like and unlike you?
4. I'd like you to choose 5 adjectives that you feel reflect the relationship between you and (your child). (Pause while they list adjectives.) Could you give me a specific incident that reflects each adjective?

B. THE AFFECTIVE EXPERIENCE OF PARENTING

PARENT DEVELOPMENT INTERVIEW

3

Now, I'd like to ask you some questions about the feelings you and your baby have.

1. What gives you the most joy in your relationship with (child)?
2. What do you like most about him/her?
3. When do you feel most "with" your child?
4. Do you ever feel intensely happy as a parent? (Probe, if necessary: What kinds of situations make you feel this way? What kind of effect does it have on (your child)?)
5. Can you describe a time in the last week when you and (your child) really "clicked". (Probe, if necessary: Can you tell me more about the incident? How did you feel? How do you think (your child) felt?)
6. Now, on the more negative side, can you describe a time in the last week when you and (your child) really weren't "clicking". (Probe, if necessary: Can you tell me more about the incident? How did you feel? How do you think (your child) felt?)

PARENT DEVELOPMENT INTERVIEW

4

7. What gives you the most pain or difficulty in the relationship?

8. Do you ever feel really needy as a parent? (Probe, if necessary: What kinds of situations make you feel this way? How do you handle your needy feelings? What kind of effect do your feelings have on (your child)?)

9. Do you ever feel really angry as a parent? (Probe, if necessary: What kinds of situations make you feel this way? Do you ever feel really angry at your child? How do you handle your angry feelings? What kind of effect do your feelings have on (your child)?)

10. Do you ever feel really guilty as a parent? (Probe, if necessary: What kinds of situations make you feel this way? How do you handle your guilty feelings? What kind of effect does it have on (your child)?)

Now, let's talk a little bit about your child's feelings.

12. In an average day, what would you say gives him/her the most pleasure?

5

13. And what distresses him/her, or makes him/her unhappy?
14. When your child is upset, what does he/she do? How does that make you feel? What do you do?
15. How do you figure out what your child wants or is feeling?
(Probe: What cues do you use?)
16. Does your child have moods or emotions that you sometimes have a hard time making sense of?
17. Are there times you feel you don't understand your child?
18. Are there ever times in your relationship with your child that you feel he or she has the upper hand? (Probe: How does this make you feel? How do you handle it?)
19. Does your child ever seem to need to be by himself/herself?
(Probe: Under what kinds of circumstances? How does that make you feel?)
20. Describe a situation where your child hurt or disobeyed you. (Probe: Did you think this incident was intentional? How did you handle it? How did it make you feel?)

6

22. Does (your child) ever feel rejected?

23. How do you think (your child's) relationship with you is affecting his/her development or personality?

C. PARENTAL REACTIONS TO TYPICAL INFANT/TODDLER SITUATIONS

1. How does (your child) feel when you are busy, and can't pay attention to him/her? (Probe, if not spontaneously volunteered: How do you feel when this happens?)

2. How does (your child) feel when you are able to devote considerable time and attention to him/her? (Probe, if not spontaneously volunteered: How do you feel when this happens?)

3. How does (your child) do in exploring the world and solving problems on his/her own? (Probe, if not spontaneously volunteered: How do you feel when this happens?)

4. How does your child do when he/she can't explore or solve problems without your help and support? (Probe, if not spontaneously volunteered: How do you feel when this happens?)

D. SEPARATION

1. Now, I'd like to talk about routine separations. By routine separations I mean a separation in which (your child) is left with someone familiar for the usual or expected length of time.

a. Can you briefly describe a typical routine separation for me?

b. How do you think he/she feels about these separations?
(Probe, if necessary: How does he/she feel when you leave? What kinds of reports do you get about his/her response while you're away? How does he/she feel when you return?)

c. What are these separations like for you?

