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THE IMPACT OF THE QUALITY OF MARITAL ADAPTATION ON PRENATAL MATERNAL REPRESENTATIONS AND POSTNATAL SATISFACTION WITH SOCIAL SUPPORT

by

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

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ABSTRACT

The Impact of the Quality of Marital Adaptation

On Prenatal Maternal Representations and

Postnatal Satisfaction with Social Support

by

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Advisor: Professor Diana Diamond

This study investigated the relationship between specific intrapsychic processes and interpersonal relationships involved in the transition to motherhood. Specifically, it looks at how the quality of marital adaptation shapes prenatal maternal representations. This study further explores how prenatal maternal representations are related to postnatal satisfaction with social support.

The subjects were 37 primaparous, married, middle-class women between the ages of 24 and 39. All subjects were administered the Pregnancy Interview (Slade, Grunebaum, Huganir & Reeves, 1986) and completed the Dyadic Adjustment Scale (Spanier, 1976) during their third trimester of pregnancy. Each subject was then administered the Social Support Scale (Crockenberg, 1981) at 14-months postpartum.

The results highlight that prebirth marital adaptation has a lot to do with the experience of a woman's first pregnancy. First, a pregnant woman in a strong marriage was significantly more likely to portray her fetus with loving, warm, and joyful feelings.

Second, a woman in a strong marriage was significantly more likely to be able to imagine having a relationship with her fetus during pregnancy and future baby after the birth. Third, a woman who was able to imagine a relationship with her fetus and future baby tended to describe her fetus with significantly more loving, warm, and joyful feelings. Finally, in regard to the influence of prebirth marital adaptation, a pregnant woman in a strong marriage was significantly more likely to envision herself as a realistically confident caregiver as measured during the third trimester of pregnancy.

The influence of prebirth marital adaptation on women's transitions to motherhood extended beyond pregnancy. Women who were dissatisfied with the help that their husbands were providing or who did not mention their husbands as providing any help at 14-months postpartum reported significantly lower levels of marital adaptation during pregnancy. Furthermore, women who were dissatisfied with their husband's support reported fewer friends, family members, and professionals whose help was experienced as satisfying.

The results of the current study strongly suggest that it is the family system that the couple creates prebirth that impacts on the transition to parenthood. It is proposed that the issues that a husband brings to the marital relationship impact on his ability to act as an emotional container for his pregnant wife and to provide her with a background of emotional safety. As a woman's husband serves as her attachment figure in adulthood, an argument can be made that his ability to provide her with emotional and practical support is the most important factor impacting on the quality of her maternal representations.

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Chapter 1

Introduction

A woman's first pregnancy is a time of great transformation. She experiences physical disequilibrium as her body changes in ways, which are outside of her control. As her body begins to change physiologically and anatomically, a pregnant woman begins to focus her attention on what is occurring internally (Bibring, Dwyer, Huntington & Valenstein, 1961). With the quickening at about four months of pregnancy, she is faced with the intrapsychic task of reappraising and completing the separation-individuation process from her own parents (Ballou, 1978). In particular, a first-time pregnant woman needs to rework her internal representation of her own mother in order to both meet her baby's dependency needs as well as acknowledge her baby's separateness from her. According to Benedek (1959), a woman's motherliness, patience, and empathy as well as her ability to give to her baby originate in her early experiences with her own mother and are revived by her current experiences of parenting her own baby. "Since motherliness involves the repetition and working through of the primary, oral conflicts with the mother's own mother, the healthy, normal process of mothering allows for . . . intrapsychic 'reconciliation' with the mother (Benedek, 1959, p.396). Thus, during pregnancy and early motherhood, a woman completes an identifying process with her own mother and, in the process, must find her own way of becoming a mother.

These physical and intrapsychic transformations influence and are influenced by her interpersonal relationships, especially her relationship with her spouse. At times of critical family change, Cowan and Cowan (1992) believe that support from a spouse has a

different meaning than support from others. In addition, a woman's relationships with her parents, siblings, friends, doctors, employer and co-workers often undergo change during pregnancy. The challenge to each pregnant woman is to successfully adapt to the developmental transformations that are virtually unceasing (Trad, 1990; 1991).

Women vary in their ability to successfully adapt to the developmental transformations inherent in becoming a mother. Little is known about which intrapsychic processes and interpersonal relationships facilitate a smooth transition to motherhood. However, a woman's transition to motherhood may be influenced by both her intrapsychic world, developed through her early childhood experiences with her parents, and her current interpersonal relationships, in particular with her spouse. Indeed, a pregnant woman's intrapsychic world and her interpersonal relationships are closely related and contribute to this transition. As Dicks (1963) has highlighted, an adult's intrapsychic issues developed in relationship with her parents greatly influence whom she chooses as a spouse. In the context of the marriage, the intrapsychic issues of the past get reenacted again in the current interpersonal sphere with the mate. Marriage is "the nearest adult equivalent to the original child-parent relationship" (Dicks, 1963, p.125).

More recently, Wallerstein (1995) found that at the heart of every good marriage is "a core relationship created out of the conscious and unconscious fit of the partners' needs and wishes" (pp.20-21). This core relationship reflects what each spouse needs and expects from the other. These expectations are influenced by an individual's experiences with his or her family of origin and significant others during infancy, childhood and adolescence, but are ultimately formed within the marriage (Wallerstein, 1995). The core relationship also reflects what each spouse views as undesirable or unacceptable.

Additionally, the core includes each spouse's internal representation of the other such as "She will be a wonderful mother" and "He has a great sense of humor." In essence, the core relationship is the couple's internal representation of their marriage, "a shared vision of what brought these two people together and what they see for their future as a couple and a family . . .." (Wallerstein, p.21).

Further clarification is needed regarding the relationship between specific intrapsychic processes and interpersonal relationships involved in the transition to motherhood. It is the intent of the present study to explore this question during the time frame between a woman's third trimester of pregnancy and fourteen months after her baby's birth. This study investigates aspects of her transition to motherhood. Specifically, it looks at how the quality of marital adaptation shapes the following aspects of a woman's transition to motherhood: 1) the affective tone of the representation of her fetus; 2) her fantasies about the prenatal relationship with her fetus and the postnatal relationship with her baby; and 3) her representation of herself as a caregiver as measured in the prenatal period. This study further explores how the quality of a woman's affective tone of the representation of her fetus and her capacity to envision herself as a competent caregiver are related to her ability in the interpersonal realm to put together an effective social support network and her level of satisfaction with the help she is receiving in the postnatal period.

A woman's first pregnancy has been observed as a time of great psychological change as it necessitates "separation from, or termination of past relationships or conditions" (Trad, 1990). While a woman may look forward to developing an intimate and pleasurable relationship with her baby, she may also be fearful of negative changes

occurring in her career, her body and her relationship with her husband. Other psychological changes noted during pregnancy include an increase in anxiety (Leifer, 1980; Lester& Notman, 1986), a reactivation of unresolved conflicts from earlier developmental phases (Benedek, 1959, 1970; Bibring, 1959; Raphael-Leff, 1986), an alteration in state of consciousness (Colman and Colman, 1972), an increased vulnerability and neediness (Winnicott, 1956s), an alteration in dreams and fantasies (Ammaniti, 1991; Ammaniti et al., 1992; Kestenberg, 1976; Raphael-Leff, 1986; Stack, 1987; Trad, 1990), and a shift towards primary process thinking (Condon, 1987). According to Bibring (1959), all pregnant women regardless of their prior state of emotional health experience the above changes as "a crisis" leading to extreme psychological disequilibrium (p.119). This emotional crisis is particularly poignant for the primapara who is experiencing these changes for the first time. However, if a pregnant woman appropriately meets these developmental challenges, she may achieve intrapsychic reorganization and gain a new level of ego integration resulting in further personality development (Benedek, 1959; Bibring, 1959).

Fortunately, women, in the context of a marriage, do not experience these developmental changes in isolation. The father's emotional availability to his wife is important from the time they decide to conceive a child. "The father responds to the receptive-dependent needs of his wife which are increased by her pregnancy, by her anxieties about giving birth and taking care of their child" (Benedek, 1959, p. 400). Simultaneously, an expectant and then new father is undergoing his own psychological crisis as he reexperiences primary identifications with his own parents (Osofsky, 1982). Similar to his pregnant wife, he has the potential to achieve developmental growth by

reworking his early identifications and finding his own way of becoming a father (Osofsky, 1982). Expectant fathers as well as mothers begin to develop an object relationship to their fetus during pregnancy. An expectant father's object relationship to his fetus may be influenced by many factors including his early experiences of being parented by his own mother and father (Osofsky, 1982), the strength of his marital relationship (Weaver & Cranely, 1982), the nature and timing of the fetus' movements or hiccups, the visual representation of the fetus during sonograms, and the knowledge of the fetus' gender as a result of an amniocentesis.

The father seems to play a crucial role in facilitating his pregnant wife's psychological growth. According to Ballou (1978), the psychological work of pregnancy concerns "the gradual emergence of the woman's sense of the child as someone who is a locus of feelings, of potential motivations and intentions, and who is experienced in increasingly more human terms" (p.385). In essence, the pregnant woman comes to accept that her child is a separate human being who will be dependent upon her. In order to accept her baby's dependency on her, she must connect to and accept her own dependency needs on her mother or maternal substitute. The manner in which each woman experiences her baby's dependency needs reflects her particular conflicts around dependency as developed in relation to her own mother (Ballou, 1978; Benedek, 1959; Lester & Notman, 1986; Pine, 1982). The husband's maternal function concerns his ability to be giving to, affectionate towards, and approving of his wife allowing her to connect to and reconcile with her maternal representation. For all women, the husband's capacity to be nurturing during pregnancy is extremely important. This is especially true for those women whose early experiences of being parented by their own mothers were less than

optimal. A woman's experience of her husband during pregnancy would thus seem to influence the quality of her affective representation of her fetus, the object relationship quality of her prenatal relationship with her fetus and her postnatal relationship with her newborn, and her confidence level about caring for her baby after birth. One imagines that a woman in a strong marriage where emotional and physical affection are regularly expressed would feel more loving towards her fetus, fantasize more about intimate moments with her fetus and newborn, and feel more realistically competent about her ability to meet both her baby's emotional and physical needs.

After parturition, mothers often rely on their husbands for both emotional support and help in the day-to-day job of parenting. In terms of caregiving, mothers of young children have been found to depend heavily on their husbands' support when making childcare decisions (Leventhal-Belfer, Cowan & Cowan, 1992). When children were six, 18, and 42 months old, mothers who were more satisfied with the support they received from their spouses for their childcare decisions and responsibilities were more satisfied with their actual arrangements (Leventhal-Belfer, Cowan & Cowan, 1992).

As many researchers have documented, the strongest predictor of the postbirth marital adaptation seems to be the quality of the prebirth marital relationship (Cowan & Cowan, 1992; Cox, Tresch-Owen, & Lewis, 1989; Heinicke & Lampl, 1988). Several researchers (Belsky, 1990; Heinicke & Guthrie, 1992; 1996) have attempted to determine what aspects of the prebirth marriage contribute to or detract from a couple's successful transition to becoming a family. Belsky (1990) proposes that couples who have difficulty communicating prenatally are most likely "to experience conflict over issues pertaining to childrearing" (p.186). Heinicke and Guthrie's (1992) findings highlight the importance of

a couple's prebirth ability to express and resolve negative affect in the context of coming to a consensus about disagreements to good postbirth marital adaptation, and consequently, parenting. In particular, a couple's prebirth ability to confront an important unresolved issue, express negative affect in a modulated way, and resolve the issue was positively associated with their ability to work together to resolve issues pertaining to the care of their baby (Heinicke and Guthrie, 1996). Perhaps, then, a woman's representations of her husband and their marriage during pregnancy would also affect how she constructs her social support network and her level of satisfaction with the actual help she is receiving after birth. Specifically, the better the couple is at communicating and coming to an agreement about issues prenatally, the more likely it is that the pregnant woman will feel realistically confident about her ability to care for her baby. The woman knows from prior and current experience with her husband that they will be able to talk about and resolve issues concerning their baby as they arise. The extent to which she can realistically envision herself as a caregiver and planfully think about the postnatal period may allow her to make good use of and feel satisfied with her social support network. A woman's caregiving representational system, which is related to, but distinct from her model of attachment relationships to her own caregivers, may also influence her capacity to feel satisfied with herself as a caregiver and to perceive her infant as worthy of care (Solomon & George, 1996).

This study also investigates a previous finding that women who tended to give adaptively regressed Rorschach responses during pregnancy were more likely to acknowledge minimal anger in their relationship to their infants at 10-months postpartum (Hermelin-Kuttner, 1996). Furthermore, women who gave adaptively regressed

Rorschach responses were more likely to experience less anger at their 10-month old infants. Hermelin-Kuttner's (1996) results contradicted her hypothesis that an adaptively regressed pregnant woman would be more likely to acknowledge anger in her relationship to her 10-month infant in a modulated and balanced way. Instead, the adaptively regressed pregnant woman seems to minimize any felt anger in her relationship with her infant in an attempt to remain empathic and emotionally available to him or her.

We would expect that a pregnant woman who represents her fetus with positive affect would tend to be more empathic and emotionally available to her fetus. Such a woman may more fully acknowledge her future baby's needs and may planfully think about the postnatal period. Consequently, she may better utilize her social support network and feel more satisfied about the help she is receiving at fourteen months postpartum.

Chapter 2

Literature Review

Pregnancy and the Development of Maternal Feelings

Pregnancy ushers in a new stage of life for a woman in which physical and emotional disequilibria seem to be inherent. Women experience body changes, fears, anxieties, hostility and regressions to earlier phases of development. A pregnant woman faces the challenge of successfully adapting to the developmental transformations that are nearly unceasing (Trad, 1990, 1991).

A mother will only be able to sensitively meet her infant's needs if she is first able to identify with the needs of her fetus and then baby. Indeed, central to many writers' viewpoints (Ballou, 1978; Benedek, 1959; Bibring, Drwyer, Huntington & Valenstein, 1961; Lester & Notham, 1986; Pines, 1972, 1982), expectant and new mothers must be able to regress to earlier stages of emotional development in order to identify with their fetus and infant.

Consequently, a woman who is struggling with unresolved issues from her own childhood will have difficulty redefining her needs in light of those of her child. Moreover, she will have difficulties representing the future objectively, envisioning her baby and establishing boundaries between her own identity and that of her infant (Trad, 1990).

This intrapsychic process begins with the very commencement of the pregnancy. Bibring et al. (1961) describe a specific sequence of changes in a pregnant woman's "object-libidinal and narcissistic positions" beginning with conception and preparing her

for delivery and early parenthood. When a woman realizes she is pregnant, a woman needs to incorporate a significant representation of her husband or sexual partner into her self-representation. Then, as her body begins to change physiologically and anatomically, the pregnant woman begins to withdraw a good deal of her interest from the outside world and to focus her attention on what is occurring internally. At this stage, "the libidinal concentration of the self increases and leads to an integration of, and merging, with, this foreign body, turning it into an integral part of herself" (Bibring et al., 1961, p.15).

The woman's narcissistic investment in herself is disrupted when the fetus is first felt to move. The quickening occurs at about four months of pregnancy. At that point, the woman begins to realize that the fetus is a separate being within her own body. As the fetus continues to grow and to make his presence felt, she prepares herself psychologically for the separation inherent in delivery by representing her fetus as part of herself, as part of her husband, and as a separate being outside of either herself or her husband.

As the above sequence of changes indicates, a pregnant woman must be flexible enough psychologically to shift her libidinal and object cathexes at the developmentally appropriate points during pregnancy. However, a variety of complications related to an individual woman's history and revolving above all around her relationship with her own mother may prevent her from making the necessary integration of representations and shifts in object and narcissistic libido (Bibring et al., 1961).

In this regard, a woman's ability to successfully resolve the emotional crisis of pregnancy hinges on her "relationship to her own mother, its infantile aspects and its

maturational resolution in the daughter's move toward becoming a mother herself" (Bibring et al., 1961, p. 18). From the spontaneous statements of women in the Bibring's study, they appeared to be reworking childhood identifications with their mothers. These new identifications:

> may first show the scars of the preceding childhood conflicts either by an admixture of remorse and guilt or of ambivalence and resentment .... However, ... in the case of successful maturation they develop into a conflict-free, useful identification with the mother as the prototype of a parental figure (p. 18).

Childhood conflict is not destiny; successful maturation may overcome it, and the pregnant woman may still develop a useful identification with her own mother.

The complexities of this intrapsychic process have also been discussed by Benedek. Benedek (1959) writes that a woman's early experiences with her own mother greatly influence her representations of self as caregiver in relation to her fetus during pregnancy and to her baby during early motherhood. A woman regresses to the oral phase of development during the progesterone phase of each menstrual cycle as well as during pregnancy and lactation (Benedek, 1959; 1970). Each of these phases of motherhood "reactivate the object and self representations integrated during the oral phase of her development and bring about a repetition of intrapsychic processes which originate in the mother-child relationship during her infancy" (Benedek, 1959, p.394). The quality of a woman's object relationship to her fetus and then baby is influenced by two intrapsychic processes: 1) the primary reproductive drive expresses her tendency to give to her fetus and then baby; 2) while her regression to the oral phase of development expresses her receptive tendencies facilitating her identification with her fetus and later baby.

A woman's primary identifications with her own mother affect the development of her ability to receive from and, thus identify with her fetus and then child (Benedek, 1959). In the healthy, normal process of mothering, a woman engages in the intrapsychic task of reworking her identifications with her own mother and, in the process, must find her own way of becoming a mother. If the woman received confidence in her early experiences with her own mother, she will develop feelings of motherliness as well as the ability to give to her fetus and then baby. Even during times of frustration for herself and her child, the new mother's sense of being the good thriving infant in relation to her own good mother will be reactivated and contribute to her ability to identify with, have empathy for, and competently care for her baby. In this way, the infant feels loved and she gains confidence in herself as a mother through the actual experience of parenting.

By contrast, if the primipara's own mother responded to her early receptive needs with ambivalence, she will have difficulty identifying with her fetus and then child and developing maternal feelings. Her experience of parenting a frustrated baby will reactivate her sense of being the frustrated infant of her own frustrated mother. Her inability to identify with, have empathy for, and competently care for her baby will contribute to further frustrations for both mother and child. The baby will feel unloved and the woman's level of maternal confidence will decrease. In this case, the integrative and developmental processes of reworking the primary identifications with the woman's own mother will not be completed (Benedek, 1959).

A pregnant woman's experience of anxiety has also been found to be indicative of her developing relationship with her fetus. Leifer (1980) reported that anxiety experienced during pregnancy served positive functions. For example, it often reflects a

woman's growing attachment to her fetus and her realistic concerns about his or her well being. "Anxiety about the well-being of the fetus appears to be an important indication that the pregnant woman is engaged in preparing for her emotional relationship with the baby" (p.50). Leifer suggests that pregnant women who feel little anxiety, attempt to maintain their pre-pregnancy emotional state, or experience anxiety exclusively about themselves are "communicating danger signals that they are not dealing adaptively with this important task of pregnancy" (p. 50).

Writers (Lester & Notman, 1986; Pines, 1972, 1982) have also extrapolated their ideas from their work with analytic patients. Lester and Notman (1986) found that anxiety was a common denominator in the experience of all their pregnant patients. Anxiety, however, seems to take different forms at three distinct phases of pregnancy. They delineate the first phase as commencing when the woman first becomes aware of her pregnancy and lasting until the quickening. Women experience anxiety in two realms. They fear the changes occurring in their bodies and more specifically the fetus growing inside them. The women dreamed of tropical landscapes such as forests and jungles, "of uncontrolled and primordial growth" (p.364).

For these women, the awareness of their pregnancies also reactivated separation and individuation issues with their own mothers. They experienced both fantasies and wishes violating and entering their mother's bodies as well as "primitive fears of being swallowed and incorporated" (p.363) by their omnipotent mothers. Several women with unresolved separation-individuation conflicts decided to delay telling their parents they were pregnant; these women feared that their parents would become overly involved in their pregnancies and take control of their babies after birth. Lester and Notman (1986)

suggest that "the fusional urges of the pregnant woman were projected to the parents (mother) who were then seen in fantasy as acting under the influence of these urges claiming the foetus as their own" (p.364).

The second phase commences with the quickening and lasts until six or eight weeks before delivery. The advent of the quickening is when many women first come to believe that they are carrying an alive human being within them. When the expectant mother feels her fetus move, her maternal feelings are awakened and she expresses pleasure in promoting the growth of her fetus and in nurturing her baby after birth. "The presence within the mother's body of an object at once part of herself and yet separate (obeying its own imperative in movements that the mother cannot initiate or stop), this presence becomes the early basis of motherliness"(Lester & Notham, 1986, p. 364).

The quickening also primes the pregnant woman to become further differentiated from her own mother. Pregnant women often report feeling complete and whole as a result of containing an alive human being within their bodies. This new unit comprised of mother and fetus establishes firmer boundaries between the pregnant woman and her own mother. The quickening thus promotes "intrapsychic shifts in the areas of self and object boundary formation" (Lester and Notham, 1986, p.363) allowing the pregnant woman to progress further along the separation and individuation continuum from her maternal object.

The anxiety associated with the second stage is most pronounced if the pregnant woman's identification with her own mother has been problematic and has not been reworked (Lester & Notman, 1986). When pregnant women experienced intense

ambivalence towards the maternal object, they were unable to represent their fetus as a separate being who needed their nurturance and care.

Instead, these women experienced a great deal of conflict between the wish for a child as a narcissistic object and the aggression against a dependent, competitive object drawing upon their emotional and physical resources for care. They did not feel any sense of "sustained comfort next to the mother and their memories always revealed discomfort, tension and frustration in their dealings with the maternal object" (Lester and Notham, 1986, p.363). These women also expressed both strong wishes to fuse with and extreme rage at the maternal object. Their ability to progress along the separation-individuation continuum from their maternal object was clearly compromised.

The third phase begins sometime between the 32nd and 34th weeks of pregnancy and lasts until the final week or two before delivery. Women's anxieties concern the extreme disfigurement of their bodies during the latter part of their third trimester. Indeed, the women feared that devastating complications might occur during delivery to both them and their babies. Some women feared that their own bodies and those of their babies would be damaged during delivery. Others were concerned that their babies would be born deformed or dead. These anxieties, however, were not apparent within the last two weeks of pregnancy. Women might experience relative calmness during this time because of hormonal changes and the end of their pregnancies is in sight (Lester & Notman, 1986).

All pregnant women face the challenge of adapting to various developmental transformations. For example, an expectant mother with a toddler is most likely concerned with helping her first-born adapt to having a younger sibling as well as

reevaluating her relationship to her work. It is the first pregnancy, however, that most directly raises the challenge of reworking conflictual identifications with the woman's own mother in order to find her own way of becoming a mother. It is a unique time period during which she attempts to achieve a new adaptive position within her intrapsychic world of childhood and the interpersonal world of adult relationships (Pines, 1978). Specifically, a first-time pregnant woman needs to achieve "a stable and satisfactory balance between her unconscious fantasies, daydreams and hopes and the reality of her relationship to herself, her husband and her child" (1972, p.333). Much of the internal stress experienced by a primipara comes from having to become a mother to her future child while still remaining the daughter of her own mother (Pines, 1978).

The internal stress of a first pregnancy offers a woman a further opportunity to both identify with and individuate from her mother (Pines, 1982). As in adolescence, this new stage of identification is rooted in the shared biology of mother and daughter. The pregnant woman, like her mother before her, has been impregnated by her sexual partner. The physical changes of pregnancy thus promote "a woman's bodily re-experience of primary unity with her mother, and at the same time afford an experience of differentiation from her mother's body which once contained her own" (Pines, 1982, p.312). Inevitably, a woman's bodily re-experience of primary unity with her mother is "accompanied by a re-enactment of infantile emotional development, with libidinal aggressive and narcissistic components of the relationship to the self and to the other, altered both in the inner and outer worlds" (Pines, 1982, p.312). A woman's experience of this temporary regression is determined by the quality of her identification with her

maternal representation and of her narcissistic identification to her fetus (as if she were her own child).

This temporary regression can be gratifying and lead to emotional growth if the pregnant woman has a predominantly positive identification with her maternal representation and with her fetus. If the woman did not receive "good enough mothering" (Winnicott, 1960), she may experience this temporary regression as painful and frightening. As the boundaries between her self-representation and her maternal representation were never firmly established, she may wish to merge with the life-giving, fertile maternal representation while simultaneously fearing its ability to overpower her. The woman relies upon both physical and emotional support from her husband and other members of her social support network to help her more effectively cope with the pressure of this internal stress (Ballou, 1978; Pines, 1978).

While first pregnancies are particularly stressful, all healthy women, not just primiparas, develop "primary maternal preoccupation" (Winnicott, 1956) towards the end of their pregnancy. This emotional state was viewed as a 'normal illness' during which women became preoccupied with their baby to the exclusion of everything else. This heightened sensitivity to the fetus lasted several weeks after the birth and allowed the woman to "feel herself into her infant's place" (p. 304) and thus meet his or her needs. The ordinary devoted mother stays orientated to the infant, but is able to let her baby separate from her when the child needs to become more autonomous (Winnicott, 1960). According to Winnicott (1960),

> the most important thing . . . is that the mother
> through identification of herself with her infant knows
> exactly what the infant needs in the way of holding
> and in the provision of an environment generally (p.54).

The mother's physical holding of her infant and her empathy for her infant's needs are thus "the essence of maternal care"(Winnicott, 1960, p.54).

The literature emphasizes that pregnancy is a stage of life that is characterized by emotional disequilibrium. The quality of a pregnant woman's early identifications with her own mother and her ability to rework them influence her capacity to further individuate from her mother. Furthermore, a pregnant woman's capacity to rework her early identifications with her mother seems to be related to her ability to identify with her fetus and to the development of her maternal feelings. As Pines (1978) and Ballou (1978) have pointed out, a woman's interpersonal relationships with her husband and other members of her social support network may facilitate or hinder her efforts to complete this intrapsychic process. This implies that each woman given her unique life history and her current interpersonal relationships will find her own way of resolving the emotional disequilibrium of pregnancy and of becoming a mother. In order to better understand how a pregnant woman internally represents herself as a caregiver in relation to her fetus and then infant, it is necessary to take a closer look into the complex nature of internal representations of relationships. The following discussion will focus on the way maternal representations during pregnancy and their impact on early mother-child relationships have been studied by researchers and described in the literature.

Maternal Representations during Pregnancy

Zeanah and Barton (1989) define internal representations as "memory 'structures' that re-present a version of lived experience to an individual. They are the internal aspects of relationship patterns that guide external interactional behaviors" (p. 137).

Furthermore, internal representations of relationships are "abstractions that average various internal subjective experiences and corresponding interactional behaviors" (Zeanah and Barton, 1989, p. 138). For example, a woman might have memories of her mother brushing her hair in the morning and of her father weaving fantastic tales while taking her to nursery school. Each generalized memory including the corresponding feeling states represents not one interpersonal interaction, but an average of many such experiences. As Zeanah and Barton (1989) point out, internal representations function in two important ways: 1) they organize a diverse array of experiences creating the potential for them to be remembered, and 2) they provide a framework for anticipating and interpreting future interpersonal interactions.

Maternal representations during pregnancy refer to the thoughts, feelings, fantasies, and dreams that an expectant mother has about her fetus and future baby and about herself as a caregiver. As Stern (1985) has asserted, a woman's representations of her infant and of herself as a mother are not distinct, but interrelated; a pregnant woman's representation of her fetus and future baby includes her representation of herself as a mother in relation to her fetus and infant.

Indeed, investigations have shown that expectant mothers and fathers develop highly elaborated internal representations of their fetuses during pregnancy and babies during early infancy (Zeanah, Keener & Anders, 1986; Zeanah Keener, Stewart & Anders, 1985). This has been demonstrated in both a sample of older, well-educated expectant couples (Zeanah et al., 1985) and one of pregnant adolescents from working class families (Zeanah et al., 1986). More recently, researchers have shown how these internal representations are structured during pregnancy (Ammaniti, Baumgartner,

Candelori, Perucchini, Pola, Tambelli and Zampino, 1992) and how they influence the quality of the infant-mother relationship after birth (Ammaniti, 1991; Fonagy, Steele and Steele, 1991).

Ammaniti et al. (1992) explored the structure and the content of maternal representations during pregnancy by interviewing and administering questionnaires to primaparas about their thoughts and feelings about their fetuses. The results showed that expectant mothers in their third trimester of pregnancy have a clear representation of themselves as mothers that is separate from the representation they have of their fetuses. Furthermore, the results demonstrated many similarities in the content-free features of a woman's representation of herself as a mother and her representation of her fetus. For example, women who offered elaborate and flexible representations of themselves as mothers tended to be those who gave richly detailed representations of their fetuses that were open to modification.

The quality of a pregnant woman's representation of herself as a caregiver and of her fetus has been associated with the quality of her development as a mother after the birth of her infant. Moss (1967) found that maternal representations as assessed two years before the birth of the infant predicted differences in mothers' responsiveness to their three-month old infants. The woman's acceptance of the nurturing role and the degree to which she viewed infants in a positive way two years prior to delivering her own baby were correlated with her responsiveness to her infant at three-months postpartum.

