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PREGNANCY FOLLOWING MISCARRIAGE:

A STUDY OF

ATTACHMENT AND UNRESOLVED GRIEF

By

MARJORIE DERMER

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Arietta Slade, Ph.D.
Chair of Examining Committee

January 11, 1996
date

Kay Deaux, Ph.D.
Executive Officer

Supervisory Committee: Arietta Slade, Ph.D.
Steve Tuber, Ph.D.
Paul Wachtel, Ph.D.

The City University of New York

Abstract

Pregnancy Following Miscarriage:

A Study Of Grief Resolution and Attachment

by

Marjorie Dermer

Advisor: Professor Arietta Slade

This study investigates the sequelae of pregnancy/perinatal loss on several relationships. Measures included the Adult Attachment Interviews (AAI), Pregnancy Interviews (PI), Brief Symptom Indexes (BSI) and Strange Situations for 51 primiparas in the last trimester of pregnancy. Subjects included an experimental group of 10 primiparas with a history of pregnancy/perinatal loss and a control group of 41 primiparas without such a history. Subjects' 14 months-old offspring were also included in this study.

The relationship between a history of pregnancy/perinatal loss and the unresolved category on the AAI was examined. It was found that women with such a history fell into the

unresolved category on the AAI in significantly higher numbers.

Subsequent pregnancy was investigated in terms of how the prospective mother's attachment to her fetus was impacted upon by a maternal history of pregnancy/perinatal loss. This was assessed with the PI. No significant differences were found between groups in terms of attachment to the fetus. Fantasy elaboration of the fetus approached significance.

The effect of a maternal history of pregnancy/perinatal loss on the attachment relationship between mother and infant was examined with the Strange Situation. Offspring of mothers with a loss history were significantly more often insecure.

The relationship between pregnancy/perinatal loss and psychological symptomatology was investigated with the BSI. Women with a loss history were significantly higher on the symptom of somatization.

The pregnancy/perinatal loss group was examined in a series of descriptive analyses. The data suggested that those who were secure on the AAI were more likely to have resolved their respective pregnancy/perinatal loss than those who were insecure. Mothers who resolved their respective pregnancy/perinatal losses tended to have children who were secure more often than did mothers who failed to resolve such losses.

The results of this study support the hypothesis that a history of pregnancy/perinatal loss effects the way prior

losses are perceived and impacts upon the maternal-infant attachment relationship. That such a history effects maternal-fetal attachment was not supported. The qualitative data supported the hypothesis that attachment representation is related to the capacity to resolve pregnancy/perinatal loss and that resolution around pregnancy/perinatal loss is related to infant security status.

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role model for me. Our relationship and his death taught me much about attachment and loss.

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CHAPTER 1

INTRODUCTION

> "Then there was the image that things always looped back to, those five miscarriaged children. It was my habit to think that if I could be a certain way, embody a certain attitude, a child would come to me and stay with me. The attitudes I had tried were obvious - receptive to conception then protective. Now I saw my error, though. Who would stay with a mother who merely waited? Who accepted things so dully, who could say so easily, something will happen, we'll get another chance."
>
> Ginny in A Thousand Acres

Jane Smiley's novel, A Thousand Acres, speaks to the power of pregnancy loss. Her character's self image, longings and drives are largely defined by her miscarriages. Ginny views her pregnancy losses as caused by her intrinsic lack of some magical quality that would sustain a baby. These miscarriages are her obsession and her secret - her clandestinely buried fetuses dot the landscape. The force and the pain of these pregnancy losses are profound. Beyond the pages of fiction, the issue of the psychological effects of perinatal loss is an important and relevant one. Historically, there has been little sympathy for women who miscarried. In the middle ages women were sometimes burned alive after miscarrying, even when the miscarriage was caused by a kick or a blow from the husband (Davis, cited in

Reinharz, 1988). Today, a woman might still be punished for miscarrying if she is a member of a group that believes that wives owe children (usually sons) to their husbands. In these groups miscarriage is grounds upon which a man may divorce his wife (Reinharz, 1988). In an article in which she discusses her personal experience with miscarriage, Reinharz, noted that the tendency to ignore, silence and misunderstand women who have miscarried is a form of psychological punishment and indicative of the stigma that miscarriage carries.

While the terms, "miscarriage" and "perinatal loss" tend to be used interchangeably in the literature, they connote different events. Miscarriage is actually a lay term describing early spontaneous loss with in the first 20 weeks of pregnancy. The correct medical term is "spontaneous abortion," which tends not to be used as it is thought to be distressing to bereaved women. The term perinatal refers to the period of time from the 20th week of pregnancy through the 28th day after birth. Thus, a perinatal demise occurs at a gestational age later than that of a miscarriage (Kohn & Moffitt, 1993). The issues addressed in this study encompass both types of loss, so that when one term is used the other is implied, unless otherwise specified.

Perinatal loss is an all too common experience in women's procreative lives. Recent figures suggest that nearly one-third of all conceptions end in some type of natural pregnancy loss, with almost 80% of all losses occurring in the first

three months of pregnancy, about 14% in the second trimester, and approximately 6% in the third (Kohn & Moffitt, 1992).

Layne (1990) discussed the "veil of silence" that surrounds pregnancy loss in our culture. Perinatal loss tends to be not mentioned or skipped over in most how-to books and magazine articles on pregnancy, nor is it discussed in most childbirth classes. Another marker of the lack of social acceptability of perinatal loss is the fact that there are no Hallmark cards for such occasions (Layne points out that there are even cards for pet birthdays).

This blind spot is not restricted to popular culture. In the realm of the psychological there, too, exists a lacuna around perinatal loss. There is a paucity of scientific literature exploring the intrapsychic meaning of this frequent event - an often cited complaint in the existing literature (Davidson, 1991; Hall, Beresford, & Quinones, J. 1987; Neugebauer, et al. 1992a & 1992b; Stack, 1984). This appears reflective of the nature of the attention pregnancy loss receives from medical establishment where recognition of perinatal mortality is muted and sometimes distorted (Layne, 1990). Perinatal pathology is the least developed branch of pathology and in many states statistics are not kept on miscarriage, even when they end in a hospital emergency room. Medical professionals tend to minimize miscarriage when it is discussed at all (Reinharz, 1988). Women have often been advised that "nature weeds out defective pregnancies this way"

and told to "try again." The implicit message being that miscarriage is not a sad event, but a "good" one and that the woman must get on with her life and not focus on the loss. (Layne, 1990; Leon, 1986; Reinharz, 1988) The realty is, however, that perinatal loss can be devastating to the prospective mother, a loss that by its unique nature is replete with meaning.