2. Now, could you describe the kind of separation (your child) might experience as somewhat more stressful than a routine separation?

a. How do you think he/she feels about these separations?
(Probe, if necessary: How does he/she feel when you leave? While you're away? When you return?)

PARENT DEVELOPMENT INTERVIEW

8

b. What are these separations like for you?

3. What is the longest time you have ever left (your child)?

a. How do you think he/she felt about this separation?

(Probe, if necessary: How did he/she feel when you left? While you were away? When you returned?)

b. How did you feel during the time you were away?

4. Has there ever been a time in your child's life when you felt as if you were losing him/her just a little bit? What did that feel like for you? (Probe, if not spontaneously volunteered: How did you handle these feelings?)

Now, I'd like to talk briefly about some of the ways your experiences with your own parents has influenced your parenting?

5. How do you want to be like and unlike your mother as a parent?

6. How about your father?

7. How are you like and unlike your mother as a parent?

PARENT DEVELOPMENT INTERVIEW

9

8. How about your father?

G. CHANGE

Now, let's talk a little bit about you and your husband.

1. How has your relationship with your husband been affected your having a nearly one year old baby?

Prompts:

- a. If not offered spontaneously: Are there ways it has enhanced your marriage, or Are there things that you miss?
- b. How have the two of you felt about these changes?

2. If mother has not mentioned changes in her and her husband's sexual relationship: What kind of impact has having a child had on your sexual relationship?

Prompt:

- a. How have you felt about your sexuality, and about the changes in your sexual relationship?
3. How has your husband felt about the changes in your sexual relationship?
4. How is your husband involved with the baby these days?
How have you felt about his involvement?

PARENT DEVELOPMENT INTERVIEW

10

5. To what degree do you feel your husband supports you emotionally and practically in the day-to-day job of mothering?
6. How does your child differ from what you imagined he/she would be like?
7. How are you different as a mother from what you expected you'd be?

Now let's talk a bit about how you and your husband negotiate conflicts these days.

1. When the two of you disagree about something or are angry with each other, what happens? Do you fight? Talk? Let it slide?

Comment: Use the subject's language regarding conflict.

2. Do you think the particular way you two disagree or fight works for you? Does it make things better or worse? (If subjects has -- implicitly or explicitly -- answered this in the preceding question, ask this question anyway, but say something to acknowledge that the question is redundant.)
3. What kinds of things do you two come into conflict about most often?
4. How often do you fight? How "serious" does it feel?

Finally, let's talk a little about the future.

1. What do you hope for as a parent during your baby's second year?

REFERENCES

- Aber, J. L., Belsky, J., Slade, A., & Crnic, K. (in press). Stability and change in maternal representations of their relationship with their toddlers. *Development Psychology*.
- Aber, J. L., Slade, A., Berger, B., Bresgi, I., & Kaplan, M. (1985). *The Parent Development Interview*. Unpublished Manuscript.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of Attachment: A Psychological Study of the Strange Situation*. Hillsdale, N.J.: Erlbaum.
- Baker, H., & Baker, M. (1987). Heinz Kohut's self psychology: An overview. *American Journal of Psychiatry*, 144(1), 1-9.
- Ballou, J. (1978). The significance of reconciliative themes in the psychology of pregnancy. *Bulletin of the Menninger Clinic*, 42(5), 383-413.
- Benedek, T. (1959). Parenthood as a developmental phase: A contribution to libido theory. *Journal of the American Psychoanalytic Association*, 7, 389-417.
- Benedek, T. (1970). The psychobiology of pregnancy. In E. J. Anthony & T. Benedek (Eds.), *Parenthood: Its psychology and psychopathology* (pp. 137-151). Boston: Little, Brown.
- Benoit, D., & Parker, K. (1994). Stability and transmission of attachment across three generations. *Child Development*, 65, 1444-1456.
- Benoit, D., Parker, K., & Zeanah, C. (1997). Mothers' representations of their infants assessed prenatally: Stability and association with infants attachment classifications. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 38(3), 307-313.
- Bibring, G. L. (1959). Some considerations of the psychological processes in pregnancy. *Psychoanalytic Study of the Child*, 14, 113-121.
- Bibring, G. L., Dwyer, T. F., Huntington, D. C., & Velenstein, A. F. (1961). A study of the psychological processes in pregnancy and the earliest mother-child relationship. *Psychoanalytic Study of the Child*, 16, 9-24.
- Blatt, S. J., & Berman, W. (1984). A methodology for the use of the Rorschach in clinical research. *Journal of Personality Assessment*, 48, 227-239.