The findings of Shereshefsky and Yarrow (1973) underscore the significant impact of a pregnant woman's capacity to clearly and confidently visualize herself as a

mother on her adaptation to pregnancy and her early adjustment to motherhood. An expectant mother who had developed nurturing qualities, substantial ego strength, and a strong feminine identification, as demonstrated by her ability to clearly and confidently visualize herself in the maternal role, made a significantly more positive adjustment to pregnancy (Shereshefsky and Yarrow, 1973). Furthermore, a woman's level of adaptation to pregnancy was positively related to her adaptation to motherhood during the first six months of her baby's life. In particular, first-time pregnant women who were able to clearly and confidently visualize themselves as future mothers made a significantly better postnatal adjustment. During the first six postpartum months, these women were found to be significantly more accepting of their infant and their maternal role, more nurturing, and to have made a more positive marital adaptation as well as a more successful transition to becoming a family with their husbands (Shereshefsky & Yarrow, 1973).

The significant influence of a pregnant woman's capacity to confidently visualize herself as a mother on her infant's development has also been demonstrated (Heinicke, Diskin, Ramsey-Klee and Given, 1983). An expectant mother who was efficient yet flexible, who had developed ego strength, who had an active style of emotional expression, and who confidently visualized herself in the maternal role tended to have an infant who received high scores on two Bayley Ratings at 12-months postpartum. These two ratings for Endurance and Goal Directedness are conceptually linked to later task orientation. (Heinicke et al., 1983).

Furthermore, a mother's responsiveness to her infant during the postnatal period was also associated with prenatal maternal characteristics. A mother who was responsive

to her infant's needs had been assessed during pregnancy as someone who was "efficient yet flexible, who related well to her peers, who was not too anxious, and who gave little evidence of approaching others with a critical or suspicious attitude" (Heinicke et al., 1983, p. 206). Part of what defines a realistically confident caregiver is, of course, the ability to be flexible and modulate one's anxiety. These findings suggest that a new mother optimally represents her relationship with her infant in flexible terms. In particular, her representations need to be flexible enough to adapt to changing circumstances as well as be sufficiently assertive and capable of efficiently organizing an increased list of external demands (Heinicke et al., 1983).

Given these findings, a pregnant woman's ability to envision herself as a realistically competent mother seems to be related to her ability to redefine her own needs in light of her baby's needs during the prenatal period. We assume that part of her personal redefinition includes an ability to planfully think about the nature and extent of the social support that she will need to care for her future baby. This implies that the expectant mother must construct an effective social support network given the realities of the help available in her environment. For instance, some pregnant women will live in close proximity to their and their husband's respective families, while others will live at great distances from them. Thus, a pregnant woman's ability to envision herself as a realistically competent mother is expected to predict her level of satisfaction with her social support network during the postnatal period.

How has the development of maternal representations been described in theoretical terms? A woman's early experience of being mothered is influential in determining how she will affectively represent her fetus during pregnancy (Raphael-Leff,

1986). A pregnant woman's maternal representations are thought to derive from what she has internalized from past interpersonal interactions about herself in relation to others (Raphael-Leff, 1986; Zeanah & Barton, 1983). As noted above, Stern (1986) points out that a woman's representation of her infant always includes a complementary representation of herself as a mother in relation to her infant. This implies that a pregnant woman's early experience of herself in relation to her own mother would impact on the affective quality of her representation of her fetus and of herself as a caregiver in relation to her fetus.

In addition, the nature and extent of a pregnant woman's social support system is a contributing factor. An expectant mother can only chance externalizing her idealized "inner resources" if she can depend upon her husband, parents, therapist or close friend to continually replenish her narcissistic supplies (Raphael-Leff, p.50, 1986).

According to Raphael-Leff (1986), maternal representations during pregnancy influence how a new mother responds to her infant's dependency needs after birth. She suggests that the emotional state of 'Primary Maternal Preoccupation' (Winnicott, 1960) begins during early rather than late pregnancy. The condition stems from the unconscious identification of the pregnant woman's internal representation of herself as an infant with her internal representation of her fetus.

A woman who internally represents her fetus as an ideal self or as someone who will enable her to recapture her long lost unity with her own mother will develop Primary Maternal Preoccupation. Raphael-Leff has classified such women as Facilitators as they tend to adapt to their baby's physiological and emotional needs.

However, if the pregnant woman internally represents her fetus with denigrated aspects of her infant self such as weakness, dependency or aggression, she will develop Primary Maternal Persecution. As may be expected, such a woman's ability to identify with the maternal role will be substantially compromised. These mothers are classified as Regulators as they tend to expect their babies to adapt to their needs and schedules.

The Facilitator and the Regulator experience pregnancy and thus represent their fetuses in two distinct ways. The Facilitator feels enhanced by the experience of creating and carrying her child. However, her ability to idealize or represent her fetus with predominantly positive affect is not easily achieved. She is required among other things to put her baby's needs before her own, to deny the imperfections of her baby and the transition to motherhood, and to avoid feeling any envy, rivalry, hostility or aggression towards her baby (Raphael-Leff, 1986). In contrast, the Regulator feels depleted during pregnancy by the internal persecutor whom she is carrying. She may refer to her fetus as an alien inhabiting her body or a controlling little dictator. The Regulator cannot be vicariously gratified through carrying and mothering her child; her inability to avoid feeling envy, rivalry, hostility and aggression towards her child prevents her from identifying and empathizing with her baby's needs.

According to Lebovici (1983), maternal representations impact all forms of development and organization of interpersonal interactions between mother and baby. This is especially true for the affective component of those interactions. In particular, it is important to note whether a woman's mental representations of relationships are flexible or rigid. If her representations of relationships are flexible, she will tend to use new information from actual experiences to update her internal representations and make

good decisions concerning her relationship with her child (Lebovici, 1983). In contrast, if her representations of relationships are rigid, she will have difficulty using incoming information to modify her internal representations and will tend to base her decisions regarding her relationship with her child on outdated and inaccurate representations.

Condon and Dunn (1988) have advanced the view that the fantasies of expectant parents play an influential role in the development of their future relationships with their children. Trad (1991) writes that new parents may be disappointed if physical characteristics, temperament and behavior of the actual baby differ greatly from those of the fantasy baby. In contrast, new parents may feel initially gratified by the actual baby if he or she closely resembles their expectations of the fantasy baby (Trad, 1991).

As mentioned previously, maternal representations are not just theoretical constructs, but have been the subject of extensive study. Such study has focused heavily on issues related to attachment, especially a new mother's attachment to her own parents and an infant's attachment to his of her mother.

Fonagy, Steele and Steele (1991) examined how a first-time pregnant woman's mental representation of attachment impacts on the quality of the postnatal relationship existing between her and her infant. Each expectant mother's mental representation of attachment was assessed by the Adult Attachment Interview (George, Kaplan & Main, 1985) during the third trimester of pregnancy. The quality of the infant-mother attachment relationship was assessed by the Strange Situation (Ainsworth, Blehar, Waters & Wall, 1978) at 12-months postpartum. The researchers hypothesized that there would be an intergenerational transmission of attachment whereby the mother's prenatal attachment classification would predict the subsequent infant-mother attachment pattern.

The results indicated that a pregnant woman's attachment classification predicted whether her infant would be securely or insecurely attached to her at 12-months postpartum in 75% of the cases (Fonagy et al., 1991). "While mothers of infants who would develop a secure or anxious-avoidant attachment were distinguishable before the child was born, the . . . study could not easily identify mothers of children who would develop an anxious-resistant attachment" (Fonagy et al., 1991). The narratives of many of the pregnant women whose infants subsequently developed an anxious-resistant pattern indicated a supportive attachment history, a state of mind characterized by low preoccupying anger, idealization, and a general sense of security (Fonagy et al., 1991). Indeed, these women were classified as Autonomous on the prenatal Adult Attachment Interview. However, on the basis of the Strange Situation of these women's infants, the researchers state that they did not detect fragility in these women's prenatal interviews, "which foreshadowed difficulties in adjustment to the caregiving role" (Fonagy et al., 1991, p.902). Informal observations at the time of the Strange Situation indicate that the mothers of anxious-resistant infants may experience the transition to motherhood as considerably disillusioning (Fonagy et al., 1991).

Ammaniti (1991) also explored how maternal representations during pregnancy affect the quality of the actual interpersonal relationship between mother and infant. During the third trimester of pregnancy, women were administered a semi-structured interview to examine a pregnant woman's internal representations of herself as a mother and her future baby. When the infant was 12-months old, the Strange Situation was administered to determine the quality of the infant's attachment to his or her mother. At this same time, the mother was administered the Adult Attachment Interview.

In order to illustrate how maternal representations during pregnancy influence subsequent interactions between mother and infant, Ammaniti (1991) presented the data on two very different pregnant women and their respective infants. At 12-months postpartum, one woman was classified as Autonomous with respect to attachment and her infant son was judged securely attached. In contrast, the other mother was classified as Dismissing of attachment while her infant son developed an anxious-resistant pattern of attachment.

During pregnancy, the two expectant mothers' experiences differed greatly, particularly in the ways that they described their social support networks. The woman classified as Autonomous with respect to attachment reported that her relationship with both her husband and her own mother was enhanced during her pregnancy. She also reported receiving a good deal of support from her husband's family. The woman judged as Dismissing of attachment reported experiencing her pregnancy alone without the needed support from her husband or their respective families.

These women also differed in their abilities to imagine what their baby would be like and in their desire to know the sex of the baby. In general, the woman judged Autonomous with respect to attachment allowed herself greater freedom to fantasize about her baby. The woman classified as Dismissing of Attachment was unable to fantasize about the characteristics of her future baby and did not want to know the sex of her child.

Many of the same investigators have focused on the father's impact on the woman's development of maternal representations. In regards to the content characteristics of the representations, primiparas tended to represent their fetuses as being

more similar to their husbands than to themselves (Ammaniti et al., 1992). Ammaniti et al. (1992) speculate that the expectant mothers distanced themselves from their infants "in order to create a mental representation of the child not yet born" (p. 178) and to represent the fetus as a human being separate from themselves. Moreover, the pregnant women tended to attribute more positive characteristics to their fetuses and their husbands than to themselves. Zeanah et al. (1985) similarly found that pregnant women's representations of their fetuses' personalities during the third trimester were overwhelmingly positive. These results indicate that "the initial, perhaps idealized, image of the child seems to have been derived less from the projections of the woman's own characteristics, than from her representation of the child's father" (Ammaniti et al., 1992, p. 178). Given these findings, one might expect to find a relationship between the quality of a pregnant woman's representation of her marriage and the affective quality of her representation of her fetus, a hypothesis to be explored later in this study.

Fonagy et al. (1991) speculate that the father's history of attachment relationships may illuminate the nature of the mother-infant attachment patterns. Their study provides evidence that the transition to motherhood may bring about positive change in internal structure. The results indicate that 27 % of the pregnant women who were judged as Dismissing of or Preoccupied by attachment had infants who developed a secure pattern of attachment. In post-hoc analysis, neither the cultural background nor the social-economic status of the women contributed to this unexpected finding. As reported by Fonagy et al. (1991), previous research has demonstrated that a strong marriage accompanied by social support is able to lessen the impact of institutional upbringing on caregiving (Quinton & Rutter, 1988) and to also allow a break in the cycle of abuse

(Egeland, Jacabvitz, & Sroufe, 1988). These researchers conclude that it seems prudent to consider both the mother's and the father's mental representations of their particular attachment histories as well as their representations of each other and their child (Aber, Slade, Berger & Kaplan, 1985; Bretherton, Biringen, Ridgeway, Maslin & Sherman, 1989) in order to gain a more complete understanding of how past relationships impact on present and future ones (Stevenson-Hinde, 1988, 1990).

This focus on the role of expectant fathers suggests the next extended step in the analysis of these issues. The prenatal relationship between the expectant mother and her husband must be examined. That, after all, is a key context in which the pregnant woman lives before the birth of her baby. Before examining the prenatal marital relationship in detail, however, it is important to briefly look at how marital relations have been described in the literature. In particular, the questions of what attracts one partner to another and which factors contribute to marital adaptation need to be explored.

Object Relations and Marital Adaptation

In an early marital study, Dicks (1963) reported that an adult's intrapsychic issues developed in relationship with her own parents greatly affect whom she chooses to marry. In a marriage, partners attempt to recreate the intensity of their original attachment feelings as well as the suffering of their early frustrations and rage. Frequently, an individual unconsciously seeks out a partner who will help reenact some unresolved issue about one of her parents. "The partner attracts because he or she represents or promises a re-discovery of an important lost aspect of the subject's own personality, which owing to

earlier conditioning, has been recast as an object for attack or denial" (Dicks, 1967, p. 30).

In essence, an individual's intrapsychic issues developed in childhood are reenacted over and over again in the current interpersonal sphere with the spouse. As previously mentioned, marriage is the closest "adult equivalent to the original child-parent relationship" (Dicks, 1963, p. 125).

Scarf (1987) writes that partners are often attracted to one another for the same qualities that later cause turmoil in their relationship. An individual unconsciously senses which potential partners will facilitate a reconnection to disowned aspects of the self. Projective identification occurs when one partner projects "denied and disavowed aspects of his or her inner experience onto the intimate partner"(Scarf, 1987, p.64) and then perceives those dissociated feelings as belonging to the partner. An individual becomes dissociated from certain feelings and thoughts through her early experiences with her original partners, her parents. The spouse who projects her dissociated feelings not only experiences them as existing in her mate, but encourages her mate through cues and provocations to act as if these feelings were his own (Scarf, 1987). The spouse is then able to identify vicariously with her partner's expression of her own dissociated feelings without taking responsibility for them. Moreover, the spouse is often critical of her partner's expression of her own repudiated feelings. Consequently, intrapsychic issues developed during childhood are transformed into interpersonal conflict in the current adult relationship.

When confronted with marital strife, partners respond in one of several ways (Dicks, 1963). For some couples, the reenactment of conflictual issues in their marriage

creates an opportunity for each spouse to rework their respective intrapsychic issues. As a result of this internal reworking, each spouse often achieves greater autonomy from his or her own family of origin and experiences increased interpersonal satisfaction in the marriage. On the other hand, there are also those individuals who are unable to resolve their respective intrapsychic conflicts. In some couples, one spouse may be more willing than the other to attempt to resolve earlier intrapsychic issues. The willing spouse is then confronted with the choice of remaining in the relationship without developing a more gratifying way of relating to her partner or of leaving her partner. In other couples, the partners may not even attempt to address their respective intrapsychic issues. Consequently, these adults gain physical autonomy without achieving greater emotional autonomy from their families of origin (Dicks, 1963).

According to Dicks (1967), marital adaptation requires that each spouse balance his or her need for autonomy with his or her need for mutuality with the intimate partner. Each mate needs to have developed "an established sense of personal identity and ego-strength" (p.29) as well as to have preserved a capacity for dependence from childhood. "For human and marital success, it is essential for individuals to conserve and make available in adult life tender concern for others based on one's own, still felt, dependent needs" (Dicks, 1967, p. 29).

In order to be mutually gratifying, marital interaction requires "a flexible readiness" (Dicks, 1967, p.31) in each spouse to modify his or her behavior in response to the other's current needs. For example, one partner may have to function as the emotional anchor for the other's dependence. At a later time, their roles may be reversed.

According to Dicks (1967), "this flexibility is, of course, an aspect of the capacity to tolerate, fuse and use ambivalence – perhaps, the key to the secret of *all* human relations. It is the ability to 'contain hate in a framework of love' (p.31).

Wallerstein (1995) studied good marriages to determine how and why love lasts. She proposes that "a good marriage is built on a series of sequential psychological tasks that the man and the woman address together" (p. 26) The achievement of these goals or psychological tasks is fundamental to the success of the marriage.

Conceptually, these psychological tasks are similar to Erickson's (1959) blueprint of the life cycle. Each young married couple faces nine life challenges or psychological tasks as they attempt to create and maintain a good and strong marriage (Wallerstein, 1995). The first three are specifically relevant to preparing the couple for the arrival of their first child and adapting to the transition to parenthood. If a husband and wife do not successfully deal with each challenge as it is encountered, they hinder their future development as a couple.

Before becoming parents, the husband and the wife need to successfully achieve the first two psychological tasks (Wallerstein, 1995). During the early years of marriage, the husband and the wife must first separate emotionally from their respective family of origin in order to fully invest themselves in the marriage. Simultaneously, both spouses need to redefine their relationships to their respective family of origin. The second task involves creating a life together that is supported by the couple's intimacy and mutuality and that also allows for each partner's autonomy. These first two tasks require psychological growth and subtle accommodation to one's spouse. "Moreover, each

requires giving up the independence and freedom of the single life for the satisfaction of being husband and wife" (Wallerstein, 1995, p. 28).

The couple is faced with the third psychological task during the course of the woman's first pregnancy. The expectant and then new parents have to make room psychologically and physically for their baby while preserving their intimacy as a couple. "This task requires taking on the new identity of parent and subordinating one's own needs to those of the infant" (Wallerstein, 1995, p. 72).

If the marriage is not built on a stable foundation, the arrival of the baby may mark the beginning of the end of the marriage (Wallerstein, 1995). As noted above, expectant parents develop highly elaborated representations of their fetus during pregnancy and their infant after birth (Zeanah et al., 1985; Zeanah et al., 1986). The birth of the baby may be particularly disruptive if the child is represented with negative affect that was originally experienced towards a member of one of the couple's respective family of origin. For example, the husband may experience intense jealousy at the sight of his wife nursing their baby, and consequently represent their baby as someone who is disrupting his special relationship with his wife. In actuality, the husband may be representing his infant with affect that he experienced during childhood at the arrival of a younger sibling. Fraiberg, Adelson & Shapiro (1975) has referred to these types of representations as "the ghost in the nursery" and described their destructive impact on a mother's ability to care for her baby. According to Wallerstein (1995):

> The task of parenting requires conquering the primitive fear, anger, and jealousy that come into the family with the baby. This involves getting to know the baby as an individual and learning to love and cherish the child as he grows at his own pace and becomes a full-fledged person (p.78).

Moreover, parenting also involves maintaining the intimacy of the couple's relationship by relegating the parental role to the back burner at regular intervals in order to spend time with each other as friends and lovers (Wallerstein, 1995).

As the literature indicates, newly married couples must separate emotionally from their respective families of origin and reestablish new lines of communication with them. In addition, the partners need to establish a sense of mutuality and intimacy all the while allowing for the expression of each partner's autonomy. Before the arrival of the first baby, it is especially important to begin the process of resolving interpersonal conflict that has developed out of the particular mixture of the partners' early intrapsychic issues. These are among the most important factors contributing to marital adaptation. The question of how the quality of the marriage influences maternal representations during pregnancy and the transition to parenthood is next examined in detail.

Prebirth Marriage and the Transition to Parenthood

Investigators have long been interested in exploring the nature of the prebirth marriage and its impact on the couple's experience of pregnancy and early parenthood. Weaver and Cranley (1982) explored paternal-fetal attachment behavior. Their study positively correlated paternal attachment behavior to the fetus with the strength of the prebirth marital relationship. Thus, women in better marriages tend to have husbands more likely to prenatally attach to the fetus. Furthermore, Wente and Crockenberg (1976) found that the higher the stress in the marital relationship during pregnancy, the greater the difficulty the husbands had adjusting to fatherhood.

As regards the expectant mother, Richardson (1987) suggested that an unsatisfactory relationship with the husband may be a serious impairment to the woman's preparation for future mothering activities and may leave the woman feeling unsupported and alone as she embarks on motherhood. In addition, Weingarten, Baker, Manning and Katzner (1990) noted that new mothers with more difficult marriages tended to have more negative perceptions of their infants than new mothers with satisfying marriages.

What specific role does an expectant father play in influencing his wife's maternal representation? Ballou (1978) has highlighted the expectant father's psychological role in facilitating the development of mutuality between his pregnant wife and their future infant. In order to accept the dependency needs of her fetus, a woman needs to first accept her own dependency on her own mother or maternal substitute (Ballou, 1978). During pregnancy, the expectant father's maternal function facilitates the dependency aspect of his wife's reconciliation with her own mother and, consequently, her ability to experience her fetus as a person with needs as well as potential motivations and intentions. Thus, the interpersonal relationship between the expectant father and mother influences the woman's intrapsychic realm which, in turn, impacts on her interpersonal relationship with her child.

Shefereshefsky and Yarrow (1973) hypothesized that the husband would play an important role in facilitating his wife's adjustment to pregnancy and early motherhood. The results, however, demonstrated that the husband's responsiveness to his pregnant wife and to the pregnancy had little impact on the woman's adaptation to pregnancy. However, the quality of the couple's postnatal marital adaptation was found to be related

to the woman's ability to accommodate to her infant and to accept the maternal role as measured during the first six months after birth.

During the transition to parenthood, many studies have shown that marital satisfaction declines for both spouses (Belsky, 1990; Belsky & Pensky, 1988; Belsky, Spanier & Rovine, 1983). Belsky et al. (1983) found that marital quality and functioning declines modestly, but highly reliably from the last trimester of pregnancy to nine months postpartum.

However, an analysis of individual differences revealed little change in overall comparative marital quality for each couple throughout the study period. Similarly, Belsky and Pensky (1988) demonstrated that marriages that appear to be functioning well before the first child's birth continue to look that way during the postnatal period. Conversely, those spouses that expressed great dissatisfaction with the functioning of their marriages during the prenatal period were significantly more likely to feel dissatisfied after their child's birth.

Thus, the transition to parenthood seems to bring about a decline in the degree of an individual's marital satisfaction. However, the rank order of individual partners and couples seems to remain the same. Those couples who expressed greater satisfaction in their marriages before their child's birth continued to be those most satisfied during the postnatal period (Belsky & Pensky, 1988).

The most frequently given reason for the effect of children on marital satisfaction is that "they decrease the amount of time that couples spend together and affect adversely the nature of their interactions" (Belsky, 1990). Parents spend more time interacting with their children than with each other and thus communicate less frequently.

Anderson, Russell and Schumm (1983) found that the principal reason for women's dissatisfaction with their marriages was that they had less time to discuss issues and communicate in general with their spouse.

At the same time that couples are communicating less, conflict between spouses is increasing (Belsky et al., 1983; Belsky & Rovine, 1990; Cowan et al., 1985). Cowan et al. (1985) suggest that a first child may have different effects on men's and women's sense of themselves. After the arrival of the first child, a new mother's sense of herself as a parent was found to greatly increase while her sense of herself as a partner to her husband decreased. In addition, many new mothers made a radical shift from the realm of work and career to home. A man's sense of himself as a parent developed more gradually putting him in touch initially with his role of financial provider for his family. Many men became quite involved with their children's birth and early care, but they did not become as involved as they had anticipated during their children's first year of life. Moreover, the men's sense of themselves as partners to their wives was found to decrease.

Cowan et al. (1985) hypothesized that "intrapersonal and interpersonal conflicts stimulated by these growing differences between partners begin to have a significant impact on the marriage" (p. 463). These researchers investigated possible correlates between a decline in marital satisfaction from pregnancy to18-months postpartum. For both husbands and wives, lowered marital satisfaction was only significantly related to increased conflict and disagreement in their relationship.

According to Bell (1984), marital conflict and difference only lead to difficulty when a couple's ability to problem solve is ineffective. Belsky (1990) found that couples

who had difficulties communicating with each other prenatally were those most likely to experience conflict about childrearing. In the view of Cowan et al. (1985)

> it is not merely a growing difference and rising conflict that determines the quality of their marriage. Rather, it is how effectively parents learn to work together to meet these challenging changes that differentiates couples who adapt well and those who experience distress during their transitions to parenthood. (p.477).

As most new parents are physically and emotionally drained, is seems particularly important for the couple to hone their abilities to communicate well and effectively problem solve before the baby's arrival.

In a later study, Cowan and Cowan (1988) found further support for the view that a couple's ability to communicate well and come to a consensus about issues impacts on postnatal marital adaptation. Ninety percent of the new parents in their study reported an increase in marital conflict and disagreement during the two-year period from the third trimester of pregnancy to 18-months postpartum. Both husbands and wives viewed the division of labor in the family as the most important issue leading to marital conflict. A couple's satisfaction with their roles in the marriage relied upon whether and how family tasks were discussed. "Some couples noted that with more issues to disagree about and less time available, they had become more efficient and effective problem solvers" (Cowan and Cowan, 1988, p.131).

Levy-Shiff (1994) focused her investigation of postnatal marital adaptation on childcare as it is "probably the most problematic and important area of family reorganization" (p.59). For both husbands and wives, the level of paternal involvement with their baby was the most powerful predictor of their marital satisfaction. When

fathers were involved in the care of their infants, both mothers and fathers experienced a more limited decrease in their overall marital satisfaction.

Paternal involvement with the baby contributes to better postnatal adaptation for several reasons. First, the husband lessens the amount of domestic work for his wife creating the potential for them to share in more joint activities (Levy-Shiff, 1994). However, it is not only the decrease in work that is important. Women respond negatively to the "absence of equity and feelings of sharing and closeness" (Levy-Shiff, 1990, p. 59) with their husbands. This implies that a woman views her husband's interest and support in their child as an expression of his love for the woman herself (Levy-Schiff, 1990). In addition, paternal involvement may increase the father's empathy of his wife's experience of caring for their infant and his understanding of the reasons she has less time to spend with him. Finally, a father who participates in the care of his infant may feel less like an outsider in relation to the mother-infant dyad (Levy-Shiff, 1990).

As many researchers have documented, the strongest predictor of the postbirth marital adaptation seems to be the quality of the prebirth relationship (Belsky, 1990; Belsky & Pensky, 1988; Belsky, Spanier & Rovine, 1983). Building upon these findings, Heinicke and Guthrie (1992) postulated that there would be different patterns of prebirth marital adaptation that would be associated with greater positive family development at two years postpartum. The quality of family development was then evaluated by assessing the child's expectation that his/her needs would be met, the parents' responsiveness to the child's needs, the child's sense of autonomy, and the parent's capacity to foster effective autonomy in the child.

Three patterns of marital adaptation were found to be associated with greater positive family development (Heinicke & Guthrie, 1992). As would be expected, those couples who had a strong marriage during the prenatal period and whose marital quality remained consistently high during the postnatal period had a more positive family development. In addition, those couples whose marital relationship improved after the birth of their baby were found to have greater positive family development. Furthermore, those couples whose marital quality initially decreased from prebirth levels and then increased over the 24-month period were reported as having more positive family development. According to Heinicke and Guthrie (1992), these findings support their assertion that couples who achieve a balance between "positive mutuality and each partner's autonomous individual development are likely to model such developments in their children and to have the resources to respond specifically to the needs of the infant and enhance their child's autonomy (p. 125). Indeed, Diamond, Heinicke and Mintz (1996) found that couples in which the fathers and mothers were more individuated from their respective families of origin and who were more individuated as a couple tended to have children with a higher expectation of being cared for and a higher sense of self at both six and 12 months.

Especially relevant to the present study, Heinicke and Guthrie's (1992) results highlight the importance of a couple's ability to express and resolve negative affect in the context of coming to a consensus about disagreements to both good marital functioning and, consequently, parenting (Heinicke & Guthrie, 1992). This latter point is given particular support by the finding that marital quality which initially decreased and then increased led to a positive outcome for the family's development. For couples whose

marital quality followed the decrease-increase pattern, the birth of their child seems to have initially stressed their positive prenatal connection to one another. However, these couples proved to have the inner resources necessary to work through the stressful transition of becoming a family and reestablish a positive, yet forever transformed, connection to one another (Heinicke &Guthrie, 1992).

In a more recent study, Heinicke and Guthrie (1996) predicted that couples who could confront, discuss, and resolve a significant marital issue during the prenatal period would maintain a consistently high level or demonstrate an increase in their positive postbirth marital adaptation. Using the prebirth marital assessment as a baseline, they evaluated each couple's adaptation in comparison to the rest of the sample, and determined whether it consistently increased, consistently decreased, decreased then increased, or increased then decreased. Couples were asked to discuss a significant marital issue, express their feelings about it, and reach some consensus about how it should be handled.

The results indicate that couples who resolved the prebirth marital interaction conflict were consistently high or increased in their postnatal marital adaptation. Those who could not resolve the marital issues were consistently low or had decreased in their marital adaptation in the two years following the birth of their child. Positive patterns of postnatal marital adaptation developed whether the premarital resolution of the issues had been reached by an ongoing agreement or in the context of the expression of intense affect. The expression of personalized criticisms could be part of the process that eventually led to a resolution of the issues (Heinicke & Guthrie, 1996).

Further analysis revealed that couples who decreased in their postnatal adaptation tended to withdraw from efforts at conflict resolution in the prebirth marital interaction. In comparison, those couples who did not confront issues in the prebirth marital interaction tended to have a consistently low postnatal marital adaptation. It was particularly the husband's withdrawal or off-task behavior (remarks that did not address the issue posed) and his negative, as opposed to positive, behavior that reflected the absence of a positive resolution.

According to Heinicke and Guthrie (1996), a couple's ability to confront meaningful unresolved issues, to express as well as regulate negative feelings towards one's spouse, and to come to a resolution would seem to be a reliable indicator as to how they adapt to each other and respond to the ongoing challenge of resolving issues pertaining to the care of their infant. Furthermore, Heinicke and Guthrie (1996) stress the importance of the couple's ability to confront and resolve emotionally laden issues as a positive influence on the development of their child's sense of security and autonomy.

Given the above findings, one would assume that a woman who feels secure in her ability to discuss ideas and resolve issues with her husband prenatally may anticipate being able to communicate with her spouse after the birth of their child. During pregnancy, she may feel more realistically confident in her ability to care for her child because she knows that she will not be parenting alone. She will be able to turn to her husband to discuss and come to a consensus about issues that arise as they both make the transition to parenthood.