Recent studies counter the early theories of Helena Deutch (1945), who suggested that grief after perinatal loss would be diminished or, at least, qualitatively different because the "baby" of pregnancy cannot be the object of maternal love as it is a fantasy product of the woman's psychic life. For many women, however, the period following a miscarriage is filled with the same kind of mourning and grief as there would be after the death of any loved one (Banson & Stevens, 1992; Hall, et al. 1987; Seller, Barnes, Ross, Barby & Cowmeadow, 1992; Smith & Borgers, 1989; Theut, Pederson, Zaslow, Cain, Rabinovich, Morihisa, 1989). Worden (1991) described the normal course of grief work as involving decathecting from the deceased, adjusting to life with out the lost person and, ultimately, resolution - the formation of new relationships. Grief resolution, however, is not always the outcome with mourning around miscarriage. Some women continue to grieve for years after their loss (Hall, et al., 1987; Leon, 1986; Peppers & Knapp, 1980; Theut et al., 1989). Grief can be so profound that when women follow the standard advice

to "try again" and do become pregnant, both the subsequent pregnancy and the relationship between mother and infant may involve a number of consequent serious difficulties (Davis, Stewart & Harmon, 1989; Lewis, 1979; Phipps, 1985).

This study will examine the sequelae of perinatal loss on several types of relationships. Subsequent pregnancy will be investigated in terms of how the prospective mother's 'relationship' with, or attachment to, her fetus is effected. Moving within a developmental framework, the impact upon the attachment relationship between mother and infant will be considered. Finally, the relationship between the response to perinatal loss and other types of bereavement will be explored, with a view to considering whether the reaction to prior bereavement (i.e. the death of a parent, or other important attachment figure) is predictive of a traumatic, or easily resolved response to perinatal loss. Alternatively, is the sequelae of perinatal loss so profound that it creates a lens through which prior bereavements are re-experienced and colored by the perinatal loss experience.

The proposed study can be further illuminated by considering the related domains of literature. These include the psychological meaning of pregnancy; bereavement and its ramifications - especially around perinatal loss; pregnancy to perinatal loss; maternal-fetal attachment and attachment theory.

The Psychological Meaning of Pregnancy

When considering the psychological ramifications of miscarriage it is it important to understand the unique context in which it occurs - pregnancy. It is well documented that pregnancy for many women is a psychologically vulnerable time (Deutsch, 1945; Benedek, 1959; Bibring, 1961). Pregnancy is a powerful transitional period because it is a time in which the expectant woman's conflicts from earlier periods can be both revived and intensified.

Benedek (1959) and Bibring (1961) were among the first to discuss the psychological tasks and issues involved in the different phases of pregnancy. Both authors viewed pregnancy as a time of maturational crisis where early conflicts reemerge and need to be addressed and worked through. If this process goes reasonably well, a psychological reorganization can occur. Benedek believed that the "crisis" of pregnancy offered a "transcendent opportunity for integration and growth."

Bibring discussed the intrapsychic processes involved in each trimester of pregnancy. The course of pregnancy required the expectant mother to psychologically move from an initial "narcissistic" phase where the fetus is perceived as a part of the self, to a reorganization which integrates the narcissistic sense of the fetus with the perception of the fetus as a separate object and prepares the mother for delivery. If these phases go well, the maternal-child relationship will have "the characteristic of a freely

changeable fusion of narcissistic and object libidinal strivings so that the child is always perceived as part of the mother while at the same time remains an object that is part of the outside world and part of her sexual partner." Both Bibring and Benedek note that it is with the birth of the infant and caretaking that much of the conflict stirred up by pregnancy moves toward resolution.

Other authors have amplified and expanded upon the view of pregnancy as time of crisis. Kestenberg (1976) elaborated upon the intrapsychic meaning of the biological phases of pregnancy. She understood pregnancy as generating for the expectant woman a psychological recapitulation of the psychosexual stages. Ballou (1978), Leon (1986) and Pines (1982) discussed the special role of maternal identifications in the psychology of pregnancy. These authors focussed upon the power of the expectant mother's representation of her own mother to determine whether pregnancy leads to growth or primitive acting out. Leon cited Benedek (1970) when he observed that "the pregnant woman embodies three generations." Leon elaborated, "her symbolic identification with her unborn child revives her symbiotic attachment to her mother as well as an identification of herself as an infant." The process of giving birth to a healthy baby allows for a deepening internalization of maternal identification. After birth, the new mother's infantile identification enables an empathic awareness of her infant's needs, which her maternal strivings

can now fulfill. Both infantile and maternal identifications are engaged in the process of mothering. In a mutually satisfying postpartum symbiosis, the mother fulfills her child's needs and in so doing has her own maternal and infantile needs gratified.

Trad (1990) added to the understanding of the psychological components of pregnancy by analyzing the dreams and fantasies of pregnant women. He found that the themes of ambivalence, over-identification, regression, hostility and separation were implicit in the transformation that attends pregnancy and motherhood. Trad noted that the salient conflict depends upon the idiosyncratic issues of the prospective mother, but it appeared that in most cases, the changes necessary to create a new life evoked profound emotions, including anger, hostility, fear and loneliness. Working through and integrating these emotions and conflicts were central to adaptive functioning.

All of these formulations of pregnancy suggest its intrapsychic complexity and primitive conflictual areas. Each phase of pregnancy appears to carry with it its own regressive pulls and tasks towards integration. Ultimately, pregnancy emerges as a tumultuous transitional period. The intrapsychic struggle toward conflict resolution and integration serve to prepare the mother to care for her child. But resolution of the crisis brought on by pregnancy does not end with the baby's birth; the mother requires that nurturing bond with her

baby in order for her maternal and infantile needs to be optimally fulfilled (Elkin, 1990; Leon, 1986).

Grief and Perinatal Loss

Clearly, pregnancy under the best of circumstances is a trajectory that is replete with turbulent issues that must be dealt with. A perinatal loss interferes with this process and leaves the bereaved mother with the crisis of pregnancy as well as the crisis of loss to resolve (Leon, 1986). There are factors unique to perinatal loss that can make resolution particularly difficult and edge the bereaved woman onto a path that diverges from "normal" grief moving into the realm of the "pathological."

Normal and Pathologic Grief

The early psychoanalytic view of grief proposed by Freud (1917) differentiated normal from pathologic grief. Both grief reactions were understood to include the bereaved's experience of painful dejection, loss of interest in the outside world, loss of the capacity to love and inhibition of activity. Pathologic grief, or melancholia, was distinguished by including a dramatic loss of self esteem as well as narcissistic self absorption.