- Blatt, S. J., Berman, W., Bloom-Feshback, S., Sugarman, A., Wilber, C., & Kleber, H. D. (1984). Psychological assessment of psychopathology in opiate addicts. *The Journal of Nervous and Mental Disease*, *172*, 156-165.
- 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*, 364-373.
- Blatt, S. J., Ford, R. Q., Berman, W., Cook, B., & Meyer, R. (1988). The assessment of change during the intensive treatment of borderline and schizophrenic young adults. *Psychoanalytic Psychology*, *5*, 127-158.
- Blatt, S. J., Tuber, S. B., & Auerbach, J. S. (1990). Representation of interpersonal interactions of the Rorschach and level of psychopathology. *Journal of Personality Assessment*, *54*, 711-728.
- Blatt, S. J., Wein, S. J., Chevron, E., & Quinlan, D. M. (1979). Parental representations and depression in normal young adults. *Journal of Abnormal Psychology*, *38*, 388-396.
- 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. (1982). *Attachment, 2nd edition of Vol. 1 of Attachment and Loss*. New York: Basic Books.
- Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psychoanalysis*, *39*, 350-73.
- Bowlby, J. (1982). *Attachment and Loss: Vol. 3. Loss*. New York: Basic Books.
- Brazelton, T. B., & Cramer, B. (1990). *The earliest relationship*. New York: Merloyd Lawrence.
- Brown-Cheatham, M. (1993). The Rorschach Mutuality of Autonomy Scale in the assessment of black father-absent male children. *Journal of Personality Assessment*, *61*, 524-530.
- Cassidy, J. (1994). Emotion Regulation: Influences of attachment relationships. *Monographs of the Society for Research in Child Development*, *59*(240), 228-249.

- Coates, S., & Tuber, S. B. (1988). The representation of object relations in the Rorschachs of extremely feminine boys. In H. Lerner & P. Lerner (Eds.), *Primitive Mental States and the Rorschach* (pp. 647-654). Madison: IUP.
- Condon, J., & Dunn, D. (1988). Nature and determinants of parent-to-infant attachment in the early postnatal period. *Journal of the American Academy of Child and Adolescent Psychiatry, 27*(3), 293-299.
- Condon, J. T. (1986). The spectrum of fetal abuse in pregnant women. *Journal of Nervous and Mental Disease, 174*(9), 509-516.
- Condon, J. T. (1987). The battered fetus syndrome: Preliminary data on the incidence of the urge to physically abuse the unborn child. *Journal of Nervous and Mental Disease, 175*, 722-725.
- Condon, J. T. (1993). The assessment of antenatal emotional attachment: Development of a questionnaire instrument. *British Journal of Medical Psychology, 66*, 167-183.
- Condon, J. T., & Corkindale, C. (1997). The correlates of antenatal attachment in pregnant women. *British Journal of Medical Psychology, 70*, 359-372.
- Coonerty, S., Diamond, D., Kaslow, N., & Blatt, S. J. (1987). *The Rorschach Separation-Individuation scale*. Unpublished Research Manual, Yale University, New Haven, CT.
- Cranley, M. S. (1981). Development of a tool for the measurement of maternal attachment during pregnancy. *Nursing Research, 30*, 281-284.
- Derogatis, L.R., Rickels, K. & Rock, A. (1977). *The SCL-90-R: Administration, Scoring and Procedures Manual, I*. Baltimore: Clinical Psychometric Research.
- Deutsch, H. (1945). *The Psychology of Women Vol. 2: Motherhood*. New York: Grune & Stratton.
- Diamond, D., & Blatt, S. (1994). Internal working models of attachment and psychoanalytic theories of the representational world: A comparison and critique. In M. Sperling & B. Berman (Eds.), *Attachment in Adults: Theory, Assessment and Treatment*. (pp. 72-97). New York: Guilford Press.
- Edwards, W.L. (1993). *Adult Attachment Criteria: An Exploration of Object Relations Theory and Attachment Theory*. Unpublished Doctoral Dissertation, University of Texas at Austin.