The Nature of Social Support

Social support has been defined as information that leads an individual to believe that she is cared for and loved, esteemed and valued, and a member of a network of communication and mutual obligation (Cobb, 1976). An individual's social support network consists of those people who participate in activities and exchanges of an emotional and/or material nature with him or her (Cochran & Brassard, 1979, Crockenberg, 1981; Weinraub, Brooks & Lewis, 1977).

Research has shown that adequate social support makes developmental transitions easier and mitigates the effect of stressful life events, including the recovery from surgery (Egbert, Battit, Welch & Bartlett, 1964), the ability to cope well with chronic asthma (de Araujo, van Arsdel, Holmes & Dudley, 1973) and job termination (Cobb, 1974) as well as the physiological response to pregnancy and the emotional transition to motherhood (Crockenberg, 1981; Nuckolls, Casel & Kaplan, 1972). Indeed, Nuckolls et al. (1972) hypothesized that prenatal level of stress would be related to physiological complications during pregnancy. The results indicated that for women experiencing high levels of stress, a solid marital relationship and support from family members were associated were lower complication rates.

Gottlieb and Pancer (1988) propose that there are four types of support necessary to meet a couple's psychosocial and practical needs during the transition to parenthood. The first type is emotional support, which refers to network members' "expressions of attachment to and esteem for the individual that are typically communicated in confiding interactions that foster the ventilation of feelings and insecurities in particular" (Gottlieb & Pancer, 1988, p. 241). The second type of support

is cognitive guidance, which consists of the network members' "advice, counsel, and normative information about the individual's handling of his or her situation or about his or her plans for handling situations" (Gottlieb & Pancer, 1988, p.241). Tangible aid, the third type of support, consists of personal services and financial resources that are given by network members without any cost to the individual receiving them (Gottlieb & Pancer, 1988). The fourth type of support, coherence support, refers to maintaining or increasing the couple's confidence that they will not be overwhelmed by the changes brought by "the transition to parenthood and that these changes will be accommodated both within their personal life courses and in their marital relationship" (Gottlieb & Pancer, 1988, p.242). Ideally, couples should be the recipients of these four types of support, to varying degrees, from the time that they first consider having a child until their pattern of functioning as a young family has stabilized (Gottlieb & Pancer, 1988).

Several investigators (Belsky & Rovine, 1984; Crockenberg, 1981; Gottlieb & Panner, 1988; McCannell, 1987; Richardson & Kagan, 1979) have explored the changes that occur in social relationships during the transition to motherhood and the role that social networks play in facilitating postnatal adjustment. In the Richardson and Kagan (1979) study, new mothers reported dramatic breaks with some network members, a gradual drifting apart from others, and increased contact and more closeness with old friends who were also parents. Similarly, Belsky and Rovine (1984) found that new parents significantly increased their contact with other parents of young children during the first postpartum year. These findings suggest that the availability of similarly situated people is important to new mothers as their shared experience provides social comparisons (McCannell, 1987).

Gottlieb and Pancer (1988) assert that new parents may not have to develop new friendships to be included in their social networks if they can simply place more emphasis on parental roles and interests that they share with people who are already part of their social support network. Therefore, couples who begin to have children at approximately the same time as do their close friends are developing multidimensional ties with their existing network members, minimizing the need to develop new relationships to support them in their parenting role. Conversely, new relationships that are based primarily on shared parental roles may be the least gratifying for new parents "because their very concentration of parenting issues threatens to submerge other valued identities of the partners" (Gottlieb & Pancer, 1988, p. 240).

In addition, Belsky and Rovine (1984) found that first-time parents received more emotional support from family members than did parents having later-born children. Many first-time parents also reported feeling closer to their respective families during the transition to parenthood than they had before the birth of their infant. This was especially true for new mothers. The transition to parenthood seems to present an opportunity to heal or rekindle certain family relationships (Richardson & Kagan, 1979).

Furthermore, physical proximity to grandparents did not influence the quantity of emotional and material support received by new parents (Belsky & Rovine, 1984). Couples who lived close to their parents saw them more, but did not receive any more support than couples who lived at a distance. Close physical proximity to grandparents may not always be beneficial to new parents; some grandparents may interfere with how the couple is choosing to raise their child, leading to conflict within the extended family (McCannell, 1987).

Belsky and Rovine's (1984) study also revealed that couples who regularly spent time with their family and friends during the third trimester of pregnancy tended to continue this level of contact during the first nine month's of the baby's life. Belsky et al. (1983) believe that "a pattern of constancy in the face of change characterized the development of social network contact across the transition to parenthood " (p.461).

In the postnatal period, social support is particularly useful to a new mother as it lessens her share of competing tasks, allowing her to spend more time parenting her infant. Crockenberg (1981) proposed that the availability of social support to new mothers would increase the likelihood of sensitive and consistent mothering, particularly when infants were highly irritable. The findings indicated that the amount and quality of the support provided by the new mother's husband, family, friends and community contacts at 3-months postpartum was the strongest predictor of secure mother-infant attachment at 12-months, especially for mothers with irritable babies.

As Crockenberg (1981) points out, new mothers who are the recipients of affective and material support from their support network are apt to be "less harried, feel less overwhelmed, have fewer competing demands on their time, and as a consequence are more available to their babies" (p.863). Furthermore, a new mother who receives adequate social support may develop maternal confidence that is based in actual experiences with her infant (Crockenberg, 1988).

Crockenberg (1988) further suggests that social support may facilitate maternal adjustment in the postnatal period by impacting on how the new mother internally responds to a stressful event. "Noninstrumental social support may intervene between the experience of a stressful event and behavior by helping the individual develop effective

and appropriate strategies for dealing with the event "(Crockenberg, 1988, pp.144-5). For example, a new mother may gain confidence and competence in her ability to take care of her baby if those individuals in her social support network are telling her that she is doing a good job with her child. Furthermore, if these confirming messages are coupled with childcare suggestions, the new mother may continue to develop a set of skills that will increase her competence as a caregiver and "allow her to generate from within the message that she is competent" (Crockenberg, 1988, p.145).

Intimate social support from the husband is extremely important to both a woman's psychological adjustment to pregnancy and motherhood (Grossman, Eichler & Winnickoff, 1980). As discussed in the previous section, expectant couples in strong marriages tend to experience less difficulty during the transition to parenthood, and this finding is also supported by the literature of social support. During the postnatal period, mothers often depend on their husbands for both emotional support and help in the day-to-day job of parenting. In particular, mothers of young children have been found to rely heavily on their husbands' support when making childcare decisions (Leventhal-Belfer, Cowan & Cowan, 1992). When children were six, 18, and 42 months old, mothers who were more satisfied with the support they received from their spouses for their childcare decisions and responsibilities were more satisfied with their actual childcare arrangements (Leventhal-Belfer, Cowan & Cowan, 1992).

Intimate social support plays a very crucial role for new mothers whose early experiences of being parented were less than optimal. Research (Crockenberg, 1987; Quinton & Rutter, 1985) indicates that the impact of a woman's childhood experiences on her capacity to function as a competent caregiver may be mediated by current support

from a spouse or partner. Quinton and Rutter (1985) compared the parenting abilities of women who spent part of their childhood in institutions to those who were reared by their own families. They found that women raised in institutions were just as likely to demonstrate adequate parenting abilities as the control group if they had supportive spouses. However, as marriage is the nearest adult equivalent of the early parent-child relationship (Dicks, 1963) women raised in institutions were less likely to be in stable, supportive marriages than were women in the control group (Quinton & Rutter, 1985).

The quality of a woman's current social support may significantly modulate the influence of rejection during childhood. Crockenberg (1987) studied the factors contributing to the expression of anger toward and punitive control of two-year old toddlers by their adolescent mothers. When adolescent mothers experienced both rejection during childhood and low current support from their partners, they tended to express high levels of anger and be quite punitive towards their two-year old children. In contrast, when adolescent mothers experienced rejection during childhood and high current support from their partners, they were significantly less angry and punitive with their toddlers than the mothers who experienced low partner support. Crockenberg (1987) concludes that these findings are consistent with "a more fluid concept of development—early experience has a role in the way mothers care for their children but not necessarily a determining role. Current life circumstances, especially the social support available to the mother, are also important" (p.973).

In contrast to an extensive literature relating to high-risk samples, research investigating the connection between social support and maternal behavior in low-risk samples is limited. In the studies that have been conducted, investigators report findings

that have much in common to those with infants with special needs (Affleck, Tennen, Allen & Gershman, 1986; Boukydis, Lester, &Hoffmann, 1977; Crnic, Greenberg & Slough, 1986; Crockenberg & McCluskey, 1986; Dunst & Trivette, 1986; Glaser, 1987), low-income families (Feiring & Taylor, 1982; Longfellow, Zelkowitz, Sauders & Belle, 1979), adolescent mothers (Crockenberg, 1987; Lee & Colletta, 1983; Levine, Garcia-Coll & Oh, 1985; Mercer, Hackley & Bostrom, 1984; Unger & Wandersman ,1985), single-parent families (Flesock, 1985; Weinraub & Wolf, 1983), and abusing parents (Gaudin & Pollane, 1983; Newberger, Reed, Daniel, Hyde & Kotelchuck, 1977; Polansky, Chalmers, Buttenweiser & Williams, 1979; Turner & Avison ,1985). Social support in both low-risk and high-risk samples is "positively associated with mothers' emotional well-being and with sensitive and responsive maternal behavior (Crockenberg, 1988, p. 160).

Social support also plays an extremely important role in facilitating the development of maternal self-esteem and responsiveness. Shea and Tronick (1982) examined the predictors of maternal self-esteem during early infancy. In a sample of 30 healthy, low-risk, mother-infant pairs, they investigated the woman's confidence in her ability to mother her baby during the first several days after birth and at four-weeks postpartum. During the neonatal period, family support accounted for 30% of the variance in the new mothers' self-esteem, after differences associated with newborn health were taken into consideration. The new mothers who communicated receiving more support from their families also had significantly greater maternal self-esteem than those new mothers who received less support from their families. At four-weeks postpartum, family support on its own accounted for 52% of the variance in the new

mother's self-esteem. In addition, a positive correlation was found between maternal self-esteem and how a woman related to her newborn. New mothers who reported greater self-esteem behavior expressed more positive affect and acted more confidently when interacting with their newborns. These same mothers were also more sensitive and responsive to their infants' cues and vocalizations.

Leung (1985) reported similar findings with a sample of 35 new Chinese mothers. New mothers who reported receiving more family support experienced an easier transition to motherhood than did those mothers who received less support from their families. In particular, women receiving greater family support experienced less anxiety and depressive feelings than did women who were not the recipients of such support. It is noteworthy that the women's husbands were found to be the most important source of emotional empathic understanding and assistance in the day-to-day job of parenting. Women who did not receive adequate emotional support and instrumental assistance from their husbands were found to be significantly more depressed than were those receiving support from their husbands.

Levitt, Weber and Clark's (1986) study of 43 mothers and their 13-month old infants corroborates Leung's (1985) findings concerning the importance of support from the husband for the mother's emotional well-being in intact families. Furthermore, Levitt et al.'s (1986) study extends the impact of marital support to differences in the infant-mother relationship. Emotional support and assistance in the day-to-day job of parenting from the husband was associated with greater life satisfaction and more positive maternal affect. This was not the case for any other family members. In addition, emotional and practical support from mothers' friends was associated with lower life satisfaction and

more negative maternal affect. This finding suggests that new mothers may turn to their friends to provide support when it is not forthcoming from their husbands, but that the former is not a satisfactory substitution for the latter (Crockenberg, 1988).

The findings did not demonstrate a significant relationship between support from the spouse and the infant's attachment to his or her mother. However, the quality of a mother's affect when interacting with her infant was related to the infant's security of attachment as measured by the Strange Situation (Ainsworth et al., 1978). The mothers of securely attached infants expressed more positive affect than did mothers of anxiously or resistantly attached infants. As the quality of marital support is positively associated with the quality of maternal affect, this latter finding suggests that support from the husband may indirectly effect infant social and emotional development as mediated through the mother's behavior (Crockenberg, 1988).

In this regard, new mothers who receive family support have been shown to have significantly higher maternal self-esteem than new mothers who were not the recipients of such support (Shea & Tronick, 1982). In turn, the new mothers who had higher maternal self-esteem were found to express more positive affect and act more confidently when interacting with their newborns. They also proved to be more sensitive and responsive to their infants' cues. Leung (1985) and Levitt et al. (1986) studies provide evidence that the quality of a husband's emotional and practical support significantly impact on a new mother's emotional well-being and the quality of her maternal affect. The quality of maternal affect was then shown to influence how the mother responded to her infant's dependency needs and bids for autonomy as measured by the infant's security of attachment at 13-months (Levitt et al., 1986).

If this is the case during the postnatal period, the quality of the prenatal marriage may significantly impact the pregnant woman's level of confidence in her maternal role, the quality of her affective representation of her fetus, and her ability to fantasize about her present relationship with her fetus and future relationship with her newborn. Furthermore, the quality of the prenatal marriage, by significantly influencing a pregnant woman's level of maternal confidence, may affect her ability to redefine her needs in light of those of her infant. Specifically, her level of maternal confidence may allow her to planfully think about the postnatal period and to effectively use her social support network to meet both her infant's and her own needs. Consequently, she may report feeling satisfied with the help that she is receiving during the postnatal period.

Overview

The preceding literature review leads directly to the following hypotheses, which are the subject of this study:

(1) A pregnant woman's total score on a measure of marital quality (Spanier Dyadic Marital Scale, Spanier, 1976) will positively predict to her ability to affectively represent her fetus positively. Overall, a woman in a strong marriage will tend to represent her fetus with positive affect. A woman in a difficult marriage will be less likely to represent her fetus with predominantly positive affect.

(2) A pregnant woman's total score on the Spanier Dyadic Marital Scale (Spanier, 1976) will positively predict to her ability to fantasize about having a close and warm prenatal relationship with her fetus and the development of a pleasurable, intimate and mutual relationship with her baby. Overall, a woman in a strong marriage will tend to

envision a close and tender prenatal relationship with her fetus and the development of an enjoyable, intimate and mutual relationship with her baby. A woman in a difficult marriage will tend to envision a more distant or less connected relationship with her fetus and the development of the baby's autonomous capacities and growth away from her after birth.

(3) A pregnant woman's total score on the Spanier Dyadic Marital Scale (Spanier, 1976) will be related to her ability to feel realistically confident and competent in her maternal role. Overall, a woman in a strong marriage will tend to envision herself as a realistically confident caregiver as assessed during the third trimester of pregnancy. Women in difficult marriages will be more likely to undervalue or overvalue themselves as caregivers and thus unrealistically envision their level of competency.

(4) A pregnant woman's ability to envision herself as a competent caregiver will be related to her feelings about her social support network at 14-months postpartum. Overall, a woman who envisions herself as a realistically confident caregiver as measured during the third trimester of pregnancy will tend to be more satisfied with her social support network as assessed at 14-months postpartum. More specifically, a pregnant woman who feels realistically competent in the maternal role will tend to planfully think about the postnatal period and better utilize her social support network. She will be receiving more help from her husband, family, friends, babysitter and professionals and will be more satisfied with the help she is receiving when her infant is 14-months old. In contrast, women who undervalue or overvalue themselves as caregivers will be unable to planfully think about the postbirth period and be prevented from making good use of their social support networks. These women will be receiving less help from their husbands,

family, friends and professionals and will be less satisfied with the help they are receiving when their infants are 14-months old.

(5) A pregnant woman's ability to represent her fetus with positive affect will be positively related to her feelings about her social support system at 14-months postpartum. A pregnant woman who represents her fetus with predominantly positive affect will be more empathic and emotionally available to her fetus. Such a woman will more fully acknowledge her future baby's needs during the third trimester and consequently make better use of her social support network to assist her in meeting her infant's needs. She will be receiving more help from her social support network and will be more satisfied with the help that she is receiving when her infant is 14-months old.

It is the purpose of this study to test these hypotheses.

Chapter 3

Method

Subjects

The subjects for this study were 37 primaparous, married, middle-class women between the ages of 24 and 39. They were a part of a larger sample of women (N=66) who were followed longitudinally from their third trimester of pregnancy through their child's 28-month of life. Eighty-nine percent of the women of the total sample had completed an undergraduate degree and 49% had undertaken or completed a graduate program. Ninety-six percent of the total sample were professionals or employed in the arts or business. The subjects were recruited by research assistants through Lamaze child-birth classes, or responded to fliers placed in midwives' offices, exercise studios and maternity stores, or to advertisements placed in local parenting newspapers. The women were paid $40 for participating in the pregnancy phase of the study and $80 for their postpartum participation.

Procedure

Women were interviewed twice and administered psychological tests once during their third trimester of pregnancy. A month after their due date, women were telephoned to learn about how they and their newborn were faring as well as the specifics of their labor and delivery. Women returned to the lab when their children were 4, 10, 14 and 28 months old. At each visit, the mother was both interviewed and videotaped with her

infant and then toddler. The data for the present study was collected during the first pregnancy visit and during the third postpartum visit when the infant was 14 months old.

The first pregnancy visit

During the initial visit to the lab, a graduate student in Clinical Psychology gave subjects a general introduction to the pregnancy, infancy and toddler phases of the study. The lab is comprised of two adjoining rooms at City College that are quiet, comfortable and pleasantly decorated. Once the whole project was reviewed, subjects were asked to read one copy of a consent form and to sign and date two copies. After the graduate assistant signed and dated both copies, one copy was given to the subject for her own records. Women were then asked some general background questions about themselves and their husbands as well as to complete a questionnaire concerning physical symptoms experienced during the past month (SCL 90-R, Derogatis, 1979). The graduate student then administered the Pregnancy Interview (Slade, Grunebaum, Huganir & Reeves, 1986). At the conclusion of this interview, the women were given several questionnaires to take home, complete and then return to the lab within the following week. These included the Loevinger Ego Development measure (Loevinger, 1979), the Dyadic Adjustment Scale (Spanier, 1976) and the Infant Characteristics Questionnaire (Bates, Freeland & Loundsbury, 1979).

The third postpartum visit

During this visit, each mother and infant was administered the Strange Situation (Ainsworth, Blehar, Waters & Wall, 1978) procedure by two graduate students in Clinical Psychology. While one student explained and videotaped the procedure, the other student served as the stranger to both mother and child. After the completion of this procedure,

one of the graduate students played with the child in an adjoining room while the other administered the Adult Attachment Interview (George, Kaplan & Main, 1985) to the mother. For some infants, the Strange Situation proved too stressful for them to endure another separation from their mother. In these cases, the mother was asked to return to the lab within two weeks without her child to be interviewed. At the completion of the interview, each mother was given ample time to process any thoughts and feelings which may have been disturbing or distracting. The mother was then administered the Social Support Interview (Crockenberg, 1981) and the Caretaking Patterns Interview (Slade, 1987). Finally, the women were given questionnaires to take home, complete and return to the lab within the following week. These included the Dyadic Adjustment Scale (Spanier, 1976) and the Infant Characteristics Questionnaire (Bates, Freeland & Loundsbury, 1979).

Measures

The Pregnancy Interview (PI)

The PI (Slade, Grunebaum, Huganir & Reeves, 1986) is a 43 question, semi-structured interview that assesses a woman's emotional experience of her first pregnancy. Dr. Arietta Slade and three graduate students in Clinical Psychology at City College developed it after interviewing a small group of pregnant women and an in-depth reading of the pertinent literature. Originally, the interview consisted of only 39 questions. However, after administering the interview to another group of pregnant women, Dr. Slade and a second group of graduate students determined that the questions were not pulling for a woman's positive experiences of her pregnancy nor for difficult aspects of her

marriage. Accordingly, one question was reworded to ask directly for good feelings experienced during pregnancy and several questions were added to get a sense of how the woman and her husband negotiate conflicts.

The PI lasts approximately 90 minutes. It asks a woman to reflect on why she wanted to have a child and to describe both her and her husband's affects upon learning of her pregnancy. Women are also asked about the kinds of lifestyle changes they have made and how they feel about making these changes. The interview asks women to describe emotionally difficult moments during their pregnancy and how they have dealt with these feelings as well as to describe positive feelings about their experience.

Many questions tap a woman's prenatal affective representations of her fetus. For example, she is asked to describe the nature of her present relationship to her fetus and to imagine what her baby will be like. Questions also focus on capturing a woman's prenatal representations of herself as a caregiver. In particular, they tap whether the woman can identify with and respond to the needs of her fetus now and baby in the near future. In order to get a sense of a woman's prenatal representation of her relationship with her baby, she is asked to imagine the most pleasurable and difficult times with her newborn.

Several questions address a woman's feelings about her own mother, as she becomes a parent herself. Specifically, she is asked to reflect upon how her relationship with her own mother has affected her feelings during pregnancy and her sense of how she will parent her child. A series of questions follow concerning the woman's marriage. She is asked about the changing nature of her relationship with her husband, her expectations of his involvement with their baby, and the process by which they resolve their conflicts. Finally, a woman is asked about her feelings about her body and appearance during

pregnancy, her husband's experience of these changes, and the relationship between her experience of her body growing up and her current experience.

Scoring of the Pregnancy Interview

The Pregnancy Interview Coding System (Slade et al., 1994) was developed to code verbatim transcripts of the PI. The coding system is divided into three main sections that include a woman's developing representations of her baby, her parental representations, and her state of mind (Slade et al., 1994). In the present study, only selected codes within the first and second sections will be used.

Developing Representations of the Baby

The four codes that comprise this section include Affective Tone, Degree of Elaboration of Prenatal Representation, Content of Prenatal Representation, and Quality of Relatedness. Affective Tone is rated for both a woman's prenatal representation of her fetus and her postnatal representation of her baby. In the present analysis, the affective tone of a woman's prenatal representation of her fetus and the quality of relatedness concerning her fantasies about her fetus and their relationship after birth will be used.

Affective Tone refers to the predominant affective quality of a woman's thoughts and feelings about her unborn baby (Slade et al., 1994). It is thought to be the most direct indicator of the quality of the pregnant woman's developing attachment to her child (Slade et al., 1994). Affective tone is determined by evaluating two components of a woman's narrative. First, one must consider the affective quality of the woman's representation of the fetus (Slade et al., 1994). For example, she may represent her fetus as "her buddy",

"playful", "responsive", "making his presence known", "very reactionary", or "disruptive." Second, one must consider the affective quality of the woman's fantasy about how the baby will fit into or change her life (Slade et al., 1994). For example, she may fantasize that the baby will be a "little dictator that suddenly comes into the house and tells you when you're going to be awake and when you're going to be asleep" or she may envision "the three of us, the baby and my husband and myself together playing or learning from what we've done together."

Affective Tone is scored along a nine-point scale that ranges from High Negative (1), to Neutral (5), to High Positive (9). Women whose affective representation of their fetus is overwhelming negative to predominantly negative will receive a score in the range of High Negative (1) to Low Negative (3). Some women express their negative thoughts and feelings about their fetus indirectly. They may either minimize their negativity by expressions of conflicted, flat affect or convey scorn and dismissal by seeming indifferent (Slade et al., 1994). These women are scored Constricted-Indifferent (4). Other women represent their fetus without any particularly positive or negative affect. Such a woman's responses are quite vague. She seems to prevent herself from developing an affective attachment to her unborn child "perhaps because of fear, character style or prior losses" (Slade et al., 1994, p.6). These women are scored Neutral (5). A score of (6) is assigned to a woman who expresses a limited range of positively tinged feelings about her fetus. Finally, women whose affective representation of their fetus is predominantly positive to overwhelmingly positive will receive a score in the range of Low Positive (7) to High Positive (9).

Quality of Relatedness refers to the object relationship quality of a woman's fantasies about her prenatal relationship with her fetus and her postnatal relationship with her newborn. For example, women may fantasize about breastfeeding in completely different ways. One woman may plan to breastfeed her baby, but emphasize her intention to introduce a bottle early and wean the baby from her breast. Another woman may look forward to developing a close, intimate relationship with her baby while breastfeeding. Quality of Relatedness is scored on a five point scale ranging from (1) High Independent, to (3) Mixed Independent/Intimate to (5) High Intimate.

Parental Representations

The three codes that comprise this section include Parental Confidence and Competence, Acceptance of Baby and Self-Needs, and Intensity of Interrole Conflict. For the purpose of this analysis, the code concerning a pregnant woman's confidence and competence in her maternal role will be utilized.

Parental Confidence and Competence refers to the extent that a pregnant woman can both acknowledge her limitations in the maternal role yet remain confident that she will be able to love and care for her child. A woman's score reflects the degree to which she is realistically confident of her ability to cope with the uncertainties inherent in motherhood (Slade et al., 1994). Realistic self confidence implies that a woman is able to experience some anxiety, use the anxiety constructively to make appropriate plans to cope, and remain flexible in her approach to problem solving as she does not yet know her baby (Slade et al., 1994). As well, realistic self confidence comes from the knowledge that she will be able to turn to other people for emotional and practical support in the day-to-day

job of mothering (Slade et al., 1994). Scores for Parental Confidence and Competence are assigned along a continuum ranging from a suboptimal level of confidence to an optimal level of confidence. The five point scale ranges from Lack of Confidence or Highly Overconfident (1), to Moderate Lack of Confidence or Moderately Overconfident (3), to Realistic Confidence (5). Each scale point below the optimal point of Realistic Competence (5) encompasses women who share the same degree of either lack of confidence or overconfidence. These women were assigned the same scale point as they were judged to be equidistant from the optimal point of Realistic Competence.

Pregnancy Interviews were coded by three raters who were trained to reliability by Dr. Arietta Slade. Reliability amongst the raters was established on a group of interviews. Then, interviews were coded independently with 25% double coded in order to check reliability. Disagreements amongst the coders were resolved by conference. The reliability coefficients for the scales are as follows: Affective Tone of Prenatal Representation of Fetus, Alpha =. 9364; Quality of Relatedness to Fetus, Alpha=. 8537; Parental Confidence and Competence, Alpha=. 9495.

The Dyadic Adjustment Scale

The Dyadic Adjustment Scale (Spanier, 1976) is a 32 item self-administered questionnaire that assesses the quality of the respondent's representation of his or her marriage or nonmarital cohabitating relationship. Spanier defines the term dyadic adjustment as "an ever-changing process with a qualitative dimension which can be evaluated at any point in time on a dimension from well adjusted to maladjusted" (Spanier, 1976, p.17). At the start of his study, Spanier (1976) hypothesized that five components

contributed to his definition of dyadic adjustment. These included: troublesome dyadic differences, interpersonal tensions and personal anxiety, dyadic satisfaction, dyadic cohesion, and consensus on matters of importance to dyadic functioning. However, after the thorough scale construction analysis described below, Spanier (1976) found that dyadic adjustment is comprised of four empirically verified components including: dyadic consensus, affectional expression, dyadic cohesion, and dyadic satisfaction.

In the present study, dyadic consensus refers to the pregnant woman's representation of how much she and her husband agree on issues such as financial matters, life philosophy, and household tasks that are essential to the functioning of their relationship. Affectional expression assesses the woman's representation of the couple's compatibility in expressing physical and emotional love for one another. Dyadic cohesion measures her representation of the couples' compatibility in sharing leisure time and the frequency with which they engage in pleasurable activities together. Dyadic satisfaction assesses the woman's representation of possible negative aspects of her marriage such as quarreling and leaving the house after a fight as well as her overall satisfaction with the relationship. The total scale score in which the four subscales are embedded will be utilized in the present study.

The Dyadic Adjustment Scale (1976) was normed on a sample of 218 white, married people of the working and middle classes living in central Pennsylvania and a sample of 94 recently divorced people living in Centre City, Pennsylvania. The nodal items were identified and then factor analyzed to measure their construct validity (Spanier, 1976). In addition to the factor analysis, construct validity was further assessed by correlating the Dyadic Adjustment Scale with the frequently used Locke-Wallace Marital

Adjustment Scale (1959). The correlations between the scales were significant at the .001 level for both the married sample (.86) and divorced sample (.88).

Reliability was determined for each of the four component scales as well as for the entire 32-item scale using Cronbach's Coefficient Alpha (1951). Alpha coefficients for the four component scales were as follows: Dyadic Consensus: .90, Dyadic Satisfaction: .94, Dyadic Cohesion: .84, and Affectional Expression: .73. The alpha coefficient for the entire scale was .96.

The measure's reliability and validity has been critically evaluated for use with various populations. Spanier and Thomason (1982) studied a sample of recently separated men and women from the same geographical area as Spanier's (1976) original study. Spanier and Thomason (1982) confirmed high reliability for the total scale and found the four subscale factors to be robust and account for 94 percent of the covariance among the 32 items. However, the subscale affiliation of each item in the sample of separated individuals did not perfectly replicate Spanier's earlier findings with married and divorced samples. Kurdek (1992) reconfirmed the scale's reliability and validity with a sample of married heterosexual couples and confirmed them with a sample of cohabiting, homosexual couples. Walker, Manion, Cloutier and Johnson (1992) found the scale reliable and valid in assessing marital distress among couple's with chronically ill children.

Since its development over 20 years ago, the Dyadic Adjustment Scale has been used by numerous researchers (Lauzon & Cyr, 1993; Northouse, Jeffs, Cracchiolo & Lampman, 1995; Peter, Hand & Wilke, 1993; Rowan, Compton & Rust, 1995; Zimmer, Belanger, Sabourin & Wright, 1993) in studies of married couples. For example, Rowan et al. (1995) used the scale to assess the relationship between measures of marital

satisfaction, self-actualization and empathy in couples. The scale has also been used to investigate factors relating to women and their husband's distress prior to the women's breast biopsy (Northhouse et al., 1995). Peter et al. (1993) studied the influence of an individual's marital relationship on the development and course of agoraphobia.