Freud explained these pathologic symptoms as deriving from a process in which the lost object, who has been ambivalently experienced by the bereaved, is internalized with the bereaved person's sense of self. The bereaved party then

directs her aggressive drives inward, producing self blame and self hate.

Since Freud, there have been many psychological formulations of grief. Hall et al. (1987) comprehensively reviewed the salient literature on grief. These authors summarized Lindemann's (1944) seminal paper on acute grief. The symptoms of normal grief are as follows: 1. Sensations of somatic distress. 2. Preoccupation with the image of the deceased. 3. Guilt feelings in which the bereaved accuses herself in relation to the deceased. 4. Feelings of hostility towards doctors and others, charging them with neglect of the deceased person. 5. A change in conduct involving restlessness and difficulty organizing activities and social pleasantries.

Lindemann believed that normal grief reactions lasted four to six weeks and followed a typical course, with the duration of the grief reaction depending on the success of the "grief work" - essentially, the patient's capacity to become less absorbed with the internalized image of the deceased.

Lindemann felt that many patients attempted to avoid the intense distress associated with grief by denying their emotions. When patients were successful at denial of the emotions of acute grief, pathologic processes were likely to develop. Patients with pathologic mourning demonstrated a delay in the reaction to the loss and distorted reactions and emotions manifested by such features as over-activity without a sense of loss, acquisition of symptoms of the deceased, or

the development of a recognizable medical illness. Social relationships were impaired as intense anger was directed toward specific people or events.

Bowlby's (1961) understanding of grief was based upon his observations of the reactions of young children and animals when separated from a caretaker. He viewed mourning as a three phase process. The first phase is characterized by the "urge to recover the lost object." Weeping and anger are major features of this initial phase as the bereaved struggles with the wish for reunion. Phases two and three are illustrated by "disorganization and reorganization as adaptive processes." As the bereaved grows to accept that there will be no reunion, profound despair sets in. The bereaved's behavior becomes disorganized due to the lack of an object upon which to focus. During the "reorganization phase" the bereaved begins to focus her energy toward new objects. Awareness and concern around the lost object continue, but the primary energy is oriented towards the present and future.

Bowlby noted that this process can go awry and result in "unhealthy" or pathologic mourning. The depression and disorganization inherent in the mourning process are very painful and anxiety provoking. Bereaved individuals may attempt to ward off what may be experienced as intolerable feelings by remaining in the "phase one" orientation towards the lost object which leaves the individual in a state of "angry striving for reunion and reproach against the object

for desertion, the starting point for depressive illness." Alternatively, attempts to avoid disorganization may involve the splitting off of feelings related to the lost object which then give rise to distorted feelings and disordered behavior.

Horowitz and his colleagues (1980) viewed pathological grief as the intensification of the normal grief reaction to a level such that the bereaved became overwhelmed and resorted to maladaptive behavior, or became stuck in a state of grief without movement towards resolution. They believed that early traumas, such as the loss of a parent, predisposed one to both pathologic grief and early negative self representations that were later modified in adult life by a "compensatory" relationship. (Others, too, such as Bowlby (1980) and Parkes (1972), believed that the early loss of a parent, especially a mother, was related to poor mental health). Horowitz and his colleagues understood pathological grief reactions as a reemergence of impaired self images and relationships that were held in check by the existence of the deceased person. The compensatory relationship stabilized the vulnerable individual. The loss of this relationship could lead the bereaved to perceive her set of self images and "role relationship models" as similar to those experienced during stressful times in her life. These authors believed that many bereaved people experienced transient states of frightening sadness generated by weakened views of self. They posited that the individual's sense of self hatred and worthlessness

were connected to devalued self representations that were created in early childhood.

Pathologic Grief Symptoms Following Perinatal Loss

Pathological grief reactions are common complications of perinatal loss that are rarely recognized by clinicians (Stack, 1984). Hall et al. cited several common symptoms of pathological grief reactions. These include: feelings of uncertainty, powerlessness, helplessness, guilt, shame, sadness, disbelief, frustration, anger, blame, and recurrent disappointment. Somatic symptoms occur in as many as 80% of women who have had a perinatal loss and involve sighing, gastrointestinal disturbances, shortness of breath, loss of appetite, weight loss, palpitations and fatigue. Substance abuse, particularly of minor tranquilizers (often the very thing prescribed by doctors to calm distraught, bereaved women), or alcohol is common.

Kennell and Klaus (1982) suggested that psychiatric symptoms occur in as many as one third of perinatal loss patients. Rowe (1978) reported that pathologic grief reactions occurred in 6 of 26 women who were bereaved by stillbirth 10 to 22 months previously.

Two studies by Neugebaurer et al. (1992a & 1992b) investigated depressive symptoms in women following miscarriage. These authors found that in the early weeks following miscarriage depressive symptomatology is markedly increased. These symptoms remained elevated six months after

the loss. A similar study was conducted in England (Prettyman et al. 1993). Those investigators looked at anxiety as well as depression to miscarriage. They found "clinically important" levels of anxiety and depression in the first weeks following the loss. Symptoms diminished after 12 weeks, but one-third of the sample continued to manifest serious symptomatology.

In their review of the literature, Hall, et al. (1987) summarized the finding of several researchers regarding unique symptoms suffered by women subsequent to pregnancy loss: women experience more intense self denigration and inner emptiness than with other types of losses (Condon, 1986); Prominent guilt (Giles, 1970; Lockwood & Lewis, 1980; Callahan et al., 1982; Steirman, 1987), shame (Lockwood & Lewis, 1980; Herz, 1984; Klaus and Kennel, 1982; Stierman, 1987) and anger about having been cheated (Herz, 1984) were cited. In his literature review, Zeanah (1989) noted that "a substantial number of women, perhaps 20 to 30% of those bereaved by perinatal loss experience significant psychiatric morbidity during the year after the loss."

Factors Related to Grief Intensity Following Perinatal Loss

There appear to be several different factors that help to explain why pregnancy loss stimulates such profound grief in some women. These include factors related to the psychodynamics of pregnancy; the nature of perinatal loss; social, medical and interpersonal interactions; and mediating variables emerging from individual differences.

The Mechanism of Identification in Pregnancy

With in the realm of the psychodynamics of pregnancy, the various roles of identification can play a part in the difficulty inherent in resolving a perinatal loss. As discussed earlier, there are several simultaneous identifications present when a woman is pregnant, one is identification with the fetus, termed a narcissistic identification (Leon, 1986; Stack, 1984). In this context, "narcissistic" refers to the merged boundaries between the prospective mother and her fetus, harkening back to Bibring (1959), who was among the first to note that the developing fetus is experienced as an integral part of the mother. Furman (1978) evocatively discussed the challenge of mourning such a loss. She noted that part of the mourning process involved identifying with the deceased by internalizing aspects of him to soothe the pain of loss. Furman illustrated this with the example of a bereaved marital partner who finds solace in adopting the hobbies, professional commitments, interests, or friends of the deceased spouse. The capacity to identify in this manner makes movement toward detachment and resolution easier by "soothing the way and making the pain of detachment balanced and bearable." With a perinatal loss the process is very different. Furman's point was that losing a part of one's self can be much more difficult than mourning the loss of a separate person. She compares perinatal demise with an amputation of a limb; accepting that one will never

again have that part of oneself is very different from detaching oneself from a loved one.