- Farris, M. A. (1988). Differential diagnosis of borderline and narcissistic personality disorders. In H. D. Lerner & P. M. Lerner (Eds.), *Primitive Mental States and the Rorschach* (pp. 299-337). Madison: IUP.
- Fava Vizziello, G., Antonioli, M. E., Cocci, V., & Invernizzi, R. (1993). From pregnancy to motherhood: The structure of representative and narrative change. *Infant Mental Health Journal*, 14(1), 4-16.
- Fonagy, P., Steele, H., & Steele, M. (1991a). Maternal representations of attachment during pregnancy predict the organization of mother-infant attachment at one year of age. *Child Development*, 62, 891-905.
- Fonagy, P., Steele, M., Moran, G., Steele, H., & Higgit, A. (1993). Measuring the ghost in the nursery: An empirical study of the relation between parents' mental representations of childhood experiences and their infants' security of attachment. *Journal of the American Psychoanalytic Association*, 41(4), 929-989.
- Fonagy, P., Steele, M., Steele, H., Leigh, T., Kennedy, R., Mattoon, G., & Target, M. (1995). Attachment, the Reflective Self, and Borderline States. In S. Goldberg, R. Muir, & J. Kerr (Eds.), *Attachment Theory: Social, Developmental and Clinical Perspectives*. Hillsdale, N.J.: The Analytic Press.
- Fonagy, P., Steele, M., Steele, H., Moran, G., & Higgit, A. (1991b). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal*, 12(3), 201-218.
- Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: A psychoanalytic approach to the problems of impaired infant-mother relationships. *Journal of the American Academy of Child Psychiatry*, 14, 387-422.
- Frank, G. (1995). On the assessment of self- and object representations from the Rorschach: A review of the research and commentary. *Psychological Reports*, 76, 659-671.
- Frank, M. (1992). *Adaptive Regression and Maternal Empathy: A Rorschach Study of Unconscious Fantasy During Pregnancy*. Unpublished Doctoral Dissertation, The City University of New York.
- Freud, S. (1940). An Outline of Psychoanalysis. *Standard Edition*, 19.
- Fritsch, R., & Holmstrom, R. (1990). Assessing object representations as a continuous variable: A modification of the concept of the object on the Rorschach scale.

Journal of Personality Assessment, 55(1&2), 319-334.