In order to be used internationally, the scale has been translated into several foreign languages. The French version was used in Canada to study the relationship between different styles of attachment and marital adjustment (Lapointe, Lussier, Sabourin &Wright, 1994), the influence of familial and extrafamilial stressors on mother-son and mother-daughter interactions (Bigras & La Freniere, 1994), and the effect of an infant's presence on the marital relationship (Bigras, La Freniere & Lacharite, 1991). The Spanish version was used to study the relationship among dyadic adjustment, social support, anxiety, and depression in parents of sons diagnosed with drug addiction and schizophrenia (Espina, Pumar, Bel Cortes & Azkarate, 1994). While the German version was used to explore the factors related to marital quality and stability in middle-aged couples (Brandtstaedter, Baltes-Goetz & Heil, 1990).

Scoring of the Dyadic Adjustment Scale

The scores for the entire 32 item Dyadic Adjustment Scale range from 0 to 151, with better marital relationships earning higher scores. The scores for the Dyadic Consensus subscale are based on 13 items and range from 0 to 65, with greater agreement on issues earning higher scores. The scores for the Affectional Expression subscale are based on four items and range from 0 to 12, with greater physical and emotional expression and greater compatibility in this area earning higher scores. The scores for the

Dyadic Satisfaction subscale are based on 10 items and range from 0 to 50, with fewer occurrence of negative aspects and greater overall satisfaction with the relationship earning higher scores. The scores for the Dyadic Cohesion subscale are based on five items and range from 0 to 24, with more time spent together on leisure time activities and greater compatibility in this area earning higher scores.

As a reference point for the current study, it is useful to note Spanier's (1976) total scale and subscale means and their standard deviations. The total scale mean for the entire sample (N=312) of married individuals (N=218) and divorced individuals (N=94) was 101.5 with a standard deviation of 28.3. The entire sample mean for the Dyadic Consensus subscale was 46.9 with a standard deviation of 12.1. The entire sample mean for the Affectional Expression subscale was 7.8 with a standard deviation of 3.0. The entire sample mean for the Dyadic Satisfaction subscale was 35.0 with a standard deviation of 11.8. Finally, the entire sample mean for the Dyadic Cohesion subscale was 11.8 with a standard deviation of 5.1.

Crockenberg Social Support Scale

The Crockenberg Social Support Scale (Crockenberg, 1981, 1987) is a brief, structured interview that measures a woman's subjective evaluation of the amount and kind of social support she receives and her satisfaction with that support. In the present study, women were asked to name all the people who were helping them at 14-months postpartum and to describe the type of support given by each person. The women were then asked to estimate how often they received help from each person named. Responses range from "almost every day" to "almost never." If a woman omitted listing her husband,

she was asked specifically about the help and support provided by her husband. Women were then asked to indicate how satisfied they were with the help each person named gave them. Responses range from "very satisfied" to "very dissatisfied." Scores were calculated by counting the number of people who helped either "almost every day" or "once or twice a week." If a woman was not "very satisfied" or "satisfied" with the help of each person counted, those people were not included in her final score.

Crockenberg (1981, 1987) utilized the Crockenberg Social Support Scale in research concerning non-normative samples of women and female adolescents. However, similar instruments (Belle, 1982; Procidano, 1983) measuring perceived social support have been developed and validated using normative samples. Belle's (1982) and Procidano's (1983) studies will provide support for the validity of the instrument being utilized in the present study. As the women in the current study were older and from a higher socioeconomic group than those in Crockenberg's studies, slight adjustments in administration were made with the permission of Susan Crockenberg, Ph.D.

Data Analysis

Hypotheses 1 and 2 concern the relationship between a pregnant woman's representation of her marriage and her fetus and baby after birth. Hypothesis 1 puts forth the idea that a pregnant woman in a strong marriage will tend to represent her fetus with positive affect. Hypothesis 2 states that a pregnant woman in a strong marriage will tend to envision a close and warm prenatal relationship with her fetus and the development of an enjoyable, intimate and mutual relationship with her baby. The proposed analysis for

both Hypotheses 1 and 2 is a Pearson correlation to test for a positive linear relationship. The power for a large effect size is estimated to be .90.

Hypothesis 3 expresses the idea that a pregnant woman in a strong marriage will be more realistically confident about her ability to care for her baby. Pregnant women in difficult marriages will be more likely to undervalue or overvalue themselves as caregivers and thus unrealistically envision their level of competency. The proposed analysis for Hypothesis 3 is a Pearson correlation to test for a positive linear relationship.

Hypothesis 4 theorizes that a pregnant woman who is able to realistically envision herself as a caregiver will planfully think about the postnatal period and better utilize her social support network. She will be receiving more help from her husband, family, friends, babysitter and professionals and will be more satisfied with the help that she is receiving when her infant is 14-months old. The proposed analysis for Hypothesis 4 is a Pearson correlation to test for a positive linear relationship.

Finally, Hypothesis 5 proposes the idea that a pregnant woman who represents her fetus with predominantly positive affect will be more empathic and emotionally available to her fetus. Such a woman will more fully acknowledge her future baby's needs during her third trimester and consequently make better use of her social support network to assist her in meeting her infant's needs. She will be receiving more help from her social support network and be more satisfied with the help she is receiving at 14-months postpartum. The proposed analysis for Hypothesis 5 is a Pearson correlation to test for a positive linear relationship.

Chapter 4

Results

This chapter begins with a summary of the demographic characteristics of the sample followed by a review of the study criteria and group composition. Preceding the examination of the quantitative results testing the five main hypotheses, descriptive statistics of the three measures in this study are presented. This chapter concludes with the review of the post hoc analyses.

Subjects

Thirty-seven women pregnant with their first child were included in this study. They were a subset of a larger sample of women (N=66) who were followed longitudinally from their third trimester of pregnancy through their child's 28-month of life. The women in this subset ranged in age from 24 to 39 years, with a mean age of 31 years. Overall, this was a predominantly white, highly educated, middle class sample of women. Only three of the women in this subset were not Caucasian. Eighty-four percent of the women had graduated from college, and 46 percent had begun or completed graduate training. The majority of the women worked as professionals, or in business, skilled service, or the arts. Thirty-four women were married to and three cohabiting with men who ranged in age from 25 to 50 years, with a mean age of 35 years. Their husbands or partners were also highly educated; 84 percent had graduated from college, and 51 percent had begun or completed graduate school. The length of time that these couples had been married or cohabiting ranged from nine months to 14 years, with a

median length of time of three years. Seventy-eight percent of the women had not been married before, fourteen percent had been married previously, and eight percent had never married. Seventy-three percent of these women's husbands or partners had not been married before, 19 percent had been married previously, and eight percent had never married. Four of the women had experienced a miscarriage prior to this pregnancy. Nineteen girls and 18 boys were delivered to the women in this subgroup. All the infants and mothers were in good health postnatally, with only minor problems reported.

Table 1

Group Composition

Subjects who Completed PI that could be Coded	Group A: PI, Dyadic Adjustment Scale & Social Support Scale	Group B: PI Quality of Relatedness Code, Dyadic Adjustment Scale & Social Support Scale
N= 58	N= 37	N=30

Study Criteria and Group Composition

In order to meet the criteria for this study, subjects must have been administered the Pregnancy Interview (PI) and have completed the Dyadic Adjustment Scale during the third trimester of pregnancy as well as have been administered the Social Support Interview at 14-months postpartum. All 66 women in the Pregnancy Project were administered the Pregnancy Interview during their initial visit to the lab. Due primarily to audiotape malfunction, only 58 women generated narratives that could be transcribed

and coded. Of these 58, 37 completed the Dyadic Adjustment Scale prenatally as well as the Social Support Interview during the postnatal period. Hypotheses 1, 3, 4 and 5 refer to analyses computed with data from these 37 subjects (referred to as Group A). The PI narratives of seven of these 37 subjects did not allow the coders to generate a Quality of Relatedness code for these seven women. The composition of Group B is somewhat smaller than Group A as it only includes the 30 subjects whose narratives generated a Quality of Relatedness code. Hypothesis 2 refers to the analysis calculated with the data from these 30 subjects.

Statistical Considerations and Descriptive Analyses of the Variables

In order to compute linear correlations between the Dyadic Adjustment Scale (Spanier, 1976) and the PI and those of the PI and Social Support Scale (Crockenberg, 1981; 1987), all of the scales must respond to linear interpretation. To facilitate the interpretability of the measures, one scale with an optimal scale point in the middle and not the apex was "folded over." The scale that was folded over was the Parental Competence and Confidence scale of the PI. Folding this scale over made linear correlations possible and allowed for greater accuracy in the interpretation of the measures.

Five two-tailed correlations were planned. The total score of the Dyadic Adjustment Scale was correlated with the three scales of the PI. Two of the three scales of the PI (Affective Tone of Prenatal Representation of the Fetus and Parental Confidence and Competence) were then correlated with the total score on the Social Support Scale. The p value for rejecting the null hypotheses was set at .05.

After the Parental Confidence and Competence scale of the PI was folded over, descriptive analyses of the predictor variable (Dyadic Adjustment Scale) and outcome variables (PI and Social Support Scale) were conducted. Two PI scales (Affective Tone of Prenatal Representation of the Fetus and Parental Confidence and Competence) served initially as outcome variables of quality of marital adaptation and then as predictor variables of satisfaction with social support. Descriptive statistics are presented in Tables 2 - 4. The mean, standard deviation, minimum and maximum scores, and degree of skewness are included for each variable. In addition, the median will be reported for the Dyadic Adjustment Scale.

Table 2 presents descriptive statistics of the Dyadic Adjustment Scale. In order to meet criteria for normal distribution, the skewness value of a measure should fall between -1.5 and +1.5, and the mean and the median should be identical. The results indicate that the skewness level of the Dyadic Adjustment Scale slightly exceeded the –1.5 level. However, the median of 118 is fairly close to the reported mean of 114.87. Overall, this measure is reasonably consistent with a normal distribution and can be analyzed with correlational statistics.

Table 2

Descriptive Statistics for the Dyadic Adjustment Scale (N=37)

Dyadic Adjustment Scale	Mean	Median	SD	Skewness	Minimum Value	Maximum Value
Total Score	**114.87**	**118.00**	**15.78**	**-1.63**	**57.00**	**140.00**

Table 3 reports the descriptive statistics on the three scales of the Pregnancy Interview (PI). The skewness values for these variables fall within the –1.5 to +1.5 range; this suggests that the scores are consistent with a normally distributed sample and thus are appropriate for correlational analyses. Furthermore, the minimum and maximum values reported provide evidence that the continuum of scores available were used to code subjects' responses.

Table 3

Descriptive Statistics of Pregnancy Interview Variables

Pregnancy Interview	Mean	SD	Skewness	Minimum Value	Maximum Value
Prenatal Affective Tone (N=37)	5.19	1.96	-.19	2.00	8.00
Quality of Relatedness (N=30)	3.00	1.08	.00	1.00	5.00
Parental Confidence & Compet. (N=37)	3.57	.93	.12	2.00	5.00

Table 4 presents the descriptive statistics for the Social Support Scale. The skewness value of this variable falls within the +1.5 to –1.5 range, indicating that the scores on this measure are consistent with a normal distribution and are appropriate for correlational analyses.

Table 4

Descriptive Statistics of Social Support Scale (N=37)

Social Support Scale	Mean	SD	Skewness	Minimum Score	Maximum Score
Total Number of People Providing Satisfactory Support	4.16	1.54	.05	1.00	7.00

Testing the Main Hypotheses

Hypothesis 1) A pregnant woman's total score on a measure of marital adaptation (Spanier Dyadic Marital Scale) will positively predict to her ability to affectively represent her fetus positively.

A two-tailed correlation was calculated using the total score of the Spanier Dyadic Marital Scale and the Pregnancy Interview variable Affective Tone of the Prenatal Representation. All results of correlations utilizing the Spanier Dyadic Marital Scale are presented in Table 5. A moderately positive, statistically significant result was found to support the hypothesis (r=. 43, p. =. 009). Specifically, this finding suggests that a pregnant woman in a strong marriage will tend to represent her fetus with positive affect. Conversely, a woman in a difficult marriage will be less likely to represent her fetus with predominantly positive affect.

Table 5

Correlations between the Spanier Dyadic Marital Scale and The Pregnancy Interview

The Pregnancy Interview Variables

Spanier Dyadic Marital Scale	Prenatal Affective Tone (N=37)	Quality of Relatedness (N=30)	Parental Confidence and Competence (N=37)
Total Score	**.43**** **(37)** **P=.009**	.22 (30) P=.25	**.38*** **(37)** **P=.02**

+ p < .10 *p < .05 **p < .01 ***p < .001

Hypothesis 2) A pregnant woman's total score on the Spanier Dyadic Marital Scale will positively predict to her ability to fantasize about having a close and warm prenatal relationship with her fetus and the development of a pleasurable, intimate and mutual relationship with her baby. Overall, a woman in a strong marriage will tend to envision a close and tender prenatal relationship with her fetus and the development of an enjoyable, intimate and mutual relationship with her baby. A woman in a difficult marriage will tend to envision a more distant or less connected relationship with her fetus and the development of the baby's autonomous capacities and growth away from her after birth.

A two-tailed correlation was computed using the total score of the Spanier Dyadic Marital Scale and the Pregnancy Interview variable Quality of Relatedness. As mentioned above, only 30 subjects were included in this analysis, as seven of the 37 subjects completing the PI did not generate a Quality of Relatedness code. While the

direction of the correlation is positive, the magnitude is weak (r = .22). This non-significant finding (p = .25) fails to support the hypothesis that the quality of a pregnant woman's marital adaptation would be positively related to her ability to fantasize about a prenatal relationship with her fetus and the development of a relationship with her baby after birth.

Hypothesis 3) A pregnant woman's total score on the Spanier Dyadic Marital Scale will be related to her ability to feel realistically confident and competent in her maternal role.

A two-tailed correlation was calculated using the total score of the Spanier Dyadic Marital Scale and the Pregnancy Interview variable Parental Confidence and Competence. A moderately positive, statistically significant result was found to support the hypothesis (r =. 38, p. =. 02). Specifically, this finding suggests that a pregnant woman in a strong marriage will tend to envision herself as a realistically confident caregiver as assessed during the third trimester of pregnancy. Furthermore, this result suggests that women in difficult marriages will be more likely to undervalue or overvalue themselves as caregivers and thus unrealistically envision their level of competency.

Hypothesis 4) A pregnant woman's ability to envision herself as a competent caregiver will be related to her feelings about her social support network at 14-months postpartum. Overall, a pregnant woman who is able to realistically envision herself as a caregiver will planfully think about the postnatal period and better utilize her social support network. She will be receiving more help from her husband, family, friends, babysitter, and professionals and will be more satisfied with the help that she is receiving when her infant is 14-months old. In contrast, women who undervalue or overvalue

themselves as caregivers will be unable to planfully think about the postbirth period and be prevented from making good use of their social support networks. These women will be receiving less help from their husbands, family, friends, and professionals and will be less satisfied with the help that they are receiving when their infants are 14-months old.

A two-tailed correlation was computed using the Pregnancy Interview variable Parental Confidence and Competence and the Crockenberg Social Support Scale. All results of correlations utilizing the Pregnancy Interview variables and the Crockenberg Social Support Scale are presented in Table 6. While the direction of the correlation is positive, the magnitude is weak ($r = .21$) and it is statistically insignificant ($p = .22$). The hypothesis that a pregnant woman's ability to envision herself as a competent caregiver would be related to her feelings about her social support network 14-months after her infant's birth was not supported.

Table 6

Correlations between the Pregnancy Interview and the Crockenberg Social Support Scale

	Crockenberg Social Support Scale
Pregnancy Interview Variables	Number of People whose Help is Satisfactory (N=37)
Parental Confidence and Competence	.21 (37) P=.22
Prenatal Affective Tone	.23 (37) P=.17

+ $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

Hypothesis 5) A pregnant woman's ability to represent her fetus with positive affect will be positively related to her feelings about her social support network at 14-months postpartum. A pregnant woman who represents her fetus with predominantly positive affect will be more empathic and emotionally available to her fetus. Such a woman will more fully acknowledge her future baby's needs during the third trimester and consequently make better use of her social support network to assist her in meeting her infant's needs. She will be receiving more help from her social support network and will be more satisfied with the help that she is receiving when her infant is 14-months old.

A two-tailed correlation was calculated using the Pregnancy Interview variable Affective Tone of the Prenatal Representation and the Crockenberg Social Support Scale. Although the direction of the correlation is positive, the magnitude is weak ($r = .23$). This non-significant result ($p = .17$) fails to support the hypothesis that a pregnant woman's ability to represent her fetus with positive affect would be related to her feelings about her social support network 14-months after the birth of her infant.

Post Hoc Analysis – Quality of Relatedness Code

As mentioned above, only 30 of the 37 women who completed the PI generated a Quality of Relatedness Code. It is striking that seven of the 37 pregnant women did not fantasize about a prenatal relationship with their fetus and the development of a relationship with their baby after birth. A post hoc analysis was initiated to examine whether a pregnant woman's ability to generate a Quality of Relatedness code was related to the quality of her marital adaptation during pregnancy, her prebirth ability to

represent her fetus with positive affective tone, her prebirth ability to envision herself as a competent caregiver, and her feelings about her social support network at 14-months postpartum.

The pregnant women were divided into one of two groups based on whether or not they were able to generate a Quality of Relatedness Code. The presence of relatedness group included 30 women while the absence of relatedness group was comprised of the remaining seven women. Two-tailed correlations were computed to determine whether the presence or absence of the Quality of Relatedness code was related to the women's scores on all other variables in this study.

Table 7

Correlations between the Variable Presence or Absence of Relatedness Code and Scores on All Other Measures

Quality of Relatedness Code	Spanier Dyadic Marital Scale	Prenatal Affective Tone	Parental Confidence and Competence	Crockenberg Social Support Scale
Presence or Absence of Relatedness	**-.48 (37) P = .003****	**-.41 (37) P = .01***	-.23 (37) P = .17	-.23 (37) P = .16

+ $p < .10$ *$p < .05$ **$p < .01$ ***$p < .001$

Table 7 reflects the results of these analyses. As will be noted, all four correlations are negative. In general, the presence of the Quality of Relatedness Code is correlated with a high score on any other variable in the study. Conversely, the absence of the Quality of Relatedness code is correlated with a low score on other measures. More specifically, a highly significant negative correlation ($r = -.48$, $p. = .003$) was found between the presence or absence of relatedness and the Spanier Dyadic Marital Scale. This result suggests that women whose narratives did not generate relatedness codes had significantly worse marital relationships. In contrast, women whose narratives generated scorable codes on relatedness had significantly better relationships with their husbands. Another significant negative correlation ($r = -.41$; $p. = .01$) occurred between the presence or absence of relatedness and Prenatal Affective Tone. This finding suggests that women whose narratives did not generate relatedness codes represented their fetuses with significantly less positive affective tone. Women who provided scorable responses on relatedness tended to represent their fetuses with significantly more positive affective tone. While the other two correlations were weak and statistically insignificant ($r = -.23$; $p = .17$; $r = -.24$, $p = .16$), their negative direction indicates that women unable to generate scorable responses on relatedness tended to feel less realistically competent as a caregiver to their future baby during pregnancy and to have fewer people providing satisfying social support at 14-months postpartum. Thus, overall, the absence of the Quality of Relatedness code seems to be a patterned absence and not a random one.

Post Hoc Analysis – Dissatisfaction with Help of Husband

It was noted that only 29 of the 37 women who completed the Crockenberg Social Support Scale reported that they were satisfied or very satisfied with the help that their husbands were providing at 14-months postpartum. When asked to name the people, who provided them with support and their level of satisfaction with that support, eight women did not state that they were satisfied with the help provided by their husbands. Of these eight women, three did not mention their husbands as providing any support at all. A post hoc analysis was initiated to examine whether a woman's feelings about the help provided by her husband 14-months after their child's birth was related to the quality of her marital adaptation during pregnancy, her prebirth ability to represent her fetus with positive affect tone, her prebirth ability to envision herself as a competent caregiver, and her feelings about her social support network at 14-months postpartum.

The women were divided into one of two groups based on whether or not they were satisfied with the help their husband's were providing at 14-months postpartum. The satisfied group included 29 women while the dissatisfied group was composed of the remaining eight women. Two-tailed correlations were used to determine whether a woman's feelings of being satisfied or dissatisfied with her husband's support were related to her scores on the other variables in which the data of all 37 women were utilized.

Table 8

Correlations between the

Variable Satisfied or Dissatisfied with Husband's Support

and

Scores on Other Measures (N = 37)

Crockenberg Social Support Scale	Spanier Dyadic Marital Scale	Prenatal Affective Tone	Parental Confidence and Competence	Total Score on Crockenberg Social Support Scale
Satisfied or Dissatisfied with Husband's Support	**-.46 (37) P = .004****	-.09 (37) P = .62	-.02 (37) .91	**-.32 (37) P = .057+**

+ p < .10 *p < .05 **p < .01 ***p < .001

The results of these analyses are presented in Table 8. Two significant findings in the negative direction were reported. The first finding (r = -. 46; p = .004) suggests that women who were dissatisfied with the help their husbands were providing or who did not mention their husbands as providing help reported significantly lower levels of marital adaptation during pregnancy. The second finding (r = -. 32; p. = .057) indicates that women who were dissatisfied with their husband's support or who failed to mention their husband as providing support tended to report fewer friends, family members, and professionals whose help was experienced as satisfying.

CHAPTER FIVE

DISCUSSION

Summary of the Findings

This study was designed to explore the relationship between specific intrapsychic processes and interpersonal relationships involved in the transition to motherhood. It was the intent of the present study to investigate this question during the time frame between a woman's third trimester of pregnancy and fourteen months after her baby's birth. The first three questions look at how the quality of prebirth marital adaptation shapes the following aspects of a woman's transition to motherhood: 1) the affective tone of the representation of her fetus; 2) her fantasies about the prenatal relationship with her fetus and the postnatal relationship with her baby; and 3) her representation of herself as a caregiver as measured in the prenatal period. Specifically, would a woman in a strong marriage be more likely to represent her fetus with positive affect than a woman in a difficult marriage? In addition, would a woman in a strong marriage have a greater tendency to envision a close and tender prenatal relationship with her fetus and the development of an enjoyable, intimate and mutual relationship with her baby than a woman in a difficult marriage? Furthermore, would a woman in a strong marriage be more likely to envision herself as a realistically confident caregiver as assessed during the third trimester of pregnancy than a woman in difficult marriage?

This study also explored how the quality of a woman's affective tone of the representation of her fetus and her capacity to envision herself as a competent caregiver are related to her ability in the interpersonal realm to put together an effective social

support network and her level of satisfaction with the help she is receiving in the postnatal period. Specifically, would a pregnant woman who represents her fetus with predominantly positive affect have a greater tendency to more fully acknowledge her future baby's needs and consequently make better use of her social support network to assist her in meeting her infant's needs? Additionally, would a pregnant woman who feels realistically competent in the maternal role have a greater tendency to planfully think about the postnatal period and better utilize her social support network than women who undervalue or overvalue themselves as caregivers would?

The literature on pregnancy, prebirth maternal representations, objects relations and marital adaptation, the transition to parenthood, and social support all strongly suggest that a woman's intrapsychic world and her interpersonal relationships are closely related. In particular, a number of the studies reviewed in an earlier chapter highlight how a woman's internalized sense of herself in relation to others developed from her early parental relationships impacts on her interpersonal relationships including her choice of spouse, and how those interpersonal relationships then influence her emotional experiences during pregnancy which, in turn, impact on her interpersonal relationship with her child.

The first set of findings speaks to the impact of the quality of the prebirth marital adaptation on prenatal maternal representations of the baby. Specifically, the quality of a pregnant woman's marital adaptation was found to be significantly positively related to her prenatal affective tone of her fetus. A pregnant woman in a strong marriage was significantly more likely to represent her fetus with positive affect. Conversely, a woman

in a difficult marriage was less likely to represent her fetus with predominantly positive affect.

Contrary to expectations, the quality of a pregnant woman's marital adaptation was not related to her ability to fantasize about a prenatal relationship with her fetus and the development of a relationship with her baby after birth. This result was puzzling. However, it is important to note that seven of the 37 pregnant women did not fantasize about a prenatal relationship with their fetus and the development of a relationship with their baby after birth at all. A post-hoc analysis was initiated to determine whether the presence or absence of the Quality of Relatedness code was related to the women's scores on all other variables in this study.

In general, the presence of the Quality of Relatedness Code is correlated with a high score on any other variable in the study. Conversely, the absence of the Quality of Relatedness code is correlated with a low score on other measures. More specifically, women whose narratives did not generate relatedness codes had significantly worse marital relationships. In contrast, women whose narratives generated scorable codes on relatedness had significantly better relationships with their husbands. In addition, women whose narratives did not generate relatedness codes represented their fetuses with significantly less positive affective tone. Conversely, women who provided scorable responses on relatedness tended to represent their fetuses with significantly more positive affect. While the other two correlations did not reach statistical significance, their negative direction indicates that women unable to generate scorable responses on relatedness tended to feel less realistically competent as a caregiver to their future baby

during pregnancy and to have fewer people providing satisfying support at 14-months postpartum.

Prebirth marital adaptation was also found to be related to a pregnant woman's ability to feel realistically confident and competent in her maternal role. Specifically, a pregnant woman in a strong marriage was significantly more likely to envision herself as a realistically confident caregiver as assessed during the third trimester of pregnancy. Conversely, women in difficult marriages tended to undervalue or overvalue themselves as caregivers and thus unrealistically envision their level of competency.

The second set of findings concerns the relationship between prenatal maternal representations of the baby and postnatal satisfaction with social support network. Contrary to expectations, a pregnant woman's ability to envision herself as a competent caregiver was found to be unrelated to her feelings about her social support network at 14-months postpartum. Furthermore, a pregnant woman's ability to represent her fetus with positive affect was found to be unrelated to her feelings about her social support network 14-months after the birth of her infant.

A closer look at the responses on the Crockenberg Social Support Scale revealed that only 29 of the 37 subjects reported that they were satisfied or very satisfied with the help that their husbands were providing at 14-months postpartum. Of the eight women who were not satisfied with the help provided by their husbands, three did not mention their husbands as providing any support at all. A post-hoc analysis was initiated to examine whether a woman's feelings about the help provided by her husband 14-months after their baby's birth was related to the quality of her prebirth marital adaptation, her prenatal ability to represent her fetus with positive affective tone, her prenatal ability to

envision herself as a competent caregiver, and her feelings about her social support network at 14-months postpartum.

Two significant findings in the negative direction were reported. First, women who were dissatisfied with the help their husbands were providing or who did not mention their husbands as providing any help at all reported significantly lower levels of marital adaptation during pregnancy. Second, women who were dissatisfied with their husband's support tended to report fewer friends, family members, and professionals whose help was experienced as satisfying.

In summary, prebirth marital adaptation has a lot to do with the experience of a woman's first pregnancy. First, a pregnant woman in a strong marriage was significantly more likely to portray her fetus with loving, warm, and joyful feelings. In contrast, a woman in a difficult marriage was much less likely to speak about her fetus with predominantly positive feelings. Second, a woman in a strong marriage was significantly more likely to be able to imagine having a relationship with her fetus during pregnancy and future baby after the birth. Conversely, a woman in a troubled marriage struggled to imagine any relationship with the fetus she was carrying. Third, a woman who was able to imagine a relationship with her fetus and future baby tended to describe her fetus with significantly more loving, warm, and joyful feelings. However, a woman who was incapable of imagining such a relationship verbally depicted her fetus with significantly less positive emotions. Finally, in regard to the influence of prebirth marital adaptation, a pregnant woman in a strong marriage was significantly more likely to envision herself as a realistically confident caregiver as measured during the third trimester of pregnancy. In

contrast, women in troubled marriages tended to undervalue or overvalue themselves as caregivers and thus unrealistically envision their level of competency.

The influence of prebirth marital adaptation on women's transition to motherhood extended beyond pregnancy. Women who were dissatisfied with the help that their husbands were providing or who did not mention their husbands as providing any help at 14-month postpartum reported significantly lower levels of marital adaptation during pregnancy. Furthermore, women who were dissatisfied with their husband's support reported fewer friends, family members, and professionals whose help was experienced as satisfying. The following discussion will address how the results of this study confirm existing theory and empirical findings.

The Impact of the Quality of Prebirth Marital Adaptation on Prenatal Maternal Affective Tone of Fetus

To truly evaluate the result linking the quality of prebirth marital adaptation to the quality of prenatal maternal affective tone of the fetus, it is fitting to remember what it means in this study for a woman to be qualified as expressing good marital adaptation in pregnancy. These are pregnant women who are generally satisfied with their relationships with their husbands. More specifically, these women represent their marriages as ones in which they and their husbands 1) agree on essential issues such as financial matters, life philosophy, and household tasks; 2) are compatible in expressing physical and emotional love for one another; 3) enjoy sharing leisure time and agree on the frequency with which they engage in pleasurable activities together; and 4) do not

engage frequently if at all in negative aspects of marriage such as quarreling, leaving the house after a fight, and discussing or considering separation or divorce.