A second aspect of identification involves the prospective mother's maternal identifications, which quickly become a part of her intrapsychic world during pregnancy. Leon (1986) noted that intense maternal identifications may explain the profound guilt that some women experience around perinatal loss. The pregnant woman does not view her motherhood as an 'as if' situation. Her experience is that she is the mother of her child. When there is a loss the bereaved woman feels that, as the mother of her child, she is to 'blame' for what has happened.

Identification also comes into play around issues of identity and self esteem. With a perinatal loss the pregnant woman's sense of her self as a mother is wiped away. The loss of the pregnancy is a potent narcissistic injury; it can leave the bereaved woman feeling fundamentally flawed because she did not produce a healthy child (Furman, 1978). Lovell (1983) discussed the way pregnancy serves as a social process of identity construction. Following a loss there is an abrupt cut off in this process; the effect of which is an "instant unravelling of a woman's lived experience and a rapid deconstruction of her motherhood." Banson & Steven (1992) echoed this in their discussion of the difficulty women experienced following miscarriage in adjusting to the "nebulous" identity of being nonpregnant.

Leon offered still another way to understand not only the guilt but also the intense envy that often accompany grieving a perinatal loss. He posited that the revival of Oedipal conflicts may fuel the pregnant woman's competitive feelings towards her own mother as she struggles to resolve her ambivalent maternal identifications. He suggested that when Oedipal conflicts are intense, they can lead to the mother's fear that she or her baby will die. When there is an actual perinatal death the mother may feel especially guilty. acute envy of other women who have children may represent the continuation of intensified Oedipal issues.

Unique Aspects of Perinatal Loss

Another way of considering the difficulty around mourning perinatal loss is to look at the special qualities that distinguish this type of loss from other kinds of bereavement. Furman, discussed above, highlighted the problems involved in identifying with the deceased of perinatal demise. Related to this is that perinatal loss, as opposed to other losses, is a prospective rather than retrospective loss. Most mourning involves recalling and giving up the memories of a person in the past. Perinatal bereavement involves giving up the dream of the child who was hoped for but never was. The deceased of a perinatal loss does not have a life within the memories of the bereaved. Rather, the deceased resides in fantasy. There are no memories or interactions, nothing concrete to assist the mourning process (Leon, 1986). Seller (1993) and Stack

(1982) pointed out that adjusting to an environment in which the deceased was missing means the environment of the mind - this can be far more difficult than adjusting to a more tangible loss.

In a more external sense, rituals and ceremonies that acknowledge death - important steps in the process of grief resolution - are absent from the aftermath of miscarriage. Furman (1978) pointed out that parents of soldiers who died in Vietnam had a much easier time coming to terms with the death of their children when they received the remains, as compared to the struggle of parents who did not receive the body. Until very recently there has been no mechanism for formally recognizing a perinatal death. Currently, when pregnancy loss occurs after 20 weeks, some hospitals permit parents to view, touch and hold the deceased baby. Parents may be helped to plan funeral services and burials (Leon, 1986). This, however, is not available for early miscarriage, leaving the parents of a baby, under 20 weeks of gestation, with no ritual to help them acknowledge the loss.

Another unique aspect of perinatal loss is that it is almost always a sudden and unexpected tragedy with no time for anticipatory grief (Hall, 1987). Research has shown that there is a correlation between pathologic grief reactions and losses that are unexpected (Volkan, 1970 cited in Stack, 1984; Friedman, 1974 and Friedman et al., 1963, cited in Leon, 1986) Leon suggested that intense shock and lack of psychological

preparation can lead to profound denial of the death - a mechanism that has been observed those who endured such losses. Several authors suggested that the shock component of miscarriage was exacerbated by a social and medical atmosphere that denies the significant possibility of pregnancy loss (Reinharz, 1988; Smith & Borgers, 1988).

A further factor uniquely in the realm of perinatal loss involves the feelings of helplessness that are stirred when an aborting woman is bleeding and cramping, and neither she, nor the physician can do anything to stop the process (Banson & Stevens, 1992; Furman, 1978; Hall et al., 1987; Stack, 1984;) This sort of abject helplessness has been linked to despair and depression (Seligman, cited in Hall et al.).

Another factor in this domain is that of the bereaved's frequent exposure to painful reminders of the lost baby. Seller et al. (1992) noted that in normal grief "pangs" of anxiety and psychological pain are frequent immediately after a bereavement, eventually occurring less often and in response to specific memory inducing events. With perinatal loss it may be problematic for these pangs to diminish because of the difficulty in finding a "baby free zone". Babies are featured in many aspects of life, from the supermarket to television shows. Efforts on the part of the bereaved to avoid painful reminders of her loss can lead to increased social isolation. Women who endure early pregnancy loss often feel isolated for a number of reasons, one being the custom of not revealing a

pregnancy till after the third trimester. Bereaved women often feel awkward and ashamed about discussing their loss when their pregnancy was not public (Stack, 1984).

The Interpersonal Response to Perinatal Loss

Often, the manner of response among those who have had a medical or social relationship with the bereaved has tended to leave the bereaved with feelings of isolation and alienation. A number of authors wrote about the unintentional callousness of both friends (Banson, 1992; Hall et al., 1987; Leon, 1986; Smith & Borgers 1988; Stack, 1984) and medical personnel (Hall et al., 1987; Leon, 1986; Lovell, 1983; Seller, Barnes, Ross, Barby, & Cowmeadow 1993; Stack, 1984) around perinatal loss. Denial of grief is often encouraged by friends with comments like 'It was God's will' or, 'You didn't get to know it.' The woman is rarely encouraged to cry, to talk about her loss, or to assume the role of the bereaved (Stack). Leon noted that bereaved parents' reports of ruminative thinking, recurrent dreams and hallucinatory experiences may be a means of coping with friends' and medical personnel's tendency to encourage denial of the loss. These symptoms may be an attempt to affirm the reality of the pregnancy and the baby's existence in the face of societal pressures to dismiss it. Similarly, Lovell captures the damaging attitude of hospital staff around perinatal loss:

> "Maternity units are geared to the production of live babies. When this goes wrong there is the practical problem of what to do with the maternity patient - is she a patient? - who has no baby to be

> weighed, bathed and fed. Such a mother - or is she a mother? disturbs the equilibrium and is a reminder of failure. Failures need to be hidden. Hospitals seem not to have physical or psychological space for such a person. And the problem of a woman who seemed to have no legitimate role was often solved by sending her home with what felt (to the woman) like indecent haste."