- George, C., Kaplan, N., & Main, M. (1985). *The Berkeley Adult Attachment Interview*. Unpublished Manuscript. Department of Psychology, University of California, Berkeley.
- George, C., & Solomon, J. (1989). Internal working models of caregiving and security of attachment at age six. *Infant Mental Health Journal*, 10(3), 222-237.
- George, C., & Solomon, J. (1996). Representational models of relationships: Links between caregiving and attachment. *Infant Mental Health Journal*, 17(3), 198-216.
- George, C., & Solomon, J. (March 1993). *Toward a theory of caregiving*. Paper presented at the Biennial meeting of the Society for Research in Child Development, New Orleans, LA.
- Goddard, R., & Tuber, S. B. (1989). Boyhood separation anxiety disorder: Thought disorder and object relations psychopathology as manifested in Rorschach imagery. *Journal of Personality Assessment*, 53, 239-252.
- Goldberg, E. G. (1989). Severity of depression and developmental levels of psychological functioning in 8 to 16-year-old girls. *American Journal of Orthopsychiatry*, 59, 167-178.
- Greenberg, J. R., & Mitchell, S. A. (1983). *Object Relations in Psychoanalytic Theory*. Cambridge, MA: Harvard University Press.
- Guerra, J. P. (1998). *Adult Attachment and Early Memories: A Study of Object Relations*. Unpublished Doctoral Dissertation, The City University of New York.
- Hermelin-Kuttner, H. (1998). *Maternal Ego Flexibility and the Process of Adaptation to Motherhood: Conscious and Unconscious Aspects*. Unpublished Doctoral Dissertation, The City University of New York.
- Kernberg, O. (1966). Structural derivatives of object relationships. *International Journal of Psychoanalysis*, 47, 236-253.
- Kernberg, O. (1975). *Borderline Conditions and Pathological Narcissism*. New York: Jason Aronson.

- Kohut, H. (1966). Forms and transformations of narcissism. *Journal of the American Psychoanalytic Association, 14*, 243-272.
- Kohut, H. (1971). *Analysis of the Self*. New York: IUP.
- Kohut, H., & Wolf, E. (1978). The disorders of the self and their treatment: An outline. *International Journal of Psychoanalysis, 59*, 413-425.
- Krohn, A., & Mayman, M. (1974). Object representations in dreams and projective tests. *Bulletin of the Menninger Clinic, 38*, 445-456.
- Last, J. M., & Bruhn, A. R. (1983). The psychoanalytic value of children's earliest memories. *Journal of Personality Assessment, 47*(6), 597-603.
- Leifer, M. (1977). Psychological changes accompanying pregnancy and motherhood. *Genetic Psychology Monographs, 95*, 55-96.
- Lerner, H. D., & St. Peter, S. (1984a). Pattern of object relations in neurotic, borderline and schizophrenic patients. *Psychiatry, 47*, 77-92.
- Lerner, H. D., & St. Peter, S. (1984b). The Rorschach H response and object relations. *Journal of Personality Assessment, 48*, 345-350.
- Lerner, P. M. (1991). *Psychoanalytic Theory and the Rorschach*. Hillsdale, N.J.: The Analytic Press.
- Lester, E. P., & Notman, M. T. (1988). Pregnancy and object relations: Clinical considerations. *Psychoanalytic Inquiry, 8*, 196-221.
- Levine, L. V., Tuber, S. B., Slade, A., & Ward, M. J. (1991). Mothers' mental representations and their relationship to mother-infant attachment. *Bulletin of the Menninger Clinic, 55*, 454-469.
- Levy, K., Blatt, S.J., & Shaver, P.R. (in press). Attachment styles and parental representations. *Journal of Personality and Social Psychology*.
- Lieberman, A. (1997). Toddlers' internalization of maternal attributions as a factor in quality of attachment. In L. Atkinson & K. J. Zucker (Eds.), *Attachment and Psychopathology* (pp. 277-291). New York: Guilford Press.
- Lieberman, A., & Pawl, J. H. (1993). Infant-parent psychotherapy. In C. H. Zeanah (Ed.), *Handbook of Infant Mental Health* (pp. 427-442). New York: Guilford Press.