What is it exactly about a pregnant woman's relationship with her husband that allows her to represent her fetus with positive, joyful, and loving thoughts and feelings during a time of great physical and intrapsychic transformations? At times of critical family change such as a first pregnancy, support from a spouse is believed to have a different meaning than support from others (Cowan & Cowan, 1990). The importance of a pregnant woman's relationship with her husband is suggested by the work of Sandler and Sandler (1978) on affects and object relations. They propose that a person is constantly receiving a special type of gratification through her interactions with the objects in her environment and with her own self, which functions as "nourishment" or as affirmation of the self. Through her interactions with her objects, she "gains a variety of reassuring feelings" (p.286). They advance the belief that the need for this "nourishment," for affirmation and reassurance, has to be satisfied constantly in order to yield a background of safety. Then, pregnant women whose thoughts and feelings about their unborn babies are characterized by joy, pleasure, and love are women whose marriages provide them with a background of emotional safety. The research of Weingarten and colleagues (Weingarten et al., 1979) highlights a similar relationship between the quality of a new mother's marriage and the affective tone of her representation of her baby. They found that new mothers in more difficult marriages tended to have more negative perceptions of their infants than did new mothers in more satisfying marriages.

The idea that the father of the baby acts as a secure base for his pregnant wife is also suggested by the theory of Dicks (1967) on marital adaptation. According to Dicks (1967), marital adaptation requires that each spouse balance his or her need for autonomy with his or her need for mutuality with the intimate partner. "For human and marital success, it is essential for individuals to conserve and make available in adult life tender concern for others based on one's own, still felt, dependent needs" (Dicks, 1967, p. 29).

In order to be mutually gratifying, marital interaction requires "a flexible readiness" (Dicks, 1967, p. 31) in each partner to modify his or her behavior in response to the other's current needs. A first pregnancy ushers in a new stage of life for a woman in which physical and emotional disequilibria seem to be inherent. Women experience body changes, fears, anxieties, and regressions to earlier phrases of development. In a strong marriage, the father of the baby will function as the emotional anchor for his wife's increased dependence. As an affirmation of his love for her, he will provide "physiological soothing"(Gottman et al, 1998) to his pregnant wife during this time of great transition. The father's "flexibility is, of course, an aspect of the capacity to tolerate, fuse and use ambivalence –perhaps, the key to the secret of *all* human relations. It is the ability to 'contain hate in a framework of love'" (Dicks, 1967, p. 31). Perhaps, it is the husband's capacity to contain his ambivalence in order to provide love and emotional support to his pregnant wife that allows her to contain her own ambivalence in order to represent her fetus with predominantly positive, joyful, and loving affect.

Ballou (1978) has suggested that the father functions as a secure base in order to facilitate the development of mutuality between his pregnant wife and their future infant. The psychological work of pregnancy involves a woman's ability to accept that her

unborn baby is a separate human being who will be dependent upon her. In order to accept the dependency needs of her fetus, a woman needs to first accept her own dependency on her mother or maternal substitute (Ballou, 1978). Often, the husband is instrumental in helping the woman reconnect with her own dependency on her mother. The husband's ability to be giving to, affectionate towards, and approving of his wife allows her to grapple with and accept her own increased vulnerability and dependency on him and to engage in the task of reworking her own relationship with her mother. In a strong marriage where emotional and physical affection are regularly expressed, a pregnant woman may more effectively rework conflictual identifications with her own mother allowing her to identify more fully with her fetus and develop her maternal feelings (Ballou, 1978; Pines, 1978). Consequently, she may feel more loving towards her fetus and represent her unborn baby with predominantly positive affect.

The Impact of the Quality of Prebirth Marital Adaptation on Prenatal Maternal Quality of Relatedness

The second finding of this study relates to the lack of association found between the quality of a pregnant woman's marital adaptation and the quality of her fantasies about her prenatal relationship with her fetus and her postnatal relationship with her infant (e.g. the developing object relationship with the infant in both fantasy and reality). It was expected that a woman in a strong marriage would tend to envision a close and tender prenatal relationship with her fetus and the development of an enjoyable, intimate, and mutual relationship with her infant.

This result was quite surprising given that the quality of prebirth marital adaptation was found to predict the quality of a woman's affective tone of her representation of her fetus. Even more surprising was the fact that seven of the 37 pregnant women did not fantasize at all about a prenatal relationship with their fetuses and the development of a relationship with their babies after birth. This led to an exploration of the following question. Could there be a difference in the quality of prebirth marital adaptation between women who could and could not generate a code on Relatedness? A post-hoc analysis was initiated to determine whether a woman's ability to talk about her current relationship with her fetus and future one with her baby after birth was associated with her scores on all other variables in this study.

The results of the post-hoc analysis underscore the importance of a woman's prebirth marital relationship to her experience of pregnancy. It had been anticipated that the quality of the prebirth marriage would impact on the quality of a woman's prenatal fantasies about her current relationship with her fetus and future one with her baby after birth. However, the findings indicate that the quality of the prebirth marriage predicts to whether or not a woman will be able to allow herself to develop a prenatal relationship with her fetus and fantasize about her relationship with her infant after birth. For example, a woman in a strong marriage may feel that she has a special relationship with her "buddy" who communicates with her through his movements. During her infant's earliest months, she may anticipate intimate, peaceful moments nursing her baby and shared, joyful interactions amongst her husband, her baby, and herself. In essence, an expectant mother in a strong marriage allows herself to become emotionally attached to her fetus and future baby.

It seems likely that a woman's ability to identify with her unborn baby and accept that he will be dependent upon her would impact on her capacity to imagine having a relationship with her unborn baby and to fantasize about the time they will spend together during early infancy. Thus, the husband's maternal function or his ability to provide love, affection, support, and nurturance (Ballou, 1978) may also allow his pregnant wife to think about the relationship with her fetus during pregnancy and the future one with her baby after birth. However, if a pregnant woman does not receive love, affection, support, and nurturance from her husband, she may be incapable of developing a prenatal relationship with her fetus and of fantasizing about a future one with her baby after birth.

The findings of Ammaniti (1991) on the impact of prenatal maternal representations on subsequent mother-infant interactions lend additional support to the association found in the post-hoc analysis. In order to illustrate different patterns of influence, data on two pregnant women and their respective infants were presented (Ammaniti, 1991). At 12-months postpartum, one mother was classified as Autonomous with regards to attachment and her infant son was assessed as securely attached. In contrast, the other mother was classified as Dismissing of attachment while her 12-month old son evidenced an anxious-resistant pattern of attachment.

During pregnancy, the two expectant women's experiences differed a good deal, most notably in their descriptions of their social support networks. The mother classified as Autonomous with regards to attachment reported that her relationship with both her husband and her own mother was enhanced during her pregnancy. She also reported receiving a fair amount of support from her husband's family. The mother assessed as

Dismissing of attachment reported feeling quite alone during pregnancy without the needed support from her husband or their respective families.

Of particular interest to the present study, these two women differed greatly in their abilities to imagine what their baby would be like and in their desire to know the sex of the baby. The woman who was judged Autonomous with respect to attachment allowed herself greater freedom to fantasize about her future baby during pregnancy. Conversely, the woman classified as Dismissing of Attachment was incapable of fantasizing about her future baby and did not want to know the sex of her child. While Ammaniti (1991) did not examine the relationship between the quality of a woman's emotional support during pregnancy and her ability to fantasize about her future baby, his results suggest that such an association may exist. Consequently, they provide support for the finding of the post-hoc analysis that a woman's capacity to think about her prenatal relationship with her fetus and the future one with her baby after birth is related to the quality of her marriage during pregnancy.

In the present study, there were seven women who could not allow themselves to think about their prenatal relationship with their fetuses nor their future one with their infants after birth. These were women whose prebirth marital relationships were significantly worse than those women who were able to generate a Relatedness code.

It is hard to imagine a pregnant woman not being able to think about her relationship with the active, unborn baby whom she is carrying. What was it about the marriages of these women that made it impossible for them to fantasize about their babies' feelings, needs, personality, physical attributes, and special abilities? A closer reading of the seven interviews revealed that two of these women were quite surprised by

their husbands' responses to learning that they were pregnant. Both women had planned their pregnancies and had anticipated that their husbands would be more excited about having a baby. As Sophie stated, "I would have thought he'd be on cloud nine. It's funny. He's not the most expressive, he's been okay, but he's been so wrapped up in this renovation." Sophie was particularly caught off guard by her husband's response as he had really advocated for her to become pregnant.

Many of the women in this sub-sample had not built a stable relationship with the fathers of their babies. This does not necessarily mean that the women and the husbands did not love one another, but, in several cases, that the timing of the pregnancy was not right for them as a couple. For instance, one woman felt in retrospect that perhaps she and her husband had decided to have a baby too early in their marriage; they had not yet built a strong enough foundation as a couple. In addition, two women in this sub-sample did not plan their pregnancies. One of these women was not married to the father of her baby, whereas the other had become pregnant almost immediately after being married.

The findings of Ammaniti and colleagues (1992) may shed some light on why expectant mothers in difficult marriages were unable to be related to their unborn babies in this study. In their research on the structure and content of maternal representations during pregnancy, Ammaniti et al. (1992) found a linkage between the content of a mother's representations of her husband and of her fetus. This is to say that there were similarities in the characteristics that the mother attributed to the father of her baby and to her unborn baby. Given these results, a mother's disengagement from her fetus may be understood as a defense process to block out the negative representation of her husband. In order to defend against her negative feelings about the father of her baby, a woman

may block their expression against the fetus, and consequently represent the fetus as blank. Slade and Cohen (1996) found something similar in their work concerning women unable to represent their fetuses because of difficulties in their relationships with their mothers.

The Impact of the Quality of Prebirth Marital Adaptation on Prenatal Maternal Confidence and Competence

The third finding refers to the significant association found between the quality of prebirth marital adaptation and a pregnant woman's ability to feel realistically confident and competent in her maternal role. In order to truly evaluate this finding it is useful to remember what is meant by Prenatal Maternal Confidence and Competence. The term refers to the extent that a pregnant woman can both acknowledge her limitations in the maternal role yet remain confident that she will be able to love, protect and care for her infant. Her score on this code reflects the degree to which she is realistically confident of her ability to deal with the uncertainties inherent in motherhood. Realistic self confidence suggests that a woman is able to experience some anxiety, use the anxiety to make appropriate plans to cope, and remain flexible in her approach to problem solving as she does not yet know her infant (Slade et al., 1994). As importantly, a woman develops realistic self confidence from the knowledge that she will be able to turn to her husband and other members of her social support network for emotional and practical support in the day-to-day job of mothering (Slade et al., 1994).

The importance of the husband's role in facilitating his wife's adjustment to pregnancy and early motherhood finds support in the literature. For instance, Richardson

(1987) demonstrated that a difficult prebirth marital relationship is a serious impairment to a woman's preparation for future mothering activities most likely because it leaves a woman feeling unsupported and alone as she embarks on motherhood.

What specific aspects of the prebirth marriage facilitate or impede a pregnant woman's ability to develop realistic confidence in the maternal role? The research on the nature of the prebirth marriage and its impact on the couple's experience of pregnancy and early parenthood sheds some light on this issue. As many investigators have reported, the transition to parenthood tends to bring about a decline in the degree of an individual's marital satisfaction (Belsky, 1990; Belsky & Pensky, 1988; Belsky, Spanier & Rovine, 1983). However, the rank order of individual partners and couples tends to remain the same. Those couples who expressed greater satisfaction in their marriages before their baby's birth continued to be those most satisfied during the postbirth period (Belsky & Pensky, 1988).

Marital satisfaction seems to decline during the postbirth period because children "decrease the amount of time that couples spend together and affect adversely the nature of their interactions" (Belsky, 1990). Parents spend more time interacting with their children than with each other and, consequently, communicate less often.

At the same time that couples are communicating less frequently, conflict between partners is increasing (Belsky et al., 1983; Belsky & Rovine, 1990; Cowan et al. 1985). Cowan et al. (1985) investigated possible correlates between a decline in marital satisfaction from pregnancy to 18-months postpartum. For both husbands and wives, decreased marital satisfaction was only significantly linked to increased conflict and disagreement in the relationship.

According to Bell (1984), marital conflict and disagreement only lead to difficulty when a couple's ability to problem-solve is ineffective. Belsky (1990) demonstrated that couples who had problems communicating with each other during pregnancy were those most likely to experience conflict about childrearing. Cowan and Cowan (1988) provided further support for the view that a couple's ability to communicate effectively and come to a consensus about issues influences their postbirth marital adaptation. Thus, as many researchers have reported, the strongest predictor of the postbirth marital adaptation seems to be the quality of the prebirth marital relationship (Belsky & Pensky, 1988; Cowan et al., 1989; Cox, Tresch-Owen et Lewis, 1989; Heinicke & Lampl, 1988).

Heinicke and Guthrie's (1992, 1996) results are particularly useful in understanding the association found in the present study. Their results highlight the importance of a couple's ability to express and resolve negative affect in the context of coming to a consensus about disagreements to both good marital functioning, and consequently, parenting (Heinicke & Guthrie, 1992). Furthermore, they found that couples who could confront, discuss, and resolve a significant marital issue during the prebirth period were those who maintained a consistently high level or demonstrated an increase in their postbirth marital adaptation. In couples who demonstrated a decrease in their postbirth marital adaptation, it was particularly the husband's withdrawal or inability to address the issue posed as well as his negative behavior that impeded that couple's ability to reach a positive resolution. Thus, a couple's ability to confront meaningful unresolved issues, to express as well as modulate negative feelings towards one's partner, and to arrive at a resolution would seem to be a reliable indicator as to how

the partners adapt to each other and respond to the ongoing challenge of resolving issues concerning the care of their child (Heinicke & Guthrie, 1996).

The above findings on the impact of the prebirth marriage on a couple's transition to parenthood provide a context for understanding the association found in the present study between the quality of the prebirth marriage and a woman's ability to feel realistically confident in the maternal role. A woman who feels secure in her ability to discuss ideas and resolve significant issues with her husband during the prebirth period will anticipate being able to communicate effectively with her spouse after the birth of their baby. During pregnancy, she will tend to feel more realistically confident in her ability to love, protect and care for her infant as she knows that she will not be parenting alone. In particular, she will be able to turn to her husband to discuss and come to a consensus about issues that arise as they both make the transition to parenthood. In essence, a pregnant woman's confidence in her husband's ability to provide emotional and practical support in the day-to-day of parenting enables her to feel realistically confident in the maternal role.

The Impact of Prenatal Maternal Representations on Postbirth Satisfaction with Social Support

The fourth finding of this study relates to the lack of association found between the quality of a pregnant woman's maternal representations and her postbirth satisfaction with her social support network. It was expected that a pregnant woman's ability to envision herself as a realistically competent caregiver would be related to her feelings about her social support network at 14-months postpartum. In addition, it was anticipated

that a pregnant woman's ability to represent her fetus with positive affect would be linked to her feelings about her social support network 14-months after her baby's birth.

One possible reason that the original analyses did not yield significant results is the amount of time between the administration of the two measures. As will be remembered, the Pregnancy Interview (PI) was administered to the women between 28 and 32 weeks of pregnancy, whereas the Crockenberg Social Support Scale was administered at 14-months postpartum. Thus, there was a big time window of 16 to 18 months between the two data points.

The experience of giving birth to a baby and becoming a mother leads to internal shifts in most women. During the 16 to 18 months between a woman's third trimester of pregnancy and 14-months after her baby's birth, many aspects of a woman's representation of her baby and of herself as a caregiver can change dramatically. Perhaps, a new mother's representations of her baby and of herself as a caregiver would need to be assessed at a point closer in time to 14-months postpartum in order to be predictive of feelings about social support. Indeed, Slade (personal communication, November 2000) reported findings linking maternal self-reflection (Fonagy et al., 1991, 1995) at 10-months postpartum to her 14-month old infant's security. Ten months after the birth of their baby, women who were able to contemplate their own and their child's mental states, specifically the capacity to consider their child's motivations when understanding his behavior, tended to have infants judged securely attached at 14-months of age. Given Slade's report, it seems likely that too much time had elapsed between the data points for the prebirth variables to be predictive of the postbirth variables. More specifically, the original analyses did not yield significant findings because too much

internal change had occurred in women between their third trimester of pregnancy and 14-months postpartum.

However, in the post-hoc analyses, the quality of a woman's relationship with her husband during the third trimester of pregnancy was linked to her feelings about her social support network 16-18 months later. Specifically, women who were dissatisfied with the help their husbands were providing or who did not mention their husbands as providing any help at all at 14-months postpartum reported significantly lower levels of marital adaptation during pregnancy. Furthermore, women who were dissatisfied with the support provided by their husbands tended to report fewer family members, friends, and professionals whose support was experienced as satisfying. Thus, a husband's support during both the prebirth and postbirth period was found to be the primary influence on a woman's feelings about her social support network at 14-months postpartum.

The results of the post-hoc analyses highlight the importance of the marriage, a point corroborated by the literature of social support. According to Grossman and colleagues (1980), intimate social support from the husband is very important to both a woman's psychological adjustment to pregnancy and motherhood. The importance of the husband's support has been demonstrated in both high-risk (Crockenberg, 1987; Quinton & Rutter, 1985) and low risk samples (Leung, 1985; Leventhal-Belfer & al, 1992; Levitt & al, 1986). Since the sample of the present study is low-risk, the following discussion will focus on low-risk studies.

During the postbirth period, new mothers often rely on their husbands for both emotional support and practical help in the day-to-day job of parenting. In particular,

mothers of young children have been found to depend heavily on their husband's support when making childcare decisions (Leventhal-Belfer & al, 1992). When children were six, 18, and 42 months old, mothers who were more satisfied with the support received from their husbands for their childcare decisions and responsibilities were more satisfied with their actual childcare arrangements (Leventhal-Belfer & al, 1992). Leventhal-Belfer's results lend support to the finding of the present study that new mothers who were satisfied with their husband's support at 14-months postpartum tended to report more family members, friends, and professionals whose support was experienced as satisfying.

With a sample of 35 new Chinese mothers, Leung (1985) found that women who received more family support experienced an easier transition to motherhood than did those women who reported receiving less support from their families. More specifically, new mothers who received greater family support experienced less anxiety and depressive feelings than did new mothers who received less support. Of particular relevance to the present study, the women's husbands were found to be the most important source of emotional empathic understanding and assistance in the day-to-day job of parenting. New mothers who did not receive adequate emotional support and practical assistance from their husbands tended to be significantly more depressed than those mothers receiving adequate support from their husbands.

The importance of the husband's support for the emotional well-being of a new mother is also underscored by the results of a study by Levitt and colleagues (1986) with a sample of 43 mothers and their 13-month old infants. Husbands who were providing adequate emotional support and assistance in the day-to-day job of parenting were

married to women who expressed more positive maternal affect and greater life satisfaction. This association was not found for any other family members.

Furthermore, Levitt et al.'s (1986) study extends the influence of marital support to differences in the mother-infant relationship. As noted above, women who were receiving adequate support from their husbands were those expressing more positive maternal affect. The quality of maternal affect was then shown to impact on how the new mother responded to her infant's dependency needs and bids for autonomy as measured by the Strange Situation at 13-months. More specifically, the mothers of securely attached infants expressed more positive affect than did mothers of anxiously or resistantly attached infants. Thus, the husband's support may indirectly effect infant social and emotional development as mediated through the mother's behavior (Crockenberg, 1988).

Why does the husband's support take on a different, more important meaning than support from other family members, close friends, or professionals? Bowlby's (1982) ideas on self-reliance may shed some light on this issue. He wrote that an intimate and trusting bond between an immature and dependent infant and a consistently available caregiver leads to the capacity for relying on other people for help and support later in life when the infant becomes an adult. Bowlby (1982) suggested that the relationship between a woman's attachment system, which is not normally activated as it is in infancy, and what he referred to as "healthy self-reliance" is most observable during pregnancy and the transition to motherhood. The psychological and physical disequilibrium inherent in pregnancy causes stress and, consequently, women have an

increased need for emotional and practical support during pregnancy and in the early stages of motherhood.

Bowlby (1982) proposed that a woman's ability to recognize and express her need for support to trusted people would impact on her representation of herself as someone who could give to others, including her child. According to Stern (1985), a mother's representation of her baby does not exist without the corresponding representation of herself in relation to her baby. In adult romantic relationships, each partner is believed to function as the other partner's attachment figure. Consequently, a pregnant woman's sense that she can rely on her husband to provide her with emotional and practical support seems to be the crucial factor determining the nature of her prenatal maternal representations.

Case Study of Juliana

Juliana is an example of a woman who represents her marriage as strong and her fetus with predominantly positive and joyful affect. When asked how she felt when she found that she was pregnant, Juliana explained that her husband had accompanied her to the doctor's office for the pregnancy test. Upon learning that she was pregnant, they "just looked at each other with stupid grins, I mean, shit-eating grins on our faces and, you know, it was an emotional time." She continued that her husband was "very excited," and she was "very excited, very happy." While elaborating on the nature of her feelings of excitement and happiness, she spontaneously included a positive representation of her marriage. So she told the interviewer:

> I guess just the thought that we had actually done it, and that two years ago we had made a commitment to each other, and suddenly we were making a

> commitment to a third person, who was gonna be part of us, and I think that, deep down, that was sort of, the root of our teariness and just, sheer excitement.

Their emotional commitment to each other seems to have facilitated Juliana's ability to make an emotional commitment to their unborn baby.

Juliana represented her husband as someone who was emotionally supportive and capable of attuning to her feeling states.

> Umm, and if I'm having a bad day or if I'm upset about something or . . . I don't know; he's just very easy going. He's ah, got a very long fuse And he's just very, he's just very happy about (the pregnancy) in general. Um, he's very concerned about for instance, my back problem, at the moment, you know. . . . So, you know, he's um, very supportive.

One of the most difficult periods of her pregnancy occurred when her disabled brother-in-law came to live with them after having separated from his wife. Juliana recalled feeling resentful and needy that she was spending so much time and effort caring for her brother-in-law instead of relaxing and caring for herself. Her husband's response to this problematic situation demonstrated his sensitivity to not only her feelings of resentment and neediness, but also her brother-in-law's emotional state.

> Um, my husband was very sensitive to that and he saw the problem and he tried to handle it as best he could while (brother-in-law) was with us and (brother-in-law) definitely needed to be with family at first. He really needed to have loving support around him, but as he became a little more independent, umm, (her husband) said, "Okay, you, know, we don't want to make this a permanent thing," and we looked for a place for him in the building so that we were close by and could give him the emotional and physical support that he needed, but so that he was not so dependent on us for everything, and (her husband) was very sensitive to that.

When asked how she had handled feeling needy or unsupported, Juliana responded that her husband encouraged her to communicate these difficult emotions rather than keep them bottled up inside her.

> I've had in the past had a very bad habit of just clamming up and becoming an iceberg and (her husband) just, in our marriage, has been able to chisel through that, generally, so that I just start to get the beginnings of it, and he like, he's so good, (laughs) he just sticks his face in my face and says, "What's wrong with you?" And he won't let me just clam up, and he won't just ignore me. He forces me to talk about it, and that has helped me to be able to open up and say more readily "this is what I'm feeling and this is why I'm feeling it." Or, if I'm not, if I don't know why I'm feeling that then I can verbalize it a lot easier.

Her husband's tendency to encourage her to express difficult feelings and his ability to work with her to effectively resolve conflicts during the prebirth period suggest that they will respond well to the ongoing challenge of resolving issues pertaining to the care of their future baby (Heinicke & Guthrie, 1996). Furthermore, Juliana seemed to feel that the way they dealt with difficult issues worked for them. Her sense of her husband's emotional availability and support during pregnancy seemed to have positively impacted on her representations of her fetus and of herself in relation to her unborn baby.

Consequently, despite the difficult situation with her brother-in-law, Juliana's experience of her pregnancy was overwhelming positive as were her thoughts and feelings about her unborn baby. When asked about other strong feelings besides the difficult ones, Juliana responded that she had experienced "just sort of general happiness" and amazement. Juliana's sense of humor combined with her warm, loving feelings about her unborn baby were made apparent in her vivid description of her sonogram.

> We have a Polaroid of fetus (family's last name), the official shot. um, I mean this kid looks like he's smiling. "Hi ya Mom!" He's having a great time. (Both Juliana and interviewer laugh.) I mean, you know, like little hands, little fingers, feet and, ah, head. I mean he really does look like he's smiling . . .Oh, my God (laughs).

When asked how seeing the sonogram had affected her, Juliana described the experience as a moment of wonderment primarily because the fetus represented "a kid" that was both a part of her and a part of her husband.

> Oh, I was very excited. I said, "That's in me?" Ah, huh, you know, It was, umm, it's one of those awe-inspiring moments when you go, "Huh, I can't believe this, you know." It's like seeing the Grand Canyon for the first time, you know. You just become sort of reflective and think, you know, "That's us."

Juliana's strong marriage also seemed to allow her the freedom to think about her prenatal relationship with her fetus and the future one with her infant after birth. When asked how her marriage had been affected by her pregnancy, Juliana described her relationship with her husband as one that already included their unborn baby. So she told the interviewer in her characteristically humorous way:

> There are always three of us in bed. (Both she and the interviewer laugh.) There's (Juliana, her husband) and fetus! Umm, he gets up in the morning and he says "good morning " to fetus too. (Interviewer laughs). It's real funny. It's almost like we're a family now . . . to a certain extent. . . . I don't really think our relationship has specifically changed because of this. It's broadened . . .somewhat, but it hasn't really changed, significantly. Um, there's more thought about the future and what we will do, what we hope to do, what we know we won't do, and um, I think that it's just sort of, it's broadened how we think about – even us, umm, as a couple.

When asked if she had a relationship with her baby yet, Juliana's responded:

> Ah, to a certain extent yes . . . I mean, you know, we have the official name for it (Juliana and interviewer laugh) and, um given that we don't know what if is, what sex it is, you know, we call it just sort of an androgynous name, "fetus (family's last name)", and uh, uh, yeah, I definitely have a feeling for it. I can't wait to see it. What it looks like, you know, and there's a lot of excitement involved in it.

She elaborated on the nature of her relationship with her baby by describing an interaction amongst her husband, her fetus, and herself.

> I don't know, this kid's very, um, active and he's also very reactionary. When (her husband) pushes on my belly, fetus will sometimes push back, you know, or you'll feel around and you'll find where fetus is and fetus scoots away. (Interviewer laughs), You know, it's playful I guess, um, is how I'd sort of describe it.

Juliana continued by telling the interviewer that she and her husband not only played music for their baby, but they also spoke to their baby in both English and in Spanish.

Similar to the women in Ammaniti's (1992) study, Juliana fantasized that her infant was going to look just like her husband. "It will have dark hair and a nice Jewish nose and, um, my husband's eyes." She did not know the sex of her fetus and tended to vacillate between preferring a girl or a boy.

> Some days I think, "Oh, it would be fun to have a baby boy. Go out and play ball, do this, that, and the other." And sometimes I think, "Nah, I think maybe I'd rather have a girl. Girls are so sweet." (Juliana laughs.) I don't know, um, I really, really don't know.

Her narrative is noteworthy in that she highlights what she imagines to be the positive aspects of raising a girl and a boy. She does not prefer one sex because of any negative associations to the other.

In response to being asked if she had a sense of her baby's growing dependence on her, Juliana seemed to have a strong sense of her unborn baby's needs and to make a conscious effort to meet them. In terms of how she felt about meeting her baby's needs, she stated as a matter of fact:

> I think that I've already accepted this as a responsibility to myself. I don't have a sense of growing dependence. Ehh, um, I knew from the get go that I was going to be responsible for someone, that someone was going to be very dependent on me, and so, you know, I accepted it right off.

Furthermore, Juliana took pleasure in meeting her unborn baby's needs. "I'm a nurturer from the word go, so I don't have a problem with that. I enjoy that . . . ."

While she and her husband would have to slow down their lifestyle to meet their baby's needs, Juliana was looking forward to spending time at home with her husband and infant. In response to being asked how she felt about giving up evenings at the opera and sporting events, she told the interviewer:

> Oh, um I'm kind of excited about the changes because I think there are going to be so many pluses on the rewarding side of being a parent and having a child and raising this child that the minuses, how it changes our lifestyle, I don't think I'm really going to miss.

However, she was concerned that the baby might negatively impact on her relationship with her husband. While speaking about her decision to breast-feed her baby, she expressed uncertainty about how her husband felt about her plans to nurse.

> You know, a lot of father's become jealous of their wife's relationship with this, ah, little dictator that suddenly come into the house and tells you when, when you're going to be awake and when you're going to be asleep and all this kind of stuff.

The above passage seemed to be the only one in Juliana's interview in which she represented her fetus with negative affect. She was fearful that the baby would rule their lives and disrupt the strong bond that she had with her husband. In response to her fears, she remembered her husband telling her "that it'll be wonderful, you know . . . Don't mind me." Juliana seemed to experience her husband's response as both idealistic and supportive, the later most likely contributing to her ability to feel predominantly positive about their fetus.

Overall, Juliana anticipated a positive transition to becoming a family. She characterized her husband as one of those modern fathers who was involved in the preparation for the birth, would be present at the birth, and wanted to be involved first-hand in the care of their child. During her pregnancy, her husband had expressed a great

deal of interest in developing a close relationship with their baby after birth. To this end, he wanted to feed their baby a bottle of her expressed milk once a day. Juliana also portrayed her husband as quite confident about his ability to provide support in the day-to-day care of their child and sincere in his desire to be involved. She remembered that he had assured her that, "I've changed diapers before, no sweat. I can do that. Don't worry about it. I can handle that." These factors were most likely providing Juliana with a background of emotional safety, and, consequently, allowing her to think about her prenatal relationship with her fetus and to fantasize about many pleasurable moments with her future baby. When asked what she imagined would be the most pleasurable times with her newborn, she responded:

> Feeding times, and uh, um, the awake times when the baby's fed and diapered and it's just sort of hanging out. You know, those times when can sort of interact as a mother and child, or as two people together. you know, just enjoying the company. Um, um, I also think about, since this baby is going to be born in early summer, you know, being able to put on the snugglie and hold this child close to me, and yet be able to go out.