Individual Differences Mediating the Response to Perinatal Loss

Lastly, there appear to be factors related to individual differences that mediate the response to perinatal loss. There are, however, inconsistent results among studies that explore these variables. In his critique of the literature, Zeanah (1988) noted:

> "Even in those studies that have examined predictors of disordered mourning, the lack of clarity and uniformity about what comprises disordered mourning, the generally small sample sizes in the relevant studies, the nonuniformity of variables examined as predictors, and the nonreporting of all the variables found not to be predictive make any derived conclusions tentative at best."

Factors thought to be significant include: maternal history of reproductive loss; number of living children; attitude toward the pregnancy; gestational age of fetus/baby at time of loss and maternal general bereavement history.

Reproductive History

Neugebauer et al., (1992a) stated that their's was "the first systematic observational study on the psychological impact of miscarriage." They measured depressive symptomatology in 232 women with in 4 weeks of miscarriage, using the Center for Epidemiologic Studies Depression Scale.

This study was distinguished by its inclusion of two non-miscarriage control groups: 283 pregnant women with no miscarriage history and 318 community women who had not recently been pregnant and also had no history of perinatal loss. This is the only study of its kind to include "non-loss" control groups. Other investigations have relied on samples that differ in terms of the gestational age of the fetus at the time of the loss, or longitudinally follow a population of women who all have suffered pregnancy loss, but may differ on other variables. Thus, in addition to the points made by Zeanah (above), the great disparity between populations used in different investigations makes comparisons problematic.

In considering mediating individual factors, Neugebauer et al. (1992a) examined reproductive history on two levels: the impact of a history of prior pregnancy losses as well as the impact of having already borne children. These investigators found that prior reproductive losses were not associated with symptom levels in any cohort. Alternatively, for the miscarriage cohort, they found that depression was significantly modified by the number of living children. Thus, women who had borne children prior to enduring a pregnancy loss had less depression subsequent to the loss, with an inverse association between number of children and level of depression.

Neugebauer et al's. findings were at odds with Peppers & Knapp's (1980) study on two points. Firstly, Peppers & Knapp did not find that the number of children at home had any bearing on depressive symptomatology subsequent to perinatal loss. Secondly, Peppers and Knapp found that women who had a history of difficulties in pregnancy did experience a more intense grief reaction to perinatal loss. The results of a third investigation, Prettyman et al. (1993), were consistent with those of Peppers & Knapp on the variable of pregnancy history - a history of problematic pregnancies was associated with serious depressive symptomatology following pregnancy loss. As noted previously, comparisons between studies are hampered by the disparate populations used in each investigation. Neugebauer's sample has been described above; Peppers and Knapp's sample included women with pregnancy losses at differing gestational ages; Prettyman examined 65 women who had suffered early miscarriages. The inconsistencies among populations in these studies leaves the question of the impact of reproductive history on grief subsequent to pregnancy loss unresolved.

Attitude Toward the Pregnancy

In the literature, "attitude" is a vague term, its meaning shifting with the study. For Neugebauer et al. (1992b) "attitude" denoted whether or not the pregnancy was wanted. These authors found that the attitude toward the pregnancy did not predict to depressive symptoms when women who had

miscarriages were compared with each other. The control group of pregnant women without a miscarriage history, however, had more depressive symptoms when the pregnancy was unwanted. Hence, when the pregnant control group was used as the standard, miscarriage had a greater impact on women with wanted pregnancies than on women with unwanted pregnancies. This is based on the assumption that for women with desired pregnancies, the decline in mood to miscarriage is significant compared to those who lose an unwanted pregnancy (who would, presumably, be depressed regardless of pregnancy loss). If Neugebauer had not based his findings around a non-miscarriage/pregnancy cohort, his results would have been consistent with those of Graham et al's. (1987) study, in which the subjects were comprised of only women with miscarriages. In this investigation, "Attitude" was defined as the self reported degree of "happiness" about the pregnancy. Graham and his colleagues determined that the attitude toward the pregnancy did not influence depression.

Prettyman et al. (1993) defined "attitude" as signifying whether or not the pregnancy was planned. Contrastingly, this study suggested that unplanned pregnancies were associated with greater anxiety subsequent to miscarriage than were planned pregnancies. Similarly, Turner et al. (1991) found that a significant proportion of women with unplanned pregnancies had a "persistent grief reaction" following miscarriage. The affective attitude toward the pregnancy was

not addressed in either of these studies. Thus, clarification is necessary around whether the state of "wanting," being "happy" about and having "planned" a pregnancy are each reflective of the same variable - "attitude" toward the pregnancy. In any event, once again, divergent samples make comparisons among the studies problematic, leaving the issue of the impact of attitude unclear.

Gestational Age and Hierarchies of Grief

The issue of whether grief following perinatal loss is mediated by the fetus/neonate's gestational age at the time of demise is also unsettled. Neugebauer (1992b) found that among their study's miscarriage cohort, length of gestation was not associated with depressive symptoms; depressive symptoms were equally high for women with early or late losses. But in the pregnant, non-miscarriage cohort, observed, depressive symptom means declined with gestational advance. Given the decline in symptom levels expected at later stages of an uninterrupted pregnancy, these investigators concluded that miscarriage exerts a greater effect on women at later points in gestation. An investigation by Cuisinier, Kuijpers, Hoogduin, de Graauw, & Janssen, (1993) included only women with perinatal losses at different gestational ages, but arrived at a conclusion consistent with Neugebauer et al's. Grief intensity was found to be greater in mothers whose babies were of a more advanced gestational age.

Theut et al. (1989 and 1990) focussed upon pregnancy subsequent to perinatal loss. These investigators examined whether women who had experienced a late perinatal loss would display more grief during a subsequent pregnancy and postnatal period than women who had early miscarriages. There were two data points for this study, the eighth month of the pregnancy and six weeks after delivery. They found that advanced gestational age of the loss was significantly related to more unresolved grief during the 8th month of pregnancy as well as at 6 weeks after delivery.

Other authors have suggested the opposite effect for gestational age, finding that earlier losses are more difficult to resolve because mothers whose babies lived even fleetingly were better able to make sense of the tragedy they experienced than mothers who lost fetuses. These authors make the argument that just the act of viewing the baby takes the loss out of the realm of pure fantasy and aids in grief resolution. (Lovell, 1983; Stack, 1984).