- Mahler, M. S., Pine, F., & Bergman, A. (1975). *The Psychological Birth of the Human Infant*. New York: Basic Books.
- Main, M. (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) vs. multiple (incoherent) models of attachment: Findings and directions for future research. In C.M. Parkes, J. Stevenson-Hinde & P. Marris (Eds.), *Attachment Across the Life-Cycle* (pp. 127-159). London: Routledge.
- Main, M., & Goldwyn, R. (1995). Interview based adult attachment classifications: Related to infant-mother and infant-father attachment. *Developmental Psychology*.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), *Growing points in Attachment: Theory and Research* (1-2, Serial no. 209 ed., Vol. 50, pp. 66-104). Chicago: University of Chicago Press.
- Main, M., & Solomon, J. (1986). Discovery of an insecure disorganized/disoriented attachment pattern: Procedures, findings and implications for the classification of behavior. In M. Yogman & T. B. Brazelton (Eds.), *Affective Development in Infancy* (pp. 95-124). Norwood, N.J.: Ablex.
- Mayman, M., & Farris, M. (1968). Early memories as expressions of relationship paradigms. *American Journal of Orthopsychiatry*, 30, 507-520.
- Mebert, C. J. (1989). Stability and change in parents' perceptions of infant temperament: Early pregnancy to 13.5 months postpartum. *Infant Behavior and Development*, 12, 237-244.
- Mebert, C. J. (1991). Dimensions of subjectivity in parents' ratings of infant temperament. *Child Development*, 62, 352-361.
- Mebert, C. J., & Kalinowsky, M. F. (1986). Parents' expectations and perceptions of infant temperament: Pregnancy status differences. *Infant Behavior and Development*, 9, 321-334.
- Meyer, J. R., & Tuber, S. (1989). Intrapsychic and behavioral correlates of the phenomena of imaginary companions in young children. *Psychoanalytic Psychology*, 6, 151-168.
- Mitchell, S., & Black, M. (1995). *Freud and Beyond*. New York: Basic Books.

- Monk, C. E. (1997). *Representational Content and Quality of Mothers Whose Children are Failing to Thrive: A Rorschach Study Linking Inner Life with Interpersonal Behavior*. Unpublished Doctoral Dissertation, The City University of New York.
- Muller, M. E., & Ferketich, S. (1993). Factor analysis of the Maternal Fetal Attachment Scale. *Nursing Research, 42*, 144-147.
- Murray. (1951). Uses of the TAT. *American Journal of Psychiatry, 107*, 577-581.
- Murray, J. F. (1985). Borderline manifestations in the Rorschachs of male transsexuals. *Journal of Personality Assessment, 49*, 454-466.
- Ogden, T. H. (1986). *The Matrix of the Mind*. Northvale, NJ: Jason Aronson.
- Piaget, J. (1937/1954). *The Construction of Reality in the Child*. New York: Basic Books.
- Pines, D. (1972). Pregnancy and motherhood: Interaction between fantasy and reality. *British Journal of Medical Psychology, 45*, 333-343.
- Prian, N. (1988). Borderline phenomena in anorexia nervosa and bulimia. In H. D. Lerner & P. M. Lerner (Eds.), *Primitive Mental States and the Rorschach* (pp. 363-376). Madison: IUP.
- Prian, N., & Lerner, P. M. (1988). Rorschach assessment of anorexia nervosa and bulimia. In C. D. Spielberger & J. N. Butcher (Eds.), *Advances in Personality Assessment* (pp. 77-101). Hillsdale, N.J.: Erlbaum.
- Prieto, C. I. (1997). *Verbal-Performance Discrepancies on the WISC-III and their Relationship to the Object Relations of Intellectually Gifted Children of Color*. Unpublished Doctoral Dissertation, The City University of New York.
- Ritzler, B., Zambianco, D., Harder, D., & Kaskey, M. (1980). Psychotic patterns of the concept of the object on the Rorschach test. *Journal of Abnormal Psychology, 89*, 46-55.
- Rothstein, D. N. (1997). *Object Relations and Attachment: A Comparison of Rorschach Responses and Adult Attachment Classifications*. Unpublished Doctoral Dissertation, The City University of New York.
- Ryan, R., Avery, R., & Grolnick, W. (1985). A Rorschach assessment of children's Mutuality of Autonomy. *Journal of Personality Assessment, 49*, 6-11.