Juliana's responses also exemplify another aspect of the post-hoc finding. Specifically, women who could imagine having a relationship with their unborn babies and fantasize about the time they would spend together during early infancy tended to represent their fetuses with predominantly warm, loving, and positive feelings. In the excerpts from the narrative above, Juliana represented her fetus as someone who was responsive to her husband and herself. Furthermore, she represented her future baby as someone who was happy, playful, reactionary, and active, as someone who would physically resemble her husband whom she loved, and as someone whose dependency needs would bring positive change to her life.

In addition, the strength of Juliana's prebirth relationship with her husband enabled her to feel realistically confident in the maternal role. As she embarked upon motherhood, Juliana had confidence in her husband's ability to be emotionally supportive and capacity to attune to her feeling states. During her pregnancy, he provided necessary emotional support when she was just having a bad day as well as when she was feeling needy and resentful about caring for her disabled brother-in-law. Furthermore, Juliana had confidence in their ability as a couple to discuss difficult issues such as the situation with her brother-in-law and come to a consensus about them. She also seemed comfortable with her husband's anticipated involvement with their baby.

When asked how comfortable she felt about taking care of her baby after birth, she responded again with humor. While part of her felt capable of caring for her baby, another part was fearful, as the reality of caring for a newborn shortly after giving birth set in.

> Um, you know, I'm saying to myself: "You know, Juliana, you did a lot of babysitting when you were younger, 15 years ago." And so, I think: "So, you can really handle this, ah." And then, I think: What am I really going to do 48 or 72 hours after this kid is born and we take him home?" Am I going to go: How ya doing, nice to see ya, . . .Mom! (Interviewer laughs). You know, um, I, I have moments of thinking: "Oh, this'll be no problem." And then, I have moments of thinking: "Oh, this is going to be awful," and I'm afraid, but I know that I'll handle it just fine.

Her sense that she would be able to care for her newborn "just fine" most likely stemmed from the knowledge that she would not be parenting alone. Her husband had already suggested specific ways that he planned to support her in caring for their child, and had demonstrated his ability to communicate and work with her to resolve problems. Her confidence in her husband seemed to have contributed to her sense that she would not need her own parents to come and help her immediately after the birth. Instead, she

expressed a desire to spend time alone with her infant getting to know him or her before they came to visit.

> Um, and, I actually thought it would be easier for me, personally, to come home and maybe have a cleaning woman in, or something to sort of take care of the house – the apartment, and let me sort of get settled into a routine with this, um, infant, and . . . sort or get that going and then to have my parents come. So my parents will probably come three or four weeks after the baby is born.

Juliana also described the strength of her social support network. Her older brother whom she was quite close to lived in the same city. She had talked to him about her experiences during pregnancy, and thought they he might baby-sit occasionally for his niece or nephew. Although her parents lived far away, they were very excited to become grandparents and had agreed to care for their grandchild when he or she was about a year old so that Juliana and her husband could take a vacation. Furthermore, she was able to share her thoughts and feelings with a close girlfriend who had recently had a baby. The stable emotional environment provided primarily by her husband and then reinforced by her entire social support network seemed to enable Juliana to feel realistically confident that she could love, care, and protect her baby after birth.

Case Study of Nicole

In contrast to Juliana, Nicole represented her marital relationship as more difficult, which negatively impacted upon her experience of pregnancy. Nicole stated that she was "really surprised," "happy," and "a little scared" upon learning that she was pregnant. She explained to the interviewer that she was really surprised that she became pregnant so quickly and happy that she conceived without any difficulties. When asked what she had been afraid about, Nicole replied:

> Oh, it's just a huge responsibility having . . .and knowing that your life is going to be permanently altered and knowing that once you have children, you're always responsible for this other person and everything you do has to take that other person into account, you don't have the same kinds of ah, ...I guess freedom sounds like such an . . .sounds like I'm thinking of it in a very negative way and I'm not, but it is this big responsibility and ah, it's . . .it's . . . there's no turning back, you know, once you have a child, that's it for the next 20 years anyway (chuckle). The rest of your life, so . . .you know, just the prospect of doing whatever. . . .

Clearly, Nicole had concerns about being able to redefine her needs in light of those of her future baby. She represented her future baby as someone who would limit her freedom. In fact, she seemed to experience having a child as if she were receiving a jail sentence for the next 20 years.

Nicole experienced her pregnancy as difficult in many ways. During the first trimester, she felt quite miserable. Her physical discomfort interfered with her ability to work as much as she had anticipated. She described herself as "as little distressed" and "disappointed" about this outcome. Her baby was already negatively affecting her career.

When asked specifically about the emotionally difficult aspects of her pregnancy, Nicole focused on her concerns about her relationship with her husband.

> I know that I tend to take things more seriously. I mean, my husband and I would have a fight about something, sometimes I would really start to brood about it and get upset because I would think, oh, I'm going to have a child, you know, if we don't agree about everything and if we're not, you know, totally on the same wave length and I . . . that's probably been the one thing that I have, you know, when I have been worried or upset and, because, you know, wanting to be sure that we're going to be good parents together.

Clearly, Nicole lacked confidence that she and her husband could come to a consensus about conflictual issues and wondered if this inability would impede their capacity to parent their child together. Nicole's concerns seemed quite valid especially in light of Belsky's (1990) findings that couples who had difficulties communicating with each

other prenatally were those most likely to experience conflict about childrearing. Particularly relevant to the content of Nicole's expressed anxiety, Heinicke and Guthrie's (1992) results indicate the importance of a couple's ability to express and resolve negative affect in the context of coming to a consensus about disagreements to both good marital functioning, and consequently parenting.

When asked about whether she had felt needy, unsupported or surprised by her emotional state, Nicole responded by describing the depth of her neediness in relation to her husband.

> I have felt, I guess, more needy than I have in the past. Maybe more dependent, my husband wanting to . . .him to give me a lot of emotional support and to make sure that . . . you know, he really loves me.

Nicole's uncertainty about whether her husband really loved her seemed to be at the root of her apprehensiveness and fear about having a baby. From an object relations perspective, Nicole's relationship with her husband was not providing her with a background of emotional safety. It was not surprising then that, when she was asked about any good feelings during pregnancy, she made no mention of her feelings about her unborn baby. Her husband's inability to provide Nicole with much needed emotional support and love was contributing to her inability to have positive and loving thoughts and feelings about their unborn baby.

When asked if she had a relationship with her baby yet, Nicole responded in the negative.

> I don't really attribute emotions or feelings to the baby. . . . I don't really seem to really talk and I don't . . . I don't visualize what it looks like, you know, I don't ah, . . . I mean I have a relationship with it sometimes, you know, it'll be right up on my ribs [inaudible] sort of push them away, but other than that, I don't feel like the baby really responds to be me, or, um, I mean I respond to it sometimes, but it

> doesn't, you know, I guess my answer would probably be . . .probably be, not really.

Nicole's husband was not acting as a secure base for her during her pregnancy. Consequently, she was keeping her unborn baby at a safe, psychological distance. She did not think about her baby's feelings, imagine her baby's physical characteristics, nor feel that her baby was responsive to her. In this excerpt from her narrative, the affective tone of her representation of her fetus was once again negative; her unborn baby was someone who made her uncomfortable by settling on her ribs. Nicole's response was to physically push the baby away, which, of course, resembles her attempts to push the baby away psychologically.

Furthermore, the difficulties in Nicole's prebirth relationship with her husband seemed to prevent her from feeling realistically confident in the maternal role. Nicole lacked confidence that she and her husband could come to a consensus about significant issues and worried that this inability would impede their capacity to parent their child together. She feared that they were "not on the same wave length." In addition, Nicole expressed a great deal of neediness in relation to her husband. She wanted him to provide her with more emotional support and questioned if he really loved her.

When asked how comfortable she felt about taking care of the baby after birth, Nicole replied:

> I think in the beginning it'll be a little awkward because I've spent very little time with infants and ah, I've got a lot to learn. I know that. So, I think it'll be awkward, but anything pretty [inaudible], I mean, I'm not . . .it's hard to predict exactly how I'm going to feel once I'm holding her but um, . . .I know that babies are . . .are fairly . . .tougher than people think they are, so, I know that I . . .I'm not going to um, like hold her long and like kill her, you know, just by doing that (chuckle) [right]. Um, so I think it'll be . . .I'll sort of be awkward and fumbly in the beginning but um, you know.

While Nicole was able to acknowledge that she had a lot to learn about caring for an infant, she did not mention her husband or anyone else on whom she could rely for emotional and practical support in the day-to-day job of parenting. Her response revealed that she would be parenting alone, that she would be awkward as a caregiver, and that she was uncertain about her love for the baby.

In an effort to compensate for her husband's lack of support, Nicole tended to overestimate herself in the maternal role as evidenced by her ability to maintain an ego defense that was usually in place. Instead of becoming overwhelmed by the prospect of caring for her baby without much support, Nicole defended against her anxiety by representing babies as "tougher than people think they are." However, her anxiety about being able to protect her baby broke through when she stated "I'm not going to um, like hold her long and like kill her." Clearly, Nicole had concerns about her ability to protect, care, and love her baby after birth, and these concerns seemed linked to her husband's inability to function as a secure base for her.

Case Study of Eloise

Eloise had become unexpectedly pregnant one month following her marriage to a German man with whom she had been having a long distance relationship for the past three years. Her husband had relocated to New York to be with her, and, consequently, was experiencing several transitions simultaneously. He was adjusting to a new country, culture, and language as well as to being married. In essence, the timing of her pregnancy was not right for them as a couple. When asked about her husband's first reaction to learning that she was pregnant, Eloise responded:

> He was scared. Um, and, I mean, willing to let me make the decision as to what to do. Um, one because it's my body [right], uh, and it's also difficult for him because it's not really his home almost, yet, you know, he had just . . . I mean, he hadn't been here all that long, I mean, he didn't feel as confident with where he was moving, you know, whether or not he'd be able to provide and, you, know, all of a sudden I'm pregnant and, and everything just seems out of control and very, very scary so, I mean he was, he was almost deferring to me [right].

Eloise's husband's fears seem realistic. In particular, he was scared about the medical consequences for Eloise and the psychological consequences for both of them if she terminated the pregnancy. He was also scared about not being able to provide for the baby and not knowing how the baby would affect their relationship.

Given the nature of their long distance relationship, Eloise and her husband had not yet established a strong foundation as a couple. As Eloise admitted, they had never "seen each other deal with a real crisis. Um, or even seen each other really upset" except when they were saying good-bye to one another and flying back to their respective countries. Consequently, when she became pregnant, he did not know how to comfort her when she cried through the night and "just felt miserable." More importantly, Eloise and her husband were faced with making a decision that would have profound consequences for each of their lives, their life together, and their fetus's life without having first developed the ability as a couple to come to a consensus about conflictual issues (Heinicke & Guthrie, 1992).

Eloise's husband did not seem to be in a good position to provide a background of emotional safety (Sandler & Sandler, 1978) for his wife. Consequently, her experience of pregnancy was negatively affected. Although Eloise reported that she and her husband calmed down and became very excited after deciding to have the baby, she characterized her pregnancy, as a whole, as "emotionally difficult." For instance, at three and a half

months of pregnancy, she cried out of fear when she saw the baby move on the sonogram. "I just kept on saying is that baby really inside me because I didn't know anything about sonograms really."

Eloise's narrative could not be coded using the Quality of Relatedness Code. She could not imagine anything specific about what her baby might actually be like. While Eloise believed that she had a relationship with her unborn baby, when asked to describe it, she characterized it as "sometimes very civil (laugh) and sometimes um, I mean, I, I, reason with this baby." When the interviewer asked her what she said to the baby, Eloise described how she responded when her baby settled in her groin and made her uncomfortable.

> All day long I just kept on saying little junior, little junior, like you can't sit there like that through the next two months because you're gonna make me really, really unhappy.

The passage above also exemplifies how a woman who cannot think about her prenatal relationship with her fetus and future one with her baby after birth tends to represent her fetus with significantly less positive affect. Eloise's baby was someone who settled in her groin and made her unhappy. Her thoughts and feelings about her fetus became increasingly negative when she began to attribute motives to the baby for his placement in her body; " I think this baby hates me, and I think this . . . you know, and that's why this baby is doing this." Eloise seemed to be projecting the hatred she felt for her fetus onto her unborn baby. She continued:

> I hate being uncomfortable. Um, you know, I hate having to walk slower on the streets [right] and, you know, those kinds of things. So, I, I feel like, you know, like the kid's acting out when it like slows me down or, or anything like that.

She seemed to experience her fetus's placement in her body as a deliberate attempt to cause her physical pain. Furthermore, her unborn baby was painfully reminding her of his needs for her to slow down, which she felt angry and resentful about meeting.

In essence, Eloise seemed unable to identify with her unborn baby and redefine her needs in terms of those of her fetus. Her sense of her future baby's dependence on her terrified her.

> I just never had anyone dependent on me before nor have I ever been really independent, you know, I mean, I still depend on a lot of people, so it's, it's scary to think of, you know, somebody being so independent on, on, me.

Eloise's fear led her to misspeak. She wished that her future baby would be independent of her instead of dependent on her.

The way in which a woman experiences her baby's dependency needs reflects her particular conflicts around dependency as developed in relation to her own mother (Ballou, 1978; Benedek, 1959; Lester & Notman, 1986; Pine, 1982). During a woman's first pregnancy, she is most directly faced with the challenge of reworking conflictual identifications with her own mother in order to find her own way of becoming a mother. According to Ballou (1978) and Pines (1978), a pregnant woman's interpersonal relationships with her husband and other members of her social support network may facilitate or hinder her efforts to complete this intrapsychic process. Clearly, Eloise did not experience her husband as being able to provide her with necessary emotional support. We can hypothesize that her inability to rework conflictual identifications with her own mother was contributing to her inability to identify with her fetus and preventing her from developing maternal feelings.

Eloise continued by telling the interviewer exactly what she experienced as scary.

> I'm a very responsible person, but, but still I think everyone likes to feel like they have an out um, and when you have babies, I mean, you just don't have an out, I mean they just always need you. Um, I think that's really . . . that can be really terrifying.

Eloise was extremely afraid that she would be overwhelmed by her baby's needs. Her husband's inability to act as a secure base for her seemed to be hindering her efforts to connect to and reconcile with her maternal representation (Ballou, 1978). Her inability to identify with her fetus and accept his dependency upon her was most likely contributing to her inability to think about her prenatal relationship with her baby and future one with her baby after birth.

The difficulties in Eloise's marriage during pregnancy also seemed to be hindering her ability to envision herself as a realistically competent caregiver to her future baby. Most notably, Eloise was quite concerned about her ability to protect her baby from harm. She told the interviewer that she "kind of" liked the idea of being pregnant because she knew that the baby was safe and secure.

> I mean, it's, um, you know, as scary as it is sometimes, I mean, at least you know that your (chuckle) baby is pretty, you know, is well protected. Um, you know, isn't quite out there in the world yet where, you know, so many things can, can happen.

When she was asked how comfortable she felt about caring for her baby after birth, Eloise became overwhelmed by anxiety.

> Yeah, I mean, scared, you know, again. I mean, it's not anything I've, I've ever done where, you know, I've had to meet anyone's needs . . . I mean, I have a hard time meeting my own needs sometimes. Um, I mean, I know, I know I can do it, I mean, like, I mean like, I hope (chuckle), I hope I can do. I mean, I've, I've just seen a lot of people who um, who I have a lot less faith in than I have in myself, do it and do it successfully [right], so I imagine that I can do it as well.

In her response, Eloise unsuccessfully attempted to convince herself that she had what it took to meet her baby's needs. However, her speech was halted, and, as she admitted, she had not always been successful at meeting her own needs.

When asked what she was specifically scared about, Eloise replied:

> Um, (sigh), uh, you know, reacting to the right things at the right time, not over-reacting, um, you know, or, you pick them up when, when they cry every time, do you leave them, you know, do you feed them whenever they want to be fed of do you not, you know. I guess, doing the right thing [right] is what is most scary, I mean, I don't know what the right thing is.

Similar to Nicole, Eloise did not mention being able to turn to anyone, including her husband, for emotional and practical support during the postnatal period. As discussed above, Nicole attempted to compensate for her husband's inability to function as a secure base for her by overestimating herself in the maternal role. In contrast, Eloise demonstrated depressive tendencies and reacted to her husband's lack of support by underestimating what she had to give to her baby. More specifically, she obsessively worried about how to respond to her baby all the while assuming that she would not know how to best care for him. Eloise anticipated with great fear that she would be parenting alone. Consequently, she felt more comfortable being pregnant, as she knew her fetus was safe and secure inside her body. Eloise's inability to envision herself as someone who could adequately protect and care for her baby after birth seemed to be linked to the lack of foundation in her relationship with her husband.

Theoretical Implications and Future Research

The findings of the present study highlight the importance of a woman's relationship with her husband to her experience during pregnancy and her transition to motherhood. The question of whom a woman chooses to marry is thus quite relevant. Both object relations and attachment theorists have written about the influence of an individual's early experiences with her own parents on her interpersonal relationships with romantic partners. As Dicks (1963) has suggested, an adult's intrapsychic issues developed in relationship with her parents greatly influence whom she chooses as a spouse. Romantic love has also been conceptualized as an attachment process that is influenced in part by earlier experiences with one's primary caregivers (Feeney, 1999; Hazan & Shaver, 1987; Shaver & Hazan, 1988; Shaver, Hazan & Bradshaw, 1988; Weiss, 1982, 1986, 1991). However, while adult romantic relationships may reflect particular aspects of each partner's internal working model of attachment, they are also influenced by "factors unique to particular partners and circumstances" (Hazan & Shaver, 1987, p. 521).

Consequently, once an individual has chosen a particular partner, it seems essential to take into account both the impact of past relationships and the current relationship on the transition to parenthood. From a family systems perspective, the results of the present study seem to indicate that the transition to parenthood is a triadic process. That is to say that the transition to parenthood is influenced by the following three interacting factors: 1) the wife's experiences with her family of origin and her attachment status; 2) the husband's experiences with his family of origin and his

attachment status; and 3) the relationship that the spouses create with one another and their attachment status to one another.

It is proposed that the issues that a husband brings to the marital relationship impact on his ability to act as an emotional container for his pregnant wife and to provide her with a background of emotional safety. A pregnant woman's feelings about her husband and the support that he is providing are believed to then impact on how she feels about her unborn baby and herself, as she becomes a mother. It is thus the family system that the couple creates prebirth that impacts on the transition to parenthood. This theoretical perspective is consistent with the one suggested by Diamond, Heinicke and Mintz (1996). They found that the prebirth family system, reflecting the level of separation-individuation for the mother and the father, and their marriage, was linked to the quality of infant development and parent-infant transactions concerning separation-individuation and mutuality during the first year of life. Taken together, the results of the present study and those of Diamond et al. (1996) strongly suggest that the prebirth family system influences both maternal representations of self in relation to the unborn baby during pregnancy and the actual parental relationships with the infant after birth.

The findings of the current study are also consistent with the theoretical notion that motherhood is an attachment process that undergoes transformation (Solomon and George, 1996). Solomon and George (1996) propose that there is a caregiving representational system that is developmentally related, but distinct from a woman's internal working models of self and other stemming from her attachment relationships to her primary caregivers. The caregiving representational system concerns the woman's sense that she will be able to and want to protect her baby, and that her baby is worthy of

care. It has its own developmental path that begins in adolescence and is greatly transformed during pregnancy. The results of the present study indicate how important a pregnant woman's current relationship with her husband is in transforming both aspects of the caregiving representational system, her representation of her fetus and herself as a caregiver. More specifically, the current relationship with her husband was shown to impact on her ability to speak about her fetus with predominantly positive feelings, to emotionally attach to her fetus, and to envision herself as able to care for, love, and protect her unborn baby.

During the postnatal period, Solomon and George (1996) propose that the caregiving representational system continues to be transformed through a new mother's actual experiences of caring for her infant. In this study, we can assume that the lack of association found between a woman's prebirth representations of her fetus and herself as a caregiver and her satisfaction with her caregiving arrangements at 14-months postpartum is indicative that such a transformation has taken place. Belsky and Rovine (1990) and Cowan et al. (1991) suggest that the quality of the support provided by the husband may contribute to or detract from the mother's sense of herself as able to care for her infant and, to see her infant as worthy of care. The present study did not examine how the quality of the husband's postbirth support impacts on the quality of a woman's postbirth representations of her fetus and herself as a caregiver. However, it did find that the quality of the husband's postbirth support impacted on the woman's overall degree of satisfaction with her social support network at 14-months postpartum. That is, women who were not satisfied with their husband's support 14-months after the birth of their child were those least satisfied with the help provided by their family, friends, and

professionals. Thus, we can hypothesize that the quality of a mother's current relationship with her husband is the primary factor influencing the transformation of her caregiving representational system during the postbirth period. Future research will be needed to confirm this hypothesis.

Furthermore, a woman's current relationship with her partner has the potential to either make reparation for less than optimal early experiences or reverse good experiences with her primary caregivers (Owens, Crowell, Pan, Treboux, O'Connor & Waters, 1995). In a study of engaged couples, Owens and colleagues (1995) examined how closely adults' models of their current romantic relationships corresponded to their internal working models of attachment to their caregivers as assessed by the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1984). They found that the set of expectations, attitudes, and behaviors that individuals developed in early attachment relationships with their caregivers impacted not only on their own but also on their future spouse's security in the adult love relationship. More specifically, individuals who were engaged to partners classified as secure on the AAI were more likely to create secure models of the romantic relationship. If, however, an individual classified as secure on the AAI were paired with a partner classified as insecure on the AAI, the secure individual would be twice as likely to form an insecure model of the current love relationship (Owens et al., 1995).

Given these results, we can speculate that pregnant women who are married to men who act sensitively and consistently in their relationships will represent their marriages as strong and experience a background of emotional safety. For all women, a husband's ability to act coherently, sensitively, and consistently during pregnancy is

important. This may be particularly true for a woman whose early attachment relationships with her own caregivers were less than optimal. A husband with a secure overall perspective on attachment may be capable of helping his pregnant wife with an insecure overall perspective on attachment construct a secure representation of their romantic relationship. Consequently, we can hypothesize that her secure representation of their marriage will positively impact on her representations of her fetus and future baby, and herself in relation to her child despite her own early attachment history. Again, future research will be needed to test this hypothesis.

The results of this study have implications for clinicians working with men and women considering parenthood as well as pregnant women or expectant fathers in treatment. Clinicians who hear their patients represent their marital or nonmarital committed relationships as difficult may be advised to work with the couple or recommend couple's therapy for partners before they become pregnant or, if already pregnant, before the birth of their baby. Intervention before the arrival of the baby may enhance a woman's experience during pregnancy as evidenced by the expression of more positive, loving, and joyful thoughts and feelings about the unborn baby, the ability to think about her current relationship with her fetus and future one after birth, and the capacity to feel realistically confident in the maternal role. Consequently, a pregnant woman would experience a smoother transition to motherhood.

Although the goal of this study was to examine how the quality of a woman's relationship with her husband impacts on her experience during pregnancy and early motherhood, it would be very interesting to look at these issues from the expectant father's perspective. Specifically, how does the father's prebirth representation of his

marriage impact on his ability to act as a secure base for his wife during pregnancy and provide emotional and practical support during the postbirth period. It would also be quite interesting to explore how the father's prebirth marital representation influences his paternal representations of fetus and self as caregiver.

Limitations of the Present Study

Several aspects of the research design and methodology need to be considered to properly evaluate the findings of this study. For one, the size of the sample was relatively small. This limitation restricts our ability to interpret the significant results of the present study as applicable to the general population of first-time pregnant women. A larger sample would provide increased statistical power for the analyses, and more confidence in generalizing about significant findings.

A second limitation refers to the sample of pregnant women in the present study. In her discussion of the Pregnancy Project sample, Slade (Slade et al., 1995) noted that the sample was uncharacteristic, as it did not demonstrate expected rates of mother-infant attachment concordances. Furthermore, in light of the findings obtained on the Symptom Checklist 90 (SCL-90), Slade concluded that this sample of pregnant women seemed more disturbed than a non-patient normal population. As a possible explanation, she proposed the pregnant women's motivations for participating in a longitudinal study. Indeed, the study required seven visits over a period of two and a half years to an inconveniently located research site. Participants received minimal financial compensation intended to cover little more than their transportation costs. Slade et al. (1995) suggested that women in the study experienced higher degrees of anxiety about

becoming a mother, and that they participated to receive support and to mitigate their concerns about child rearing. In essence, the women were using their contact with the research assistants and their access to the principal investigator as an emotional safety net. It would thus be necessary to replicate this study with a sample more representative of the larger population of first-time pregnant women to validate the present findings.

A third limitation relates to methodological issues. First, the Crockenberg Social Support Scale did not prove to be a very powerful instrument. Perhaps a semi-structured representational interview might be administered to tap into women's feelings about their social support networks, in particular their husbands' support, as well as their childcare decisions and arrangements. Second, it was suggested that too much time had elapsed between the administration of the Pregnancy Interview during the third trimester of pregnancy and the Crockenberg Social Support Scale at 14-months postpartum. As having and caring for a child can dramatically change a woman's maternal representations of baby and self as caregiver, it might be useful to assess her maternal representations during the second half of the baby's first year of life. These postbirth maternal representations may serve as better predictor variables of her feelings about her social support network at 14-months postpartum.

Concluding Remarks

The results of the original and post-hoc analyses highlight the importance of the marriage to a woman's experience during pregnancy and the transition to motherhood. The quality of a pregnant woman's marital adaptation was predictive of her ability during pregnancy to 1) represent her fetus with positive affect, 2) to envision her prenatal

relationship with her fetus and future one with her baby after birth, and 3) to feel realistically confident that she will be able to care, love, and protect her future baby after birth.

These findings are consistent with the basic premises of object relations (Ballou, 1978; Dicks, 1967; Pines, 1978; Sandler & Sandler, 1978) and attachment theory (Bowlby, 1982). We can surmise that a pregnant woman may represent her fetus in a largely positive fashion when she experiences her husband as providing a background of emotional safety. This experience allows her to portray her fetus with predominantly positive, joyful and loving thoughts and feelings.

The influence of the marriage proved much greater than originally expected. A post-hoc analysis revealed that the quality of the prebirth marital relationship predicted whether or not a woman could allow herself to think about a relationship with her fetus and fantasize about a future one with her baby after birth. This result was understood in part by the belief that the husband's ability to provide love, affection, and support facilitates the development of mutuality between his pregnant wife and future baby. Thus, it was proposed that a woman's ability to identify with her fetus and develop maternal feelings allowed her to imagine a prenatal relationship with her fetus and future one with her baby after birth. In addition, this result was understood in light of the linkage found between the content of an expectant mother's representations of her husband and of her fetus (Ammaniti et al. 1992). It was suggested that a pregnant woman's disengagement from her fetus might be a defense process to block out the negative representation of her husband. With the aim of defending against negative feelings about her husband, an expectant mother may block their expression against the

fetus, and consequently be unable to imagine anything about the unborn baby whom she is carrying.

Women who had not yet built a stable relationship with their husbands did not experience a background of emotional safety. Specifically, when spouses had not yet established a strong foundation as a couple, a woman tended to feel emotionally needy in relation to her husband, doubt her husband's love for her, and question their ability to come to a consensus about conflictual issues, and consequently parent well together. These women proved incapable of allowing themselves to fantasize about being emotionally attached to their unborn babies and about sharing warm, intimate moments with their future infants. Furthermore, a woman's ability to imagine her current relationship with her fetus and her future one with her baby after birth predicted her ability to represent her fetus with significantly more positive affect.

The literature concerning the impact of the prebirth marriage on the couple's transition to parenthood provided a context for understanding the association between the quality of the prebirth marriage and a woman's ability to feel realistically confident in the maternal role. It was suggested that a woman who feels secure in her ability to discuss and come to a consensus about conflictual issues with her husband during the prebirth period would anticipate being able to communicate effectively with her husband as they make the transition to parenthood. During the prenatal period, the woman tends to feel realistically confident in her ability to love, care, and protect her baby as she knows that she will not be parenting alone. A pregnant woman's confidence that her husband will provide emotional and practical support in the day-to-day job of parenting enables her to feel realistically confident in the maternal role. Women whose husbands fail to function

as a secure base for them tend to overestimate or underestimate themselves in the maternal role, and thus unrealistically envision their level of competency. Pregnant women who demonstrate depressive tendencies may be more likely to underestimate themselves in the maternal role in response to their husband's lack of support.

The lack of relationship found between the quality of a pregnant woman's maternal representations and her postbirth satisfaction with her social support network was attributed to the time elapsed between the two data points. Many aspects of a woman's representation of her baby and herself as a caregiver may change during the 16 to 18 months between her third trimester of pregnancy and 14-months postpartum.

In the post-hoc analyses, the husband's support was again found to be primary. Women who were dissatisfied with their husbands' support or who did not mention their husbands as providing support reported 1) significantly lower levels of marital adaptation during pregnancy, and 2) fewer family members, close friends, and professionals whose support was experienced as satisfying at 14-months postpartum. The literature on social support corroborated the importance of the husband's support for the emotional well-being of a new mother. Finally, the primacy of the husband's support was considered from the point of view of attachment theory. Bowlby (1982) suggested that women who are able to rely on secure attachments are those most likely to represent themselves as mothers who are able to give to their children. As a woman's husband serves as her attachment figure during adulthood, an argument can be made that his ability to provide her with emotional and practical support is the most important factor impacting on the quality of her maternal representations.