Still other investigations concluded that gestational age has no influence on grief (Peppers & Knapp, 1980; Seller et al. 1993) As noted above, Peppers and Knapp compared grief resolution in woman who had sustained miscarriages, stillbirths and neonatal losses. These authors found there to be no significant differences on this variable. Theut commented upon the inconsistencies between her own findings and those of Peppers and Knapp. It was noted that a number of

Peppers and Knapp's subjects had experienced loss as many as 36 years previously, while Theut's study compared reactions with in 2 years. Theut suggested that perhaps what Peppers and Knapp 'really' found was that bereavement for early loss and bereavement for late loss may become indistinguishable over time.

History of Loss

Another variable is history of loss. As noted above, it is unclear whether previous perinatal losses are associated with pathologic mourning. The same questions remain about the effects of other types of bereavement on the experience of women who have miscarriages. Nicol, Tompkins, Campbell & Syme (1986) observed that a crisis (such as a the death of a loved one) during a pregnancy that ends in perinatal loss was a contributing factor to pathologic grief - however, a history of loss was not found to be significant. Other authors, as well, have concluded that prior bereavement was not significant (Forest et al., 1982; Benfield et al., 1987). Alternatively, Seller (1993) suggested that the existence of unresolved losses of any type may be influential in the reaction to perinatal loss. Hall (1987) cited David (1975), who found that pathologic grief reactions following perinatal loss were predicted in women who had recently lost a parent.

Zeanah (1988) noted that it was "surprising that no investigation has yet examined the adequacy of resolution in mourning of a previous loss as a predictor of disordered

mourning following a perinatal loss." Stack's (1984) discussion of Kaij et al. (1968) speaks to the issue raised by Zeanah. Kaij et al. observed that following a successful delivery, there was poorer postpartum mental health in women who had a history of perinatal losses. Kaij and his colleagues examined the backgrounds of these women and found that women with a history a pregnancy loss were also more likely to have lost a father and suffered early neurotic symptoms combined with bereavement. These authors hypothesized that perinatal loss may be caused by psychological factors. Unsuccessful identification with the mother was noted as a common factor among woman with a perinatal loss history. Mothers were described as possessive, dominating, punitive and intolerant. Fathers were either absent, dead or detached.

In Stack's discussion of this study he pointed out that while the authors focussed on the idea that miscarriage is psychogenic because of the link between early loss, neurotic symptoms and miscarriage, they failed to address to their original observation: the evidence of postpartum emotional disturbance among women with a history of both perinatal loss and early bereavement. It is possible that a higher incidence of prior unresolved loss in addition to unresolved mourning of the miscarriage itself may have contributed to their poor, postpartum mental health. Apart from Stack's discussion, there is little in the literature that addressed Zeanah's observation and virtually no study that empirically examines

the effect of prior grief resolution on mourning around a perinatal loss.

Pregnancy Subsequent to Perinatal Loss

As there were varied views in the literature on the impact of bereavement history, so were there conflicting conclusions as to the import of subsequent pregnancy. The majority of the literature focussed around the issue of the timing of pregnancy following a perinatal loss and its effect on resolution of maternal grief. To a lesser extent, the ramifications for the relationship between the mother and her new baby were also discussed.

In terms of the impact of timing, Rowe et al. (1978) found that women who became pregnant less that 5 months after a perinatal loss were at greater risk for disordered mourning than were those women who waited six months or longer to become pregnant. Forrest, Standish & Baum's (1982) study essentially supported the findings of Rowe et al., but added the ingredient of the mediating power of counselling. These authors found that women who became pregnant less than 6 months after a perinatal loss and received counselling did not evidence a psychiatric disorder. In contrast, a significant proportion of woman who became pregnant within the same time frame and did not receive counselling demonstrated a psychiatric disorder.

Alternatively, a study by LaRoche, et al. (1984) found no significant differences between women who became pregnant less

than 6 months after a loss and those who became pregnant later. Similarly, Smith and Borgers (1988) found that neither the occurrence, nor the timing of pregnancy had a significant effect on parental grief as measured with the Grief Experience Inventory.

In a rather different way of considering pregnancy, several investigators viewed the fact of becoming once again pregnant as, in itself, movement toward grief resolution. Wolff et al's. (1970) study suggested that the bereaved's ability to actively make plans for the future, including immediate plans to become pregnant again, constituted evidence of resolution of mourning. Similarly, Jenson and Zahourek (1972) cited the decision to have another child as demonstration of successful grief resolution. The timing of pregnancy was not focussed upon in either study.

Most of the authors cited above noted the need for studies of the impact of perinatal loss on the mother's relationship with the baby of her pregnancy. This issue was discussed by Lewis (1979), who stated that pregnancy can interfere with the mourning process that needs to follow a perinatal loss. A pregnancy is a consuming event, as is a bereavement. A bereaved pregnant woman must struggle with conflicting and paradoxical needs to focus on the deceased and the new life. Lewis believed that the immediate choice would be to focus on the live baby and interrupt the mourning process. This leaves grief unresolved with the potential to be

reactivated and interfere with the maternal-child relationship later on. Lewis suggested that the child may be rejected, inappropriately idealized, or abused as a result of the sequelae of unresolved mourning.

Other authors have discussed pathological outcomes for the children of parents who have not resolved grief around the death of a previous child. In their article regarding the "replacement child syndrome," Cain and Cain (1964) offered clinical observations of highly pathological relationships between parents, who remained unresolved in their grief, and their offspring. Often the "substitute" child lived in the shadow of his/her diseased sibling and exhibited serious morbid symptoms and preoccupations. Though this appeared more relevant for siblings of children who had survived beyond the perinatal stage, it was applicable in terms of the power of parental fantasies around a perinatal loss to impinge upon the relationship with the child.

Davis et al. (1988) and Phipps (1985) were among the few authors to examine the effects of perinatal loss on the mother's emotional experience of her new baby. Both investigations used maternal self reports and not observational data. Davis used the Perinatal Loss Interview (PLI), which included open ended questions to explore the mother's perceptions of her feelings, thoughts and behaviors in parenting her child. These authors found that regardless of the timing of the pregnancy, most mothers reported

overprotective and replacement feelings toward the child. It was hypothesized that since these feelings were an essentially universal experience, this finding may have represented normal maternal experience, rather than pathology following perinatal loss. There was no data concerning maternal depression in this study. This may be due to the nature of the PLI - only the subjects that the mother spontaneously raised were scored. The authors speculated about several reasons the mothers did not talk about depression and responsiveness: it is socially undesirable to admit to being an unresponsive mother; it is more difficult to have insight into unresponsiveness than over protectiveness or replacement feelings; the interview was not sensitive enough to elicit overt responses to this issue and for these mothers, functioning well enough to participate in the study, unresponsiveness to a child was not a problem.