- Schwager, E., & Spear, W. E. (1981). New perspectives on psychological tests as measures of change. *Bulletin of the Menninger Clinic*, 45, 527-541.
- Seligman, S. (1999). Integrating Kleinian Theory and Intersubjective Infant Research: Observing Projective Identification. *Psychoanalytic Dialogues*, 9(2), 129-159.
- Slade, A. (September 1996). *Attachment organization and early divorce: A Discussion of Dr. Judith Solomon's Paper*. Paper presented at the conference on Risk and Reverberation: Divorce in Infants and Young Children, New York Freudian Society, Mount Sinai School of Medicine, New York: NY.
- Slade, A., & Aber, J. L. (1992). Attachments, drives, and development: Conflicts and convergences in theory. In J. Barron, M. Eagle, & D. Wolitsky (Eds.), *Interface of Psychoanalysis and Psychology* (pp. 154-185). Washington, D.C.: APA Publications.
- Slade, A., Aber, J.L., Abrams, S. & Director, L. (1987). *The Parent Development Interview - Infancy*. Unpublished Manuscript.
- Slade, A., Aber, J. L., Cohen, L. J., Fiorello, J., Meyer, J., DeSear, P., & Waller, S. (1993). *Parent Development Interview Coding System*. Manuscript.
- Slade, A., Belsky, J., Aber, J. L., & Phelps, J. L. (in press). Maternal representations of their relationship with their toddlers: Links to adult attachment and observed mothering. *Developmental Psychology*.
- Slade, A., & Cohen, L. (1996). The process of parenting and the remembrance of things past. *Infant Mental Health Journal*, 17(3), 217-238.
- Slade, A., Dermer, M., Gerber, J., Gibson, L., Graf, F., Siegel, N., & Tobias, K. (1995, March). *Prenatal Representation, Dyadic Interaction and Quality of Attachment*. Paper presented at the Biennial Meetings of the Society for Research in Child Development, Indianapolis, IN.
- Slade, A., Dermer, M., Gibson, L., Graf, F., Grunebaum, L., Reeves, M., & Sitrin, A. (1994). *Pregnancy Interview Coding System*. The City College and Graduate Center of the City University of New York, New York: NY.
- Slade, A., Grunebaum, L., Haganir, L., & Reeves, M. (1987). *The Pregnancy Interview*. Unpublished Manuscript, The City College, New York.
- Solomon, J., & George, C. (1996). Defining the caregiving system: Toward a theory of caregiving. *Infant Mental Health Journal*, 17(3), 183-197.

- Spear, W. E., & Sugarman, A. (1984). Dimensions of internalized object relations in borderline and schizophrenic patients. *Psychoanalytic Psychology, 1*, 113-129.
- Stern, D. N. (1985). *The Interpersonal World of the Infant*. New York: Basic Books.
- Stern, D. N. (1995). *The Motherhood Constellation: A Unified View of Parent-Infant Psychotherapy*. New York: Basic Books.
- Stern-Bruschweiler, N., & Stern, D. (1989). A model for conceptualizing the role of the mother's representational role in various mother-infant therapies. *Infant Mental Health Journal, 10*, 142-156.
- Strauss, J., & Ryan, R. M. (1987). Autonomy disturbances in subtypes of anorexia nervosa. *Journal of Abnormal Psychology, 96*, 254-258.
- Stricker, G., & Healey, B. J. (1990). Projective assessment of object relations: A review of the empirical literature. *Psychological Assessment, 2*, 219-230.
- Stuart, J., Westen, D., Lohr, N., Benjamin, J., Becker, S., Vorus, N., & Silk, K. (1990). Object relations in borderlines, depressives, and normals: An examination of human responses on the Rorschach. *Journal of Personality Assessment, 55*, 296-318.
- Trad, P. V. (1990). On becoming a mother: In the throes of developmental transformation. *Psychoanalytic Psychology, 7*(3), 341-361.
- Tuber, S. B. (1983). Children's Rorschach scores as predictors of later adjustment. *Journal of Consulting and Clinical Psychology, 51*, 379-385.
- Tuber, S. B. (1989). Assessment of children's object representations with the Rorschach. *Bulletin of the Menninger Clinic, 53*, 432-441.
- Tuber, S. B. (1992). Empirical and clinical assessments of children's object relations and object representations. *Journal of Personality Assessment, 58*, 179-197.
- Tuber, S. B., & Coates, S. (1989). Indices of psychopathology in the Rorschachs of boys with severe gender-identity disorder. *Journal of Personality Assessment, 53*, 100-112.
- Tuber, S. B., Frank, M., & Santostefano, S. (1989). Children's anticipation of impending surgery. *Bulletin of the Menninger Clinic, 53*, 501-511.