THE PREGNANCY PROJECT.

PREGNANCY INTERVIEW

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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 you 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 !

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PREGNANCY INTERVIEW

CODING SYSTEM

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Pregnancy Interview Coding System
7/15/94

The Pregnancy Interview (Slade, Grunebaum, Huganir & Reeves, 1987) is a semistructured clinical interview designed to examine the affective experience of pregnancy. The Pregnancy Interview is administered to women in their third trimester of pregnancy. They are asked to describe their fantasies about the unborn baby, their feelings about the pregnancy itself, their feelings and fantasies about the process of becoming a parent, and their reflections on the ways parenthood will influence their marriage and other aspects of their life.

The coding system described here is divided into 3 sections: Developing Representations of the Baby, Parental Representations and State of Mind. There are 3 codes that comprise the section on Developing Representations of the Baby: Affective Tone, Degree of Elaboration, and Content of Fetal Representation. There are 3 codes that comprise the Parental Representation section: Confidence/Limitations, Acceptance of Baby and Self Needs and Interrole Conflict. Finally, there are 2 State of Mind codes: Coherence and Resolution of Mourning of Miscarriage.

In order to become reliable on these rating scales, it is first necessary to read a number of pregnancy interview transcripts so as to be familiar with the breadth and range of emotions and fantasies during pregnancy. It is a time of enormous emotional turmoil and upheaval; women reevaluate their identities and primary relationships in a variety of ways as they begin to imagine themselves in the role of mother and caregiver, and as they confront the dramatic changes that will follow the birth of their first child.

When coding individual transcripts, raters should read the entire transcript through carefully once or twice (or more, if necessary). Use only questions 1-22 for formal scoring for all scales. Read questions 23-34 for additonal information. Do not read beyond question 35. Ratings for individual codes should then be based primarily (although not exclusively) upon parental response to questions listed under code descriptors. Responses to questions other than those listed should be included in coding decisions when they add substantially to the information gained from core coding questions. Training around these decisions is particularly important.

SAMPLE CODING SHEET
PREGNANCY INTERVIEW

I Developing Representations of the Baby

1a.	Affective tone of prenatal representation	_____	(1-9)
1b.	Affective tone of postnatal representation	_____	(1-9)
2.	Degree of elaboration of representation	_____	(1-9)
3.	Content of fetal representation	1._____ 2._____ 3._____	(1-7)
4.	Quality of relatedness	_____	(1-5)

II Parental Representations

5.	Parental confidence and competence	_____	(1-9)
6.	Acceptance of baby and self needs	_____	(1-9)
7.	~~Intensity of interrole conflict~~	_____	(1-9)

III State of Mind

8.	Coherency of representation	_____	(1-9)
9.	Lack of resolution of mourning-miscarriage	_____	(1-9)

I DEVELOPING REPRESENTATIONS OF THE BABY

There are several dimensions to consider when attempting to determine the quality of a mother's developing representation of her baby. There is first the dimension of the affective tone of the representation; the predominant affective valence of the mother's thoughts and feelings about the baby. There is second the degree of elaboration of the representation, which conveys something important about the degree to which the mother has allowed herself to develop a relationship with the baby in utero. The degree of relationship is thus separate from the affective valence of the representation of the relationship. There is also the content of the representation itself. Some mothers endow their fetuses with human attributes, others with animal attributes, and still others with those of aliens or strange creatures. This content category conveys something important about the object relations level of the mother's fantasies about her unborn child, and is an important complement to the affective tone and degree of elaboration evaluations.

1. Affective tone.

Affective tone refers to the affective valence of mother's representation of her child. The representation of the developing child is sometimes different in quality from the developing representation of the fetus. The fetus, by virtue of its movement and the changes it has brought about in the mother's body, is more "real" than the child after birth, who is not yet known to the parent. The mother's thoughts and feelings about her born baby are therefore based in fantasy and projection. It may be more comfortable, for instance, to a mother to express negative feelings toward the fetus, given that her pregnancy is a time limited state that provides containment for her negative affects. Or, a mother may feel quite comfortable with her pregnant state, and attribute positive qualities to the fetus' motion and kicking, whereas she may have a good deal of anger about the baby's fantasied interference in her marriage. Therefore, mother's representation of the fetus will be scored separately from that of the child after birth.

Affective tone is a critical feature of the mother's developing attachment to the child, for it is the most direct indicator of the quality and affectivity of this attachment. Affective tone is judged on the basis of the way mothers speak about their babies, the kind of qualities they attribute to the baby, and the ways they imagine the baby fitting into or changing their lives. Affective tone can best be thought of as having two components in this context: 1) the affective quality of the representation of the fetus or baby, i.e. "cute", "curious", "nudgy", "communicative", "always running my life", etc., and 2) the affective quality of the mother's fantasy about the baby's place or role in her life, i.e." I just know he's going to make me very happy", "I'm worried that this baby is going to keep me from doing the things I want and need to do in terms of my work", "I keep thinking he'll never let me get a night's sleep once he's here", etc. Most pregnant women use generally positive terms to describe their feelings about the baby, yet there are often subtle and not so subtle indices of negative attributes of the representation -- the baby as an annoyance, a disruption, etc. It is important not to be misled by the mother's general character style. For example, a mother may be very upbeat and humorous throughout the interview, but use her humor to portray the baby as disruptive. On the other hand, a mother may be low-key but may represent her baby as someone whom she has very positive and protective feelings toward.

The tone of the representation is scaled from high negative to high positive. While the affective tone of some mothers' representations is overwhelmingly positive or overwhelmingly negative, the quality of many mothers' representations is characterized by both positive and negative affect. In fact, this kind of mixed affective picture is both typical and highly adaptive, as it is -- in a sense -- a preparation for the ways in which mothers will have to balance positive and negative feelings once their babies are born. The rater must, in effect, assign a weight to the positive or negative affect, and determine which is more prevalent. In some cases, the affective tone of the representation will be neither negative nor positive but neutral. In addition, sometimes the mother's negativity will be expressed by constriction of indifference.

1a. Prenatal Affective Tone

For affective tone of fetal representation, use questions #1,2,5-12,35.

1. High Negative. A mother receives a 1, the lowest point on the scale, if she chooses words and describes fantasies that convey a highly negative affective tone about her fetus. This will be conveyed in highly negative attributions and in an absence of positive representations. The mother may see the fetus as annoying, intrusive, making her feel uncomfortable, or being draining in other ways. She derives no pleasure from her pregnancy and she does not experience warm moments with her fetus. As well, the mother may ascribe willful, negative motivation to the fetus' movement. The hall mark of a 1 on this scale is the overall negative quality of the representation. A scale point of 2 would be in order when the representation is not so monochromatically negative - this mother is able to represent her fetus with minimal positive affect but these representations are fleeting and can not be sustained.

3. Low Negative. A woman receives a 3 on this scale if her affective tone when speaking about her fetus is moderately but directly negative. The negativity at this scale point is not as striking as a 1 or a 2. The affective tone of her representations of her fetus is tinged with negative ambivalence. The negativity, even if expressed directly, gets modulated by positive affect that is sustained more easily than in a 2. She can acknowledge positive features of the relationship but they do not represent her salient experience of her fetus. Because the overall representation is tinged with negative affect, positive expressions may often not seem genuine or believable. In some cases the mother may resort to idealization but her efforts are unsuccessful as negative affects intrude.

A woman who is a 3 may experience her pregnancy as mildly annoying. When asked about concerns about the well-being of her fetus she may describe disturbing fantasies about it's intactness. There may be a negative cast to her experience of the fetus' movements however, unlike women who are a 1 or a 2, these negative fantasies would be offset by more positive ones. She may liken the baby's movements to "a thud" or "pecking" that convey her annoyance. Although she may express having a positive reaction to being pregnant she also expresses dissapointment about some aspect of it.

4. Constricted - Indifferent. Unlike the directly negative women described above some women express their negativity via constriction and indifference - these women are scored as a 4. While not as directly negative as the women at 3 there is a decidely negative cast to their statements about their fetus. Constricted, flat affect conveys the effort to minimize and contain negative feelings while indifference has qualities of scorn and dismissal. These women do not express feelings about their fetus directly and may go as far as refusing to acknowledge having any feelings at all. However, this denial and

dismissing stands out against a backdrop of indirectly expressed negative and idealized feelings. Feelings are not acknowledged or taken seriously, they are fleeting and passing. Their descriptions sound hollow, trite and stereotypic. Women who score a 5 may also express few feelings about their fetus, but their reserve conveys a more neutral attitude. They appear to be in a holding pattern and do not convey the negative feelings portrayed by women who are a 4.

One of the ways that this manifests itself is in mothers' use of terms that indicate her wish to distance herself from her experience: she describes her experience by using the pronoun "you" when speaking about her own feelings. Their responses are brief and poorly elaborated. When asked about their feelings these mothers are often incapable of answering the question or will resort to different manoeuvres to avoid doing so directly. They may forget the question or not answer it altogether. They may also dismiss it by saying everything is "fine" or "OK." Rather than discussing feelings directly they often focus on physical complaints or difficulties during their pregnancy.

5. Neutral. A rating of 5 is assigned to mothers who do not ascribe any particularly positive or negative qualities to the representation of their fetus. They may respond vaguely or indirectly to the interviewer's probes, and it will often seem to the rater that the mother has not allowed herself to endow the representation in any elaborated way. It does not have the constricted, indifferent, and/or negative tone of a 4. There is a sense of reservation and "waiting" rather than a defensive effort to cover up negative feelings and anticipations. It is as if the affective signs of a beginning attachment have been neutralized, perhaps because of fears, character style or prior losses. When there is a limited expression of feelings about the fetus but affective qualities are expressed use scale point 4 to indicate negatively tinged expressions, and 6 to indicate positively tinged ones.

Such a woman may be unable to imagine much about her fetus and resort to generalities that in and of themselves seem neutral. She may not be able to articulate feelings about the fetus' growing dependence on her, and she may not appear to have a representation of the fetus that can be affectively characterized. The reader has little sense of how she is representing her fetus internally; she remains, in this sense, quite neutral.

7. Low Positive. A mother receives scale point 7 if her representations of her fetus are predominantly positive in nature. She can discuss her fears and concerns but these do not overshadow her predominantly positive experience of her fetus. Any ambivalence is always resolved in favor of positive representations. What differentiates a mother receiving this code from a mother receiving a higher score is the extent to which negativity appears to diminish her overall experience of her fetus. Although her experience remains predominantly positive, there remains an element of discomfort around the expression of negative affect. Women receiving this rating are still struggling to integrate the two sets of feelings, whereas mothers receiving a 9 are not. In some instances this struggle may result in a sucessfully maintained idealization of her experience.

When asked how it feels to have a baby growing inside her, a mother may represent her fetus as someone who brings her pleasure. For example, the fetus' movements may give her a warm, happy feeling. Although the mother may have had a hard time believing she was pregnant, or may say negative things about her fetus such as "this baby's already been sacrificed for" or "it's just give, give, give," her overall representation is positive, related and infused with many warm, affectionate terms and fantasies. She may refer to her fetus as a "little buddy" or a "little pal" and find herself "happier in a lot of ways."

9. High Positive. A mother receives the highest score of 9 if she represents her fetus with highly positive affect that seems believable and genuine. While she may well acknowledge negative affects, they are not only fewer in number than for those women receiving a 7, but are dramatically outweighed by positive attributions and feelings. There is no evidence of efforts to defend against or minimize negative feelings; they exist, but do not threaten a generally believable, highly positive representation.

A woman may represent her pregnancy with positive affect before the interviewer has an opportunity to ask her about it. When asked to elaborate on the positives, she will talk spontaneously, believably and excitedly about the pleasure her fetus has already brought her. For example, she may speak of the pleasure of telling family and friends and sharing with her husband the excitement of experiencing the new things that are happening. She may spontaneously describe the excitement involved when she and her husband heard the baby's heartbeat for the first time or how good the fetus' movements make her feel.. Her language and presentation indicate real, deep and acknowledged pleasure. This does not mean that the mother does not have the "usual" anxieties related to pregnancy. These do not interfere with her developing a clear, coherent, positive representation.

1b. Postnatal Affective Tone

For affective tone of postnatal represenation, use questions 1,2,9a,10-17, 21-22,26,34,35.

1. High Negative. A mother receives a 1, the lowest point on the scale, if she chooses words and describes fantasies that convey a highly negative affective tone about her baby. This will be conveyed in highly negative attributions about her baby. She may imagine her baby as someone she has to take care of and worry about, someone who will be annoying or intrusive and will give her little pleasure. As well, the mother may ascribe negative motives to the child's earliest behavior; for example, a mother may describe her child as crying to annoy or manipulate her. The hall mark of a 1 on this scale is the overall negative quality of the representation. A scale point of 2 would be in order when the representation is not so monochromatically negative - this mother is able to represent her fetus with minimal positive affect but these representations are fleeting and can not be sustained.

3. Low Negative. A woman receives a 3 on this scale if her affective tone when speaking about her baby is moderately but directly negative. The negativity at this scale point is not as striking as a 1 or a 2. The affective tone of her representations of her baby is tinged with negative ambivalence. The negativity, even if expressed directly, gets modulated by positive affect that is sustained more easily than in a 2. She can acknowledge positive features of the relationship but they do not represent her salient experience of her baby. In some cases the mother may resort to idealization but her efforts are unsuccessful as negative affects intrude. Because they are so tinged with negative affect, positive expressions may not seem genuine or believable. She may view her baby as someone she and her husband will have to worry about or she may represent the baby as someone who will take from her and possibly not give her much in return. She may imply a kind of fearfulness about meeting her baby, feeling apprehensive about what she imagines may be a negative or difficult encounter.

4. Constricted - Indifferent Unlike the directly negative women described above some women express their negativity via constriction and indifference - these women are scored as a 4. While not as directly negative as the women at 3 there is a decidely negative

cast to their statements about their baby. Constricted, flat affect conveys the effort to minimize and contain negative feelings while indifference has qualities of scorn and dismissal. These women do not express feelings about their baby directly and may go as far as refusing to acknowledge having any feelings at all. However, this denial and dismissing stands out against a backdrop of indirectly expressed negative and idealized feelings. Feelings are not acknowledged or taken seriously, they are fleeting and passing. Their descriptions sound hollow, trite and stereotypic. Women who score a 5 may also express few feelings about their baby but their reserve conveys a more neutral attitude about their baby. They appear to be in a holding pattern and do not convey the negative feelings portrayed by women who are a 4.

One of the ways that this manifests itself is in mothers' use of terms that indicate her wish to distance herself from her experience: she describes her experience by using the pronoun "you" when speaking about her own feelings. Their responses are brief and poorly elaborated. When asked about their feelings these mothers are often incapable of answering the question or will resort to different maneuvres to avoid doing so directly. They may forget the question or not answer it altogether. They may also dismiss it by saying everything is "fine" or "OK." These women have great difficulty imagining things about their baby. When they describe interactions they imagine with their baby it is reduced to discussions of having to take care of the baby in practical ways. When asked about changes that they anticipate once their baby is born they do not mention emotional changes but focus on practical issues such as: schedule restrictions, need for more space, etc.

5. Neutral. A rating of 5 is assigned to mothers who do not ascribe any particularly positive or negative qualities to the representation of their baby. They may respond vaguely or indirectly to the interviewer's probes, and it will often seem to the rater that the mother has not allowed herself to endow the representation in any elaborated way. It does not have the constricted, indifferent, and/or negative tone of a 4. There is a sense of reservation and "waiting" rather than a defensive effort to cover up negative feelings and anticipations. It is as if the affective signs of a beginning attachment have been neutralized, perhaps because of fears, character style or prior losses. When there is a limited expression of feelings about her baby but affective qualities are expressed use scale point 4 to indicate negatively tinged expressions, and 6 to indicate positively tinged ones.

Such a woman may shy away from imagining her baby in the future and resort to generalities that in and of themselves seem neutral. She may use words like "interesting" or other vague descriptors to describe imagined moments with her child. She may state that the baby is not here yet and does not know what her baby will be like. She may state that she imagines there will be a relationship but does not know what it will be like. As a result it seems as if she does not have a representation of the baby that can be affectively characterized.

7. Low Positive. A mother receives scale point 7 if her representations of her baby are predominantly positive in nature. She can discuss her fears and concerns but these do not overshadow her predominantly positive experience of her baby. Any ambivalence is always resolved in favor of positive representations. What differentiates a mother receiving this code from a mother receiving a higher score is the extent to which negativity appears to diminish her overall experience of her baby. Although her experience remains predominantly positive, there remains an element of discomfort around the expression of negative affect. Women receiving this rating are still struggling to integrate the two sets of

feelings, whereas mothers receiving a 9 are not. In some instances this struggle may result in a sucessfully maintained idealization of her experience.

When asked to imagine the most pleasurable moments with her baby, a woman may describe the baby as someone whose company she will enjoy. She may look forward to feeding the baby and just interacting with the baby as mother and child. However, while a woman's positive representations of her baby may seem warm, they are diminished in overall strength by her negatively tinged fantasies. For example, she may imagine her baby's --albeit welcome -- intrusions as disrupting her life and other relationships in unwelcome ways.

9. High Positive. A mother receives the highest score of 9 if she represents her baby with highly positive affect that seems believable and genuine. While she may well acknowledge negative affects, they are not only fewer in number than for those women receiving a 7, but are dramatically outweighed by positive attributions and feelings. There is no evidence of efforts to defend against or minimize negative feelings; they exist, but do not threaten a generally believable, highly positive representation.

Whether she is describing playing with her baby after it is born, feeding her baby, or just attending to the movements of her baby, her language and presentation indicate real, deep and acknowledged pleasure. This does not mean that the mother does not have the "usual" anxieties about the effect of the baby on her life. These do not interfere with her developing a clear, coherent, positive representation.

2. Elaboration of Baby In-utero

This scale measures the extent to which a pregnant woman fantasizes about - internally represents - her prenatal child. It can be thought of as a degree of relationship code. Does she imbue her fetus with characteristics and qualities? Does she convey a sense of her fetus as someone that she could have a relationship with, talk to, have a concept of? Whereas the affective qualities of the relationship with the fetus are assessed in the scale for affective tone (#1a and #1b) the elaboration scale measures the level or degree of representation; namely, the extent to which a representation of the fetus can be described and elaborated. It is important to distinguish between the prenatal representation and fantasies about the "born" baby. Here we are solely interested in coding the extent of the prenatal relationship.

Use questions 8, 9, 9a, and 35. Question 9 and its probes offer the most direct evidence for the degree of elaboration. Question 9a should be used for coding only if her future forecasts are based on her representation of the prenatal relationship. On question 35 pay particular attention to the probe "Do you feel like a mother yet?"

1. No Elaboration. The lowest point, a 1, is assigned when the subject denies having any fantasies about her fetus. When she is asked if she has a relationship with her baby yet such a subject may respond with a definitive "No." She may initially indicate that she and her husband talk to the baby "Once in a while. Not a lot, once in a while." When she is asked to elaborate, however, it becomes clear that it is her husband who does the talking, not her. She denies either having a nickname for her baby or imagining anything about it. While the subject may express feelings and wishes about her baby by projecting into the future ("I hope it will be a boy." "I hope it will be well adjusted"), the reader is left with no sense of the pregnant subject's current representation of her fetus.

3. Low, Constricted Elaboration. Scale point 3 is reflective of a low, constricted, and/or sparse account of the pregnant woman's sense of her fetus. The subject may tentatively affirm that she does have a relationship with her baby, but when she is asked to describe it, she is very vague, One is left with little sense of what this "relationship" is. Such a subject will report minimal fantasies about her baby. She may be aware of her difficulty in representing her fetus and feel guilty or uncomfortable about it. Her flow of imagery, what little there is, is terse and restricted.

5. Moderate elaboration. When asked to describe her relationship with her in-utero child, the subject is able to do so. While her responses do not speak to a highly elaborated sense of her fetus, she does not convey being defended against fantasizing about the baby growing inside of her. Such a subject may speak convincingly about having strong maternal feelings. She may state confidently that she has a relationship with her baby, but it is predominately a one way relationship from mother to baby. She may also follow her statement about having a relationship with her baby with a disclaimer about it "not being here yet, or not knowing what it looks like." The subject may attempt to describe her relationship with her baby, emphasizing the bond and the connection. She may have nicknames for the baby and enjoy putting cream on her stomach as a gift for the baby. Such a subject may indicate that she talks to her baby, perhaps offering a little vignette that suggests a three way interaction between mother, father and child.

7. High elaboration. This scale point is assigned when the subject's responses go beyond conveying a sense of her fetus. The subject elaborates fantasies about her baby that are sufficiently defined such that the reader has clear images of the way the mother represents her fetus. Such a subject will use powerful imagery to depict her shifting representations of her baby; the baby seems real to the subject. She may describe how it feels to have a baby growing inside her, likening the uncomfortable moments to the movie "Aliens" and contrasting this description with a sense of feeling comforted and reassured by its familiar movements or hiccoughs.

The subject may offer detailed examples of reciprocal "conversations" with the baby. All the while she richly communicates her sense of awareness of her fetus as a responsive "somebody". The subject may reveal her "nickname" for her baby and illustrate the reason for the nickname. She may also report her fantasies about the baby, describing in a compelling way her vision of her child's qualities.

9. Over Elaboration This scale point is assigned when the subject's fantasies about the fetus are so elaborated that she conveys her notion of the fetus as a separate person. The reader may have the sense that the subject's highly detailed responses serve as a defense against the anxiety of acknowledging her baby's dependency. Such a subject may imbue her child with highly developed thought processes, telling the interviewer what she imagined her baby was thinking and feeling at various times, perhaps imagining what the fetus would say to her if it could. The subject may attribute to her prenatal child feelings and motives that would more appropriately belong to an independent person. The hallmark of this scale point is the richness of elaboration. While anxiety around dependency issues may be operative in scores at either end of this scale, it is the richness of description that suggests a nine.

3. Content of Fetal Representation

Mothers refer to their children in a number of ways: they may give them nicknames that are human, they may refer to them as small mammals such as kittens or bunnies, amphibians,

fish, or creatures such as aliens. Some mothers do not ascribe any such qualities to their fetal representations, and just refer to the child as "the baby" or "it". These are indicated as "none". On the coding sheet, enter the representations in order of their appearance. i.e. #1 is the first representation mentioned, the second representation is #2, and the third mentioned representation would be #3. Do not include all general conversational references; use specific instances where mother is asked to describe characteristics of the child or nicknames, etc, namely question #9. Write the specific names, or type of animal, alien, etc on the coding sheet.

7.1 Human (Specific name and/or gender)

7.2 Human (General;non specific)

6. Mammal

5. Amphibian

4. Alien

3. Quasi-Animal (Creature)

2. Idiosyncratic/Other

1. None

4. Quality of Relatedness

Looking at the moments in the interview when the mother fantasizes about the baby or about their relationship, or the time(s) they will spend together, judge the object relatedness of those fantasies along the following dimension.

Use questions 9a - 11, 13-17, 20-22 for coding this scale.

1. High Independent Mother stresses the child's independent activities, learning and growth away from her.

2. Independent Less extreme emphasis on independence than 1.

3. Mixed independent/intimate: Mother may make mention of independent, autonomous development, but this is mixed with mention of expectation of a developing, close, pleasurable relationship.

4. Intimate Mother emphasizes the development of a pleasurabe, intimate and mutual relationship with her baby, but the feelings and thoughts are less well-developed than in #5.

5. High intimate: Mother anticipates the development of a pleasurable, intimate and mutual relationship with her baby. She thinks about moments when they will do things together and experience pleasure in such moments of closeness.

N/A.: At this point there are mothers who do not fit any of the above scale points. For some mothers the child is really only serving mother's needs. For others indepence or

intimacy cannot be judged. There is nothing in the text that indicates how the mother feels about her child. For other mothers she and her child are connected to each other in a negative way.

II PARENTAL REPRESENTATIONS

The three codes in this section are aimed at assessing the quality of a woman's representation of herself as a parent: her level of confidence, her ability to balance her own needs with those of the baby, and the degree to which she is experiencing conflict as she anticipates incorporating this new role into her life.

Women who are about to become parents are confronting one of the biggest challenges of their lives. It is a task for which a woman has no real prior experience, although she may have taken care of other children in the past, and it is a task that is enormously complicated emotionally. She will be asked to make a myriad of decisions on matters with which she has no experience, and she will necessarily turn to others for support and -- in some instances -- guidance. She will be confronted with the limitations of her own childhood, and with those of her parents. It will realistically take time away from her marriage, from her work, and from her own personal goals and interests.

5. Parental Confidence and Competence

Clearly, no woman can be even vaguely "competent" before she has at least several months of experience mothering, although she may have many competencies that will help her cope. What will distinguish women is the degree to which they are realistically confident of their own abilities to cope with the situation; thus, a realistically confident woman will acknowledge her limitations but will be confident in her ability to love the child and to benefit from the knowledge and support of those around her. Realistic competence also implies a certain degree of anxiety that is balanced by realistic plans for coping, as well as a flexible approach to problem solving. These characteristics define competence during this period, for being competent to cope with such challenges is to be both confident and accepting of one's limits at the same time. Can the mother feel that she has what it takes to make her baby happy, safe and secure, and still acknowledge that she has alot to learn and will need help during the process, or is she unable to acknowledge her personal limits? Or, does she feel so encumbered by her personal limits and her past that she doubts her ability to give her baby what he/she needs?

It is sometimes difficult to distinguish between responses that are minimizing (overconfident) and those that are maximizing (lacking confidence). Some women will fluctuate between denying their anxiety regarding competence, and seeming overwhelmed by it. One can often have the impression of a mixed defensive style, where minimization and maximization coexist. Sometimes, the temptation may be to give a "balanced" score (a "5") in order to indicate the presence of both. However, these situations are typically much more primitive than is implied by a balanced score, and indeed indicates an inner struggle and tension. In this code, we take the position that one or the other strategy will always be dominant, even if the other appears to be present. A minimizing, or distancing strategy is marked by the effort to maintain a structure or ego defense that is usually in place and functions well. The parent obviously has a farily reliable and stable mode of defense that occasionally breaks. When such intrusions occur, the parent struggles to re-establish her method of coping and containment. By contrast, when a powerful affect breaks through, and the coder has the sense of a failed attempt to establish (rather than

maintain) structure, a maximizing strategy is probably being used. If there is intense emotion and oscillation (indicative of the absence of structure), the preoccupation end of the scale should be used. Oscillation is defined by affective surges, by fluctuations either within the interview, or within a single statement where the subject undoes or reverses what she has just said. Thus, if lack of confidence intrudes into the narrative with regularity, and with affect, a high score should be assigned.

Code questions 5, 11-13, 15 - 17, 20-22. Pay particular attention to question 13 which specifically asks the women about confidence. Scale points 1, 3, 5, 7 and 9 are described below. The scale ranges from under to overconfident, with realistically competent serving as the mid and optimal point.

1. Lack of Confidence. A mother receives a 1, the lowest point on the scale, if she experiences a total lack of confidence in her ability to mother her baby. She overestimates her inability to cope with the demands of parenting, and thus sees herself as helpless and unable to manage. Unlike the overly confident woman who rigidly defines the future, she sees the future as a fluid and essentially unmanageable, unorganizable situation. At the same time, she greatly undervalues what she has to give the child, and does not recognize that her nurturing and love will be important to the baby. She may actually question her decision to have had a child. She experiences the fact that she does not yet know how to care for the baby as an insurmountable hurdle and does not seem able to prepare herself in any way for the baby's birth. She cannot imagine herself relying on other people for help. Mothers receiving this scale rating may not be able to imagine themselves having pleasurable exchanges with their babies, although this is not in and of itself an indicator of a lack of confidence. Some mothers receiving this rating may experience the child as overwhelming her resources; this kind of view of the child would be the complement of her sense of helplessness and passivity.

3. Moderate Lack of Confidence. A woman receives a score of 3 if she lacks confidence but struggles to counter this feeling. She can imagine coping with the demands of parenting, and can imagine achieving some success, but her worry is evident. She doesn't fully acknowledge how much she has to give her baby, and in this sense undervalues herself. However, her concerns are not so overwhelming as to prevent her from imagining pleasurable moments with her infant, but she may describe the difficult moments with a sense of urgency that reveals her underlying lack of confidence. She imagines turning to others for help a great deal, and acknowledges reading a great deal in preparation for parenthood. It is important to determine the degree to which such information seeking is driven by a sense of powerlessness or is an adaptive and successful coping strategy, which would earn her a higher score. Women receiving this rating may experience the baby him/herself as potentially overwhelming; thus, their view of themselves is deflated relative to their view of the child.

4-6

5. Realistic Confidence. A woman receives a score of 5, the midpoint, if she feels that she will be able to make her baby feel happy, safe and secure, while at the same time acknowledging her being a novice parent who has much to learn. She can imagine turning to others to get the information she needs, and she does not imagine being alone with the challenges that will confront her. She does not approach parenthood rigidly, but understands that she will be confronted by a range of options and issues that she will have to evaluate based on her child's and her own needs. Her representation of what her baby might need is flexible; she is aware of the options but will decide what is right for her and the baby once the baby is born. Although her lack of knowledge causes her anxiety about

what she will do in certain situations, it does not prevent her from fantasizing about pleasurable moments with her newborn. She values herself and her ability to care for the baby, but she is not so invested in her competence that she needs to protect an image of herself as flawless and invulnerable.