Phipps' conducted open ended interviews with 15 couples who had experienced a perinatal loss and a successful pregnancy. The age of the child at the time of the interview ranged from five months to three years. Phipps' findings were consistent with those of Davis et al concerning the ubiquity of anxiety in these mothers. Mothers described a transient hesitancy to attach to the infant until they were absolutely sure everything was alright. Even after this reluctance abated, feelings of anxiety and a tendency toward overprotective behavior continued, often for several months after the baby's birth. One mother describes this:

> "I was much more protective, there weren't many people who could hold him. My mom would come over and she'd say, boy every time I come here you're holding the baby...and if he was sleeping I was always checking on him. I'll bet every 20 minutes I was going up there just to put my hand on him..."

On the other hand, a number of mothers volunteered that their experience with loss facilitated attachment and promoted increased early interaction. They felt that having lost a baby made the exhaustion of the earliest, most difficult months seem less problematic. One mother stated,

> "It helped on those sleepless nights when you get up a million times and she won't go to sleep ...I'd feel so tired I'd think Oh, Lord, why did I ever have this baby ..and then I would think of what it was like before she was here, of how it was when we lost A. and we wanted her so bad and I'd say to myself - this isn't so bad, is it, and I'd say no, this isn't so bad."

The Maternal Attitude Towards the Fetus: Maternal-Fetal Attachment

In discussing the sequelae of perinatal loss, Phipps was among the only investigators to address the issue of maternal "attachment" to the fetus during pregnancy. In this context, Phipps was referring to maternal thoughts about the baby and "interactions" (i.e., stroking the baby via the abdomen) that suggest a relationship or bond between the mother and her "inside" baby. Phipps found that attachment to the fetus was attenuated in these prospective mothers - many of whom avoided such behavior and thoughts - for a number of mothers images of the deceased baby interfered with the maternal-fetal bond.

This diminished prenatal attachment, however, did not appear to impact upon the way mothers were able to attach to their neonates. Most mothers reported solid bonds with their new babies.

While Phipps was the only investigator to explicitly discuss the impact of perinatal loss on maternal-fetal attachment, the concept of a prenatal attachment relationship is implicitly at the core of the topic of the sequelae to perinatal loss. It is the notion of a significant prenatal relationship that counters Deutsch's (1945) proposition that grief to a perinatal loss was qualitatively different from other losses. Deutsch's underlying premise was that such a loss was less painful comparatively because there was less of a relationship. Nonetheless, Deutsch did recognize that the mother's attitude toward her fetus had bearing upon the mother-child relationship. Both Benedek (1959) and Bibring (1961) supported and broadened this view by hypothesizing that the emotional attachment to the fetus during pregnancy may be predictive of later mother-child interactions. Kennell and Klaus (1982) were among the first to suggest that parents emotional attachment begins early in pregnancy; by virtue of the acute emotional pain these two pediatricians observed in their female patients to perinatal loss.

Outside the realm of literature dealing with perinatal loss, there is a small body of literature that addresses the maternal-fetal relationship - variously referred to as

"attachment," "binding in" and "bond." Brazelton (1975) theorized that the rhythmicity evident between mother and infant soon after birth gives evidence that pathways of communication are established within the mother-infant dyad before birth. Rubin's (1975) work supported this conclusion. She discussed her view of the trajectory of the maternal-fetal relationship, which she later termed "binding-in:"

> The bond between a mother and her child that is so apparent immediately at the birth of her child is developed and structured during pregnancy. At birth there is already a sense of knowing the child within the limitations of not having had perceptions through the usual sensory modalities. At birth there is already a sense of shared experiences, shared history, and shared time on an intimate and exclusive plane.

Verny (1981) believed that the newborn's capacity to respond to a mother's hugs, stroking, and other cues was based on the prenatal relationship. He speculated that the attachment evident at birth was actually a continuation of the process begun early in utero.

While these theorists recognize the maternal-fetal relationship as a valid and significant experience, empirical studies of the factors that influence this phenomenon, as well as the impact of prenatal attachment on the postnatal relationship are few. Leifer (1977) was among the first to quantitatively examine the emotional attachment to the fetus and its impact upon later mother-child interactions. She included a sample of 19 primigravidas. Leifer developed two measures, an Attachment to the Baby Checklist that was

administered each trimester and a Child-Trait Checklist administered during the first trimester and early postpartum. Leifer found attachment tended to increase with the gestational age of the fetus. She noted that there was a high association between attachment to the fetus and maternal feelings towards the baby. Women who had developed only minimal emotional ties to the fetus experienced a greater sense of distance toward their babies during the hospital stay and remained low at two months postpartum. Contrastingly, those women who had developed an intense emotional attachment to the fetus by the end of pregnancy experienced higher degrees of closeness to their babies during the postpartum. This association suggested that the degree of affective involvement by the third trimester was an accurate predictor of later maternal feelings towards the new infant. Leifer concluded that the most significant developmental task of pregnancy was the acceptance and emotional incorporation of the fetus.

Additionally, both the intensity and focus of maternal anxiety during pregnancy were found to be related to the depth of the prospective mother's attachment to her fetus. High anxiety directed towards the fetus was a reflection of a strong attachment, whereas high self concern was more likely to be expressed by women who had developed only minimal ties to the fetus.

Condon and Dunn (1987) examined the effect of congruence between prospective parents' fantasies about their fetus and parents' perceptions of the baby at birth on parental "first impression" of the new baby. These authors hypothesized that when parents perceived the "reality baby" as similar to the fantasized, prenatal baby, parents would have a positive first impression. This study found a strong association between prenatal feelings ("positive," "closeness" and "affection") towards the fetus and the corresponding components of the first impression of the neonate. This was interpreted to indicate that those who were emotionally attached to their unborn child transferred this attachment to their reality baby. It was not necessary for the parent's prenatal expectations regarding the babies to be validated when the baby was born in order for parents to have a positive first impression. In fact, initial, neonatal impressions were found to be positive when the parent's expectations regarding the baby were largely positive during pregnancy. Thus, this study essentially corroborates Leifer's findings on the relationship between both maternal prenatal and postnatal affective experiences of the fetus/baby.

The majority of empirical research on maternal-fetal attachment (MFA) is found in nursing journals. Cranley, (1981a) defined MFA as the extent to which women engage in behaviors that represent affiliation and interaction with their unborn child. She developed a tool to measure MFA, the

Maternal-Fetal Attachment Scale (MFAS). Her scale included five factors: giving of self, attributing characteristics to fetus, role taking, differentiation of self, and interaction with fetus. This tool appeared to be the most frequently used measure of maternal fetal attachment, but with inconsistent results. Only gestational age (Cranley, 1981a; Grace, 1989; Heidrich & Cranley, 1989;) and quickening (Heidrich & Cranley; Mikhail et al., 1991; Zacharia, 1994) have been consistently associated with MFA. Curry (1987) reported a positive association between the mother-daughter relationship and MFA for a sample of high risk hospitalized pregnant women. This finding is inconsistent with that of other researchers (Mercer, et al., 1988 and Zacharia, 1994) who found no significant influence of the experience of being mothered on the development of MFA.

A number of investigators have also found a positive relationship between marital satisfaction and MFA (Cranley, 1981b; Mercer, Ferketich, May, Dejoseph & Solid, 1988; Sugarman, 1977). Contrastingly, Muller (1993) and Zacharia (1994) found no correlation between MFA and marital satisfaction.

In terms of self concept and MFA, Curry (1987) found a positive association, where as Cranley (1981b), Gaffney (1986) and Mercer (1988) did not find a significant association.

In the area of social support and MFA, Cranley (1981b) found a strong association, while Zachariah (1985 cited in

Mercer, 1988) found no relationship between this variable and MFA.

Anxiety and MFA have also yielded inconsistent results. Cranley (1981b) found no association between the two; Gaffney (1986) found a negative association between state anxiety and MFA, as well as an inverse correlation between trait anxiety and the Giving of Self subscale of the MFAS. The results of both studies conflict with those of Leifer, described above.

Also in contrast to Leifer's study, and, perhaps, most striking, were Cranley's (1981a) findings concerning the association between MFA during pregnancy and later maternal feelings towards the neonate. Cranley did not find a relationship between MFA and the Broussard Neonatal Perception Inventory, which was used to assess the mother's attitude toward her new infant.

Such inconsistencies have led researchers to question the validity of the MFAS in measuring this construct. (Mercer et al., 1988; Muller, 1990; Muller & Ferketich, 1990; Muller, 1993; Zacharia, 1994). Muller (1993) suggested that the MFAS primarily measured maternal 'behaviors' and not the dimension of maternal 'affiliation', as Cranley had proposed. Muller developed the Prenatal Attachment Inventory (PAI) to address the missing dimension of affiliation. Her view was that the PAI should be used in conjunction with the MFAS to "triangulate to enhance interpretation of data that are contradictory and inconsistent in current prenatal attachment

research." Muller stated that her thinking around developing the PAI was informed by the "Attachment Model". Preliminary studies have demonstrated a strong correlation between the PAI and MFAS, indicative of concurrent validity for the PAI.

Attachment Theory and Pregnancy

In referencing the Attachment Model, Muller (1993) cited a body of research that dealt with detailing the development and functioning of an attachment behavioral system. Attachment theory was proposed by Bowlby (1982) to explain why children suffered both physically and emotionally when separated from their mothers. Bowlby suggested that inborn infant behaviors mediated interaction with the caregivers (attachment figures) with the set goal of bringing an adult into proximity and obtaining safety and security.

Positive initial attachment experiences led the child to identify attachment relationships as unique, nurturing, secure and enjoyable (Marris cited in Muller). The importance of attachment does not end in childhood. Adolescents and adults ascribe meaning to their lives based upon attachment relationships. Because of these relationships they "gain a sense of security and place. Without them they feel lonely and restless." (Henderson cited in Muller).

Muller believed that attachment was also a key element in the experience of pregnancy. The pregnant woman gradually becomes "attached" to the idea of pregnancy and develops an attachment for her "inside-baby." Muller noted that

attachment theory holds that initial attachment experiences lead to the development of internal representations, which in turn influence subsequent attachments formed by a person. Based on this, Muller proposed that the quality of a woman's attachment to her fetus would be associated with the quality of her attachment to her partner. Her initial study, however, did not find a significant correlation between scores on her PAI and a measure of marital satisfaction.

Patterns of Attachment

Unlike Muller's emphasis, attachment theory has not focussed on the marital connection - the emphasis has been on the parent-child relationship. Slade and Aber (1992) summarized the basic theme of this body of research as follows: "the quality of early caregiving influences the ways a child experiences emotion, the quality of his or her relationships and the solidity of his or her self esteem. It also exerts a pivotal influence on the adults ability to parent." The significance of prenatal attachment as well as perinatal loss on the attachment process has yet to be explored with in the attachment framework. The first major piece of empirical work on attachment was developed by Mary Ainsworth (Ainsworth et al., 1978). She transposed Bowlby's theoretical observations into a research paradigm called the Strange Situation. Ainsworth measured maternal sensitivity to infant cues, with 23 mother-infant dyads, during the first year of life. When the infant reached 12 months of age she

assessed the quality of the infant's attachment to her mother with the Strange Situation. This procedure involved examining the child's behavioral responses towards her caretaker in a separation and reunion observation conducted in an unfamiliar laboratory environment. Three categories emerged to describe the child's attachment relationship: group A/anxious-avoidant infants tended to ignore and avoid the parent upon reunion; group B/secure infants behaved as though they missed the parent, sought proximity upon reunion, then returned to play; group c/anxious-resistant infants became highly distressed early in the procedure. They tended to oscillate between seeking proximity and displaying anger towards the caretaker.

Ainsworth did, indeed, find that security of attachment at 1 year of age was predicted by quality of caretaking over the first 12 months of life. This finding has been replicated by numerous others (Cited in Slade & Aber: Bates, Maslin & Frankel, 1985; Belsky, Rovine, & Taylor, 1984; Grossman, Grossmann, Spangler, Suess & Unzner, 1985).

Attachment and the Level of Representation

Slade and Aber noted that while many consider Ainsworth's discovery of the A, B and C patterns of attachment to be revolutionary, her emphasis on mother-child behavior diverted attention from her, as well as Bowlby's, central point - that different patterns of attachment revealed in the Strange Situation emerged from different relationship histories and reflect different underlying representations of the

relationship. Slade and Aber pointed out that it was Mary Main's work that allowed for the shift in attachment theory from a behavioral to a representational approach.

Main and her colleagues (1985) developed the Adult Attachment Interview (AAI) which centered around the adult's representation of her attachment-related history. This interview delves into both historical and current attachment experiences and "assesses the adult's overall state of mind with respect to attachment" (Main & Goldwyn, in press). Analysis of AAI transcripts allowed adults to be classified into one of three attachment categories: D/dismissing, F/secure-autonomous, or E/preoccupied. These adult classifications