- Urist, J. (1980). Object relations. In R. H. Woody (Ed.), *Encyclopedia of Clinical Assessment* (Vol. 1, pp. 821-833). San Francisco, CA: Jossey-Bass.
- 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, 450-454.
- van IJzendoorn, M. H., & Bakermans-Kranenburg, M. J. (1996). Attachment representations in mothers, fathers, adolescents, and clinical groups: A meta-analytic search for normative data. *Journal of Consulting & Clinical Psychology*, 64, 8-21.
- Ward, M. J., & Carlson, E. A. (1995). Associations among adult attachment representations, maternal sensitivity, and infant-mother attachment in a sample of adolescent mothers. *Child Development*, 66, 69-80.
- Werner, H. (1948/1957). *Comparative Psychology of Mental Development*. New York: IUP.
- Winnicott, D. W. (1956/1958). Primary Maternal Preoccupation, *In Through Paediatrics to Psychoanalysis* (pp. 300-305). London: Tavistock.
- Winnicott, D. W. (1960/1991a). Ego distortion in terms of true and false self, *In The Maturation Processes and the Facilitating Environment*. (pp. 140-152). Madison: IUP
- Winnicott, D. W. (1960/1991b). The theory of the parent-infant relationship, *In The Maturation Processes and the Facilitating Environment* (pp. 37-55). Madison: IUP.
- Winnicott, D. W. (1967/1990). Mirror-role of mother and family in child development, *In Playing & Reality* (pp. 111-118). London: Tavistock.
- Winnicott, D. W. (1969/1990). The use of an object and relating through identifications, *In Playing & Reality* (pp. 86-94). London: Tavistock.
- Zachariah, R. (1994). Maternal-fetal attachment: Influence of mother-daughter and husband-wife relationships. *Research in Nursing and Health*, 17, 37-44.

- Zeanah, C. H., Benoit, D., Hirschberg, L., Barton, M., & Regan, C. (1994). Mothers' representation of their infants are concordant with infant attachment classifications. *Developmental Issues in Psychiatry and Psychology, 1*, 1-14.
- Zeanah, C. H., Benoit, D., Hirshberg, L., & Barton, M. (1993, Revised). *Working Model of the Child Interview: Rating Scales and Classifications. Manuscript.*
- Zeanah, C. H., Keener, M. A., & Anders, T. F. (1986). Adolescent mothers' prenatal fantasies and working models of their infants. *Psychiatry, 49*, 193-203.
- Zeanah, C. H., Keener, M. A., Anders, T. F., & Vieira-Baker, B. S. (1987). Adolescent mothers' perceptions of their infants before and after birth. *American Journal of Orthopsychiatry, 57*(3), 351-360.
- Zeanah, C. H., Keener, M. A., Stewart, L., & Anders, T. F. (1985). Prenatal perception of infant personality: A preliminary investigation. *Journal of the American Academy of Child Psychiatry, 24*(2), 204-210.
- Zeanah, C. H., Zeanah, P., & Stewart, L. (1990). Parents' constructions of their infants' personalities before and after birth: A descriptive study. *Child Psychiatry and Human Development, 22*, 191-206.