7. Moderately Overconfident. A woman receives a score of 7 if she expresses somewhat unrealistic feelings of confidence. Although she admits to some worry about what it will be like after the baby is born, she minimizes these, and does not seem to accept the limits of her knowledge and experience. Thus, she overstates her competence. She defines the situations and or potential problems she faces in a somewhat rigid way, as if it were possible to plan every aspect of an essentially unknown situation. She may have a tendency to dismiss moments when she will not know what she is doing. She may strive to reassure herself that skills from previous experiences (such as babysitting or running a business) will necessarily generalize to parenting. She does not readily imagine herself as needing help from others, and tends to turn to books and other more distant sources as a means of reinforcing her sense of confidence. In this sense, she portrays herself as highly self-reliant. Or, she may acknowledge that she will be influenced by childhood experiences, but in an overly self-reliant way insists that she will be able to manage and keep control of such upheavals. What places her between realistically confident and highly overconfident is the degree to which she is able to acknowledge some uncertainty, incompetence and anxiety. Such feelings might be expressed in oscillation or vacillation. Whatever difficulties she confronts or can anticipate confronting, she reassures herself (and the interviewer) that everything will turn out fine. This kind of mild grandiosity may also be reflected in a woman's minimizing a baby's impact in the attempt to manage her own anxiety.

9. Highly Overconfident. A woman who receives this rating cannot accept the limits of her knowledge or experience, and sees herself as fully able to meet the needs of her infant. She does not recognize her own limitations, and she overvalues her own ability to both cope and be available to the baby. She deals with her (presumed but not acknowledged) anxiety about parenthood by rigidly defining the problems and solutions ahead of time, by insisting that she will be able to cope with everything she is confronted with. She does not acknowledge that there will be moments when she does not know what she is doing, and implies she alone will be able to cope with everything and meet all of her baby's needs. In this sense, she is grandiose. Some of this grandiosity may manifest itself in her stating that the baby will have no impact on her life, or on her marriage, presumably because she can cope with all of it without a misstep.

6. Acceptance of Baby and Self Needs

Use questions 4, 8-17, 21-22, and 34-35.

1. Inability to accept own needs; overemphasis on baby needs. Baby's needs are paramount. The mother anticipates that the baby will be all consuming. She does not recognize or give thought to how she will continue to have her own needs which will need to be met separate from those of the baby's (granting that there is enormous inherent self-sacrifice). There is no recognition that her own needs may well surface in a way that will generate conflict. She indicates that she will tend to experience her baby's feelings and needs as her own. Self enhancement stems totally from subsuming herself to meet the needs of her infant.

These are women who go to great lengths to "make room" for their babies, but take it to an extreme. They may give up work, begin wearing maternity clothes before they are showing, they may rigidly avoid any junk food, and may limit exercise severely except as mandated by their doctors. These women act -- in a sense -- as if they were being invaded by the pregnancy.

3. Minimal acceptance of self needs; some overemphasis of baby needs. Some recognition of own needs is present but the mother indicates that she cannot allow herself to take action to meet these needs. She indicates that she will not be able to keep the baby's needs from routinely taking precedence. Self enhancement will again come mostly from meeting the baby's needs, although she acknowledges that her needs will sometimes, though not often, predominate.

5. Balanced acceptance on baby and self needs. Baby's and mother's needs are balanced. The baby is viewed as having separate needs and feelings, which the mother recognizes and shows a willingness to meet. The baby's individuality is also recognized and the possibility of conflict between the mother and baby is acknowledged. Healthy self-enhancement is derived from imagining herself as an attachment figure, and is present alongside her ability to recognize that she has her own needs that will sometimes take precedence.

7. Minimal ability to accept baby's dependence; some overemphasis on self needs. Mother's needs tend to take precedence despite some recognition of the baby's separate needs and feelings. The mother may indicate that the baby's dependency makes her uncomfortable and she may imagine that she will have trouble giving of herself as demanded. This discomfort makes it difficult to experience self-enhancement from her projected role as an attachment figure, although her awareness of it makes it difficult to deny the baby's needs and feelings for purposes of self-gratification.

9. Inability to accept baby's dependence; overemphasis on self needs. Mother's needs are paramount and always take precedence. Little recognition of baby's separate needs, feeling or individuality. Baby's enormous dependency on her is denied, and the possibility of conflict between mother and baby is not acknowledged due to lack of recognition of baby's needs. Mother (implicitly or explicitly) anticipates using baby as an object or self-enhancement and as a means of self-gratification. Little evidence that the mother gets pleasure anticipating a time when she will meet the baby's needs. The test will indicate difficulty in valuing the baby for itself because mother is more concerned with how the baby will reflect on her or mirror the view of herself she must maintain.

These are often mothers who do not see any need to cut down on their normal activities, nor do they seem concerned with modifying their diets. They insist on going on living their lives as much as possible during pregnancy, and seem to resent any burdens or restrictions placed upon them. They take no pleasure in nesting or preparing for the baby, and enjoy maternity clothes, etc. only insofar as they get attention from others when wearing them.

III STATE OF MIND

8. Coherency

Mary Main, in her coding manual for the Adult Attachment Interview (Main & Goldwyn, 1988), defines the concept of coherency as "sticking together or a union of parts; a connection or congruity arising from some common principle or relationship; consistency; connectedness of thought such that parts of a discourse are clearly related; form a logical whole; or are suitable or suited and adapted to context." The coherency scale on the AAI is a central one in that it is "an overall assessment of the individual's state of mind with respect to attachment and is the chief correlate of infant security attachment." For the purposes of the Pregnancy Interview, coherency has a somewhat different import. Unlike one's state of mind with respect to attachment which is thought to be relatively stable, the condition of pregnancy is a transitional one, fraught with physical and emotional changes. Given the transformational power of pregnancy, we would not expect a pregnant woman to produce a perfectly coherent transcript; she is being askedto integrate too many unknowns and to confront too many as yet unintegrated anxieties and feelings. For these reasons, Main et al's scale has been adapted to assess the coherency of a Pregnancy Interview transcript in terms of the subject's ability to acknowledge and integrate a wide range of affects associated with both her representation of being pregnant and impending motherhood. A coherent transcript is coherent because it is variegated in a consistent and believable way with respect to the representation of pregnancy. It is not a monochromatically "happy" or "depressed" interview.

In coding interviews it is also important to look at how the women tell their story. Cues used in the AAI can guide the coding of the women's narrative of their experience of pregnancy. Run on sentences, clipped answers, subtle omissions in answering questions, losing track of the questions, and dysfluency all reflect a degree of incoherency. So does a narrative that is irrational, unbelievable, confusing, and showing too high an ideal or reflectibg present and active anger. Coding is informed both by the degree to which these narrative clues are present along with the degree to which the women can acknowledge and address the conflicting feelings brought up by their pregnancy.

All questions up to 35 should be used in coding this dimension.

1. Highly Incoherent. In attempting to score a Pregnancy Interview that is highly incoherent, a coder will struggle to understand and interpret the subject's experience. The coder will feel confused and is unlikely to agree with the woman regarding her experience. Women at this scale point, rather than having integrated a wide range of affects, can present a sharply contradictory picture of their internal state. This can take two different forms: they oscillate between two extremes of contradictory feelings or they appear monchromatically depressed. The former oscillate and can not modulate their overwhelming and contradictory feelings. These women make shocking and often bizarre or disturbing comments resulting from the articulation of their fragmented and overwhelming feelings around the representation of their experience of pregnancy and motherhood. Reading such an interview can feel like riding a roller coaster. The later's lack of modulation expresses itself by a total lack of expression of anticipatory happiness. Their experience is gloom and doom throughout.

A subject who receives a 1 on this scale might have a representation of pregnancy and motherhood that shifts in tone from grandly positive to something close to despair and rage. Such a subject might state that she felt "real joy" upon discovering that she was pregnant and paint a rosy picture of her pregnancy experience and her anticipation of motherhood. She might then abruptly talk about feeling suicidal and feeling like her life is over. Such a subject often speaks with intensity, following each positive declaration with an equally strong negating comment. In contrast, a subject who appears more monochromatically depressed, for example, may speak almost without variation about

feeeling depressed, trapped, concerned about having a baby, and may still harbor thoughts of wanting to abort her fetus. In both cases the use of splitting is strinking,demonstrating little or any integration.

3. Incoherent. In this scale point the coder will still struggle to understand and interpret the subject's experience because of inherent contradictions and narrative difficulty regarding her experience of pregnancy and impending motherhood. The hallmark of this scale point is found in the expression of a wider range of affect, however, contradictions remain characteristic. The interview does not "hang together" as a result of the contradiction that is still quite active and present. There are intrusions of disturbing or bizarre comments but not to the stark degree found at scale point 1 or 2. In the light of these comments the narrative gets colored and previous statements do not seem as believable. Often the interviewer has to redirect, contain, or push for clarifications. When the subject further articulates ther experience it often does not agree with previous statements.

The subject may express being very happy about her pregnancy but additional comments sharpely contradict this. Moreover, her feelings are often poorly elaborated. She idealizes and discusses her pregnancy stereotypically, only to contradict herself later on. For example, a subject speaks about being happy she could conceive and is looking forward to meeting the new baby but also mentions her worries about "having killed" the fetus when she fell and never really wanting kids. This women would not be scored a 1 however because the rest of her narrative hangs together better. On the other hand a woman may represent her experience as a very onerous task that she literally does not have the stamina for but also state that she is looking forward to caring for her baby. It would seem that if carrying this baby is so depleating, she might express some concern about actually caring for the baby.

5. Neither Coherent Nor Incoherent. This is the "average coherency" category. The subject is not disorganized around competing affects concerning pregnancy and motherhood. She possesses an awareness of her emotional state and is mostly able to articulate it in an intelligible and consistent fashion. There is, however, a tendency towards idealization or negativity -- a true balance is not achieved. The range of expression of affect is notably wider than in the lower scale points. She can be aware of difficulties she experiences, but she is unable to fully integrate her feelings. Although she may still make comments that surprise the reader or use language that distances herself from her feelings when discussing areas of difficulty (such as using "you feel" to refer to her own feelings) anxiety laden, contradictory emotions do not intrude frequently or in an inappropriate fashion.

A subject may paint a fairly rosy picture of her pregnancy and have positive feelings about upcoming motherhood. Although she may mention some difficulties she is unable to fully describe her difficulties to the same extent. For instance concerns regarding her confidence about how she will be able to care for the baby once it is born are quickly tempered by "others have done it before." Even her positive feelings do not feel genuinely hers. Thus her rationale for breatfeeding rests more on books and other people's views than on her desire for intimacy and bonding with her baby.

7. Coherent. This is essentially a well balanced transcript. Both positive and negative affects are acknowledged and expressed cogently. Opposing feelings can exist side by side, modulating and mediating the representation of pregnancy and motherhood. The subject is able to discuss her positive and negative feelings without one or the other predominating. Her story is believable and holds together. If there is unresolved conflict it

would be limited to one clearly delineated subject or area in which coherency decreases. Moreover, although coherent, at this scale point there is a lack of complete coherency such as a flowing narrative and/or a sense of fresh discovery when she answers questions .

A subject may speak very coherently and articulately throughout the interview until she answers questions pertaining to her relationship with her mother during pregnancy. At this point the flow of her narrative decreases, she stubbles, hedges, and does not speak at the same level of discourse. A subject may also seem to strive for coherency, often asking for clarification of questions so that she can answer appropriately. A tendency to seek finer definitions of questions may rob her responses of a freshness and natural flow that might have resulted in an even more coherent transcript.

9. Highly Coherent. The subject articulates her feelings and thoughts in a steady and developing manner. The transcript is notable for its balanced and well integrated quality around the representation of pregnancy and motherhood. She may be either reflective and slow to speak, with some pauses and hesitations, or chattery with a rapid flow of ideas, but her thoughts and feelings are clear and have a quality of freshness. The speaker is able to address conflictual topics and seems to think afresh while she speaks, perhaps adapting to new ideas and experiencing new insights even while the interview is in progress. What is really important is that both negative and positive aspects of her experiences are addressed and expanded upon. The subject conveys a strong sense that in spite of possible difficulties nothing in her life is more positive and joyfully cathected than her impending motherhood.

9 Lack of Resolution of Mourning of Past Miscarriage

Their are no direct questions about prior miscarriages on the Pregnancy Interview; however, women spontaneously bring up their miscarriage(s) and reference them throughout the interview. It would seem that the state of being pregnant reactivates the feelings associated with the prior miscarriage(s), allowing them to emerge during the Pregnancy Interview.
The lack of resolution in mourning scale for the Pregnancy Interview seeks to explore women's internal representations of their miscarriages in a way that is consistent with Mary Main's (Main & Goldwyn, 1988) rating scale for disorganization and disorientation in the Lack of Resolution of Mourning category of the AAI.

This scale, like Main's, uses nine scale points to rate the degree of lack of resolution - confusion, disorientation - around the miscarriage. At one extreme would be a consuming and disorganized or fragmented representation of the loss; at the other end would be a coherent acknowledgment and integration of the miscarriage(s). The following are themes that emerge in the Pregnancy Interviews of women who have miscarried. These themes suggest the various ways that women understand their pregnancy loss. They are listed to provide examples of different representations, however, one must always consider all of the references to the miscarriage before assigning a score.

Irrational belief of having caused the miscarriage, such as through one's emotions.

> "I felt like I was pregnant, very newly pregnant...I felt like I sort of lost it during one of those rehearsals... like I couldn't maintain...go through those feelings as actively."

The above is a striking example of a disorganized statement of guilt. This subject did report having had a miscarriage, but in this example it is not clear that the woman was actually pregnant at the time. Apparently, she believed that she was and that her intense emotions caused a spontaneous abortion. In this realm, another less glaring, but related, theme to look out for is a sense of the subject's anxiety around her emotions and their potentially harmful affects on the fetus during the current pregnancy.

Perhaps related to the above example is intense and unreasonable fears of harming fetus, i.e. through sexual relations. The subject might explain an abstention from sex as initiated by either herself or her husband. In the case of the husband it would be important to have a sense of the subjects response to it.

> "I think my sexual feelings increased and his decreased. He was very nervous (about hurting the baby). I dragged him to the Doctor and I said tell him it's o.k. It was very frustrating...I felt like I could have sex anytime, day or night...He would always come up with an excuse...I can understand...It's not his body, he doesn't know what he's jabbing into. It wasn't like we never had sex - we did have sex a lot - but it wasn't enough for me."

In the above it seems that the subject understands her husband's reluctance to have sex as frequently as she desires as a manifestation of his concern about harming the baby. She maintains that this is not remotely a concern of hers. However, the intensity of her reported need for sex raises the question of it being a counter-phobic reaction. The rest of the protocol would have to be considered for verifying themes of this nature.

Extremes of affect and reports of redirection of distress following miscarriage.

> "Last night...I was reading something about miscarriages in Parents Magazine...after the first two paragraphs I just burst out crying. It was incredible. I've never cried...I don't usually cry like this where its just overwhelming...We go to a movie and see a little sad scene and start crying. Its just incredible. I just cry."

Here it seems the subject recognizes the displacement mechanism -the question is to what extent does her representation of her prior miscarriage intrude onto her life, organizing and mediating her generalized responses during this subsequent pregnancy. Again the entire protocol would need to be considered in understanding this.

Evidence of superstitious or magical thinking - evoking the idea that certain, unrelated behaviors on the subject's part might result in the loss of her baby.

> "In the fifth month I bought a new pair of pants that had a maternity waist so that was not very conspicuous...It made me a little nervous...I think moving into bigger clothes was kind of connected with my worrying about the baby vanishing and not turning out, the pregnancy not working out."

There seems to be an implication that by openly acknowledging the pregnancy - purchasing maternity clothes - the subject places her pregnancy at risk.

The subject's odd use of language, "baby vanishing" should also be noted. Subject's use of phrases such as "a baby can be there one minute and gone the next" may be indicative of unresolved loss issues.

Preoccupation with death, especially the death of the neonate.

> "I was worrying about one of us possibly dying, or both of us dying, or something going wrong with the baby."

When this sort of concern is a recurrent theme, it may be an indication of unresolved mourning.

Rating Scale for Lack of Resolution in Mourning following Miscarriage

Before assigning a rating the entire text should be considered. Often the first mention of the miscarriage comes up early in the transcript, around the question that asks, "how did you feel when you found out you were pregnant?" Each time there is mention of miscarriage as well material that seems connected with the earlier pregnancy loss the rater should attempt to score it according to the following scale. A final scale-point may be arrived out after appraising the complete transcript.

1. Definite disorganization, disorientation or evidence of confused thought processes regarding the miscarriage. Assign this score when guilt or fear have taken on overwhelming proportions. The subject may indicate powerful irrational beliefs of having caused the miscarriage. She may express a bizarre theory concerning her guilt. She may be unable to discuss the current pregnancy at all without referencing the miscarriage throughout the interview.

3. Disorganization/Confusion. Some disorganization or disorientation, or some possibility of confusion in thought process is seen in these interviews. The subject may indicate excessive fear, guilt, worry or regret regarding the prior miscarriage. Superstitious behavior, magical thinking and odd intrusions into her manner of speaking may be presented. The individual may report unusually strong or displaced bereavement responses, while failing to provide convincing evidence that reorganization has taken place. The subject may convey the sense of a loss of boundaries around the two pregnancies - they may appear to be merged. In addition, this score is assigned when individuals report the miscarriage and explicitly state that it had "no effect."

5 Unsettled, not disorganized. These individuals seem unsettled, but not quite disorganized or disoriented. When the miscarriage comes up it may be presented in a somewhat confused or incoherent manner. The subject may appear preoccupied with the loss, bringing it up with inordinate frequency. The subject may also discuss sequelae to the loss which border on the confused while seeming so aware of the source of these responses and their irrational nature as to seem more unsettled than really disorganized/disoriented. There are no statements which suggest that the subject is considerably disorganized by the prenatal loss. Essentially, the subject's consciousness of the continuing effects of her loss is of importance here. Issues around the miscarriage are not intruding into her thoughts in a disguised fashion. The subject may be mourning her loss, but this mourning is recognized and acknowledged by her

7. Minor difficulties in resolution. The subject's viewpoint regarding the miscarriage seems largely but not entirely resolved. The subject has essentially dealt with and accepted her loss. There remain, however, articulated feelings of sadness concerning

the miscarriage, as well as fears about the current pregnancy. The subject may report becoming tearful and recognize that her sadness is a response to feelings about her prior loss. There may be anxiety about sexual activity for fear of harming the fetus. This score differs from scale point 1 in terms of degree. Here the subject finds herself living with her loss in a way that is more a part of her current experience. However, she conveys a sense of balance - while the subject may express lingering pain and anxiety related to her miscarriage, these feelings are not overwhelming, rather the subject is capable of regulating her emotions. There is the sense of some emotional distance between the current pregnancy and the aborted pregnancy - the two are not merged.

9. No evidence of disorganization or disorientation around miscarriage. The subject is able to discuss the miscarriage with out becoming mired in it. While she may express sadness about the loss and some anxiety about the current pregnancy these affects are modulated. The sadness has a retrospective quality; it does not seem to be significantly coloring her current pregnancy experience. The anxiety is appropriate to the occasion and not unduly influenced by guilt. Overall, the reader has the sense that this loss has been psychically worked through and organized into the subject's narrative. Even while the subject discusses the impact of her miscarriage she maintains boundaries around it - it does not have an intrusive quality.

A note about scoring the Parental Representation section - these codes largely assess "acknowledgement". Acknowledgement refers to the nature and quality of parental defenses in response to referenced affects. Ratings are assigned along a continuum from denial to open acknowledgement to preoccupation. The midpoint, or optimal rating, is assigned when a parent is able to acknowledge a feeling or set of feelings with a minimum of defensiveness, and with an appreciation of its function and importance in the relationship. Description of situations that evoke such feelings are rich, detailed and believeable. Low ratings indicate an inability to acknowledge negative affects; this inability may be evidenced in denial, minimization, etc. Moderate ratings are assigned when the parent is able to talk about their feelings in a way that indicates both recognition and appreciation. High ratings indicate preoccupation with the referenced affect; it is openly acknowledged, and assumes a great deal of representational "power". Here, there is a failure of containment on an ideational level, and one has the sense that mother is attempting to keep her feelings from spilling over into the narrative. This regulatory or defensive style is also referred to as "maximizing".

Two kinds of oscillation are apparent in the transcripts of parents whose representations have qualities of preoccupation or maximizing. One is the rapidly fluctuating kind of oscillation that takes place within a few sentences. Here the parent will say one thing and reverse it or undo it in the next sentence, as if the struggle for control were taking place within the sentence structure itself. The second kind of oscillation takes place within the more general framework of the interview, where the mother provides contrasting pictures of the child across a range of questions. What distinguishes this from failed minimization (a 3) is the degree to which affect breaks through in the narrative. Oscillation of the preoccupied type is defined by affective surges that must then be contained.

It is often difficult to tell the difference between minimizing and maximizing strategies when they are unsuccessful. The denier struggling against outbreaks of feeling and the overwhelmed, preoccupied parent struggling for control can seem quite similar. One can often have the impression of mixed defensive styles, where minimization and maximization or preoccupation coexist. Often, the temptation is to give a "balanced" score (a 5) in order to indicate the presence of both. However,these situations are typically much more primitive than is implied by a balanced score, and indeed indicate an inner struggle and tension. In this code, we take the position that one or the other strategy will always be dominant, even if the other appears to be present. A minimizing, or distancing strategy is marked by the effort to maintain a structure or ego defense that is usually in place and functions well. The parent obviously has a fairly reliable and stable mode of defense that occasionally breaks. When such intrusions occur, the parent struggles to re-establish his or her method of coping and containment. By contrast, when powerful affect breaks through, and the coder has the sense of a failed attempt to establish (rather than maintain) structure, a maximizing strategy is probably being used. If there is intense emotion and oscillation (indicative of the absence of structure), the preoccupation end of the scale should be used.

THE PREGNANCY PROJECT

MARITAL AGREEMENT AND DISAGREEMENT SCALE

Name: _____

Date: _____

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling family finances	5	4	3	2	1	0
2. Matters of recreation	5	4	3	2	1	0
3. Religious matters	5	4	3	2	1	0
4. Demonstrations of affection	5	4	3	2	1	0
5. Friends	5	4	3	2	1	0
6. Sex relations	5	4	3	2	1	0
7. Conventionality (correct or proper behavior)	5	4	3	2	1	0
8. Philosophy of life	5	4	3	2	1	0
9. Ways of dealing with parents or in-laws	5	4	3	2	1	0
10. Aims, goals, and things believed important	5	4	3	2	1	0
11. Amount of time spent together	5	4	3	2	1	0
12. Making major decisions	5	4	3	2	1	0
13. Household tasks	5	4	3	2	1	0
14. Leisure time interests and activities	5	4	3	2	1	0
15. Career decisions	5	4	3	2	1	0
	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?	0	1	2	3	4	5
17. How often do you or your mate leave the house after a fight?	0	1	2	3	4	5
18. In general, how often do you think that things between you and your partner are going well?	5	4	3	2	1	0
19. Do you confide in your mate?	5	4	3	2	1	0
20. Do you ever regret that you married? (or lived together)	0	1	2	3	4	5
21. How often do you and your partner quarrel?	0	1	2	3	4	5
22. How often do you and your mate "get on each other's nerves?"	0	1	2	3	4	5

	Every Day	Almost Every Day	Occa-sionally	164 Rarely	Never
23. Do you kiss your mate?	4	3	2	1	0

	All of them	Most of them	Some of them	Very few of them	None of them
24. Do you and your mate engage in outside interests together?	4	3	2	1	0

How often would you say the following events occur between you and your mate?

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
25. Have a stimulating exchange of ideas	0	1	2	3	4	5
26. Laugh together	0	1	2	3	4	5
27. Calmly discuss something	0	1	2	3	4	5
28. Work together on a project	0	1	2	3	4	5

These are some things about which couples sometimes agree and sometime disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks. (Check yes or no)

	Yes	No	
29.	0	1	Being too tired for sex.
30.	0	1	Not showing love.

31. The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy," represents the degree of happiness of most relationships. Please circle the dot which best describes the degree of happiness, all things considered, of your relationship.

0	1	2	3	4	5	6
Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect

32. Which of the following statements best describes how you feel about the future of your relationship?

5 I want desperately for my relationship to succeed, and would go to almost any length to see that it does.

4 I want very much for my relationship to succeed, and will do all I can to see that it does.

3 I want very much for my relationship to succeed, and will do my fair share to see that it does.

2 It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.

1 It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.

0 My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Crockenberg
Social Support Scale

Note: The new scoring form for the Crockenberg Social Support Scale is designed so that you can easily refer to the people named by the subject when she is asked "Who helps you?" By listing the people that the subject names on page three, you will be able be able to refer to each then as you go through the interview and ask questions about support.

Introduction

This instrument is designed to assess mothers' sources of support during pregnancy and in the postpartum period as well as their satisfaction with the amount and kind of support they receive. Social support is assessed two ways; by asking mothers *how many* people help her and *how often* they help (daily, weekly, monthly, yearly, or less). Mothers' satisfaction with support is assessed for each person who helps using a five point scale (very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied).

Administration

Step 1) Interviewer reads: **One of the things we're interested in knowing about is how much help and support you've been getting during your pregnancy and how satisfied you are with the help you get.**

I'd like you to start by telling me who helps you and what their relationship is to you.

The order of names is not important. If subject asks "What does help mean" you can respond generally, e.g. "Whatever you consider helpful is okay." If she seems to be struggling then give the following examples: "Who gives you practical or emotional support?" "Who talks to you about things that are going on?" and "Who helps you with day-to-day things?" If the subject is unsure about whom to include, you may suggest that she think of relatives, friends, professionals or others. Write down the <u>first names only</u>

of each helper and indicate their relationship to the subject (i. e. spouse, friend, nurse, etc.) in the lettered spaces provided on page three (bottom page). Women vary in the number of helpers they will spontaneously name. Do not limit them to the number of spaces provided; simply use additional forms as needed.

Step 2) **I'd like to know how each of these people help you, so let's start with a)_____. In what ways does he/she help you?**

For each helper indicate in the space provided the ways in which they help the subject. If she is not specific and uses categorical descriptions such as "He supports me emotionally," ask her if she can be more specific. You may need to prompt her by asking "what does he do to support you emotionally?

Step 3)

Turn to the top page (page one). You should be able to refer to the names of the helpers that you have written in the right margin of page three. For each of these names, ask the subject how often they help her and, using the five-point scale, circle the appropriate number above the scale point.

Step 4)

Turn to page two and repeat the procedure, asking the subject to indicate how satisfied she is with the help she receives from each helper. If is dissatisfied (a score of 1 or 2 on the scale) with a helper, make a note of this by circling the letter of that helper in the right margin.

Step 5)

Turn to page four. For each of the helpers she is dissatisfied with, ask question 4a, and use the space provided to write the subject's responses. Be sure to identify each of these helpers by letter (see attached sample).

Step 6)

Ask questions 4b and 4c, using the space provided to write the subject's responses.

Subj. # ________ Interviewer ________ Date ______ Page one

11. How often does he/she help you?

5	4	3	2	1
almost every day	once or twice wk.	once or twice mo.	less than once mo.	almost never
5	4	3	2	1
almost every day	once or twice wk.	once or twice mo.	less than once mo.	almost never
5	4	3	2	1
almost every day	once or twice wk.	once or twice mo.	less than once mo.	almost never
5	4	3	2	1
almost every day	once or twice wk.	once or twice mo.	less than once mo.	almost never
5	4	3	2	1
almost every day	once or twice wk.	once or twice mo.	less than once mo.	almost never
5	4	3	2	1
almost every day	once or twice wk.	once or twice mo.	less than once mo.	almost never
5	4	3	2	1
almost every day	once or twice wk.	once or twice mo.	less than once mo.	almost never

(FOLD HERE)

Page two

Subj. #________ Interviwer________ Date______

III. How satisfied are you with the help he/she gives you?

5 very satisfied	4 satisfied	3 neither satisfied nor dissatisfied	2 dissatisfied	1 very dissatisfied
5 very satisfied	4 satisfied	3 neither satisfied nor dissatisfied	2 dissatisfied	1 very dissatisfied
5 very satisfied	4 satisfied	3 neither satisfied nor dissatisfied	2 dissatisfied	1 very dissatisfied
5 very satisfied	4 satisfied	3 neither satisfied nor dissatisfied	2 dissatisfied	1 very dissatisfied
5 very satisfied	4 satisfied	3 neither satisfied nor dissatisfied	2 dissatisfied	1 very dissatisfied
5 very satisfied	4 satisfied	3 neither satisfied nor dissatisfied	2 dissatisfied	1 very dissatisfied
5 very satisfied	4 satisfied	3 neither satisfied nor dissatisfied	2 dissatisfied	1 very dissatisfied

(Fold Here)

Crockenberg Page three

Subj. #_____ Interviewer_____ Date_____

Introduction: One of the things we're interested in knowing about is the amount of help and support you've received during your pregnancy and how satisfied you are with the help you've been getting.

For each name on the list, ask: In what ways does he/she help you?

Description of help	Name/relationship
_____	A. _____
_____	B. _____
_____	C. _____
_____	D. _____
_____	E. _____
_____	F. _____
_____	G. _____

Subj. #_____ Interviwer_____ Date_____

IV. If subject is dissatisfied with the help she gets, for each of those people ask the following:

a) When he/she is not helpful what, if anything do you do?

b) Is there anything that you are not getting help for that you wish to? That you expected?

c) Finally, is there anyone whom you are close to who's name is not on this list? (If yes, Can you tell me why?)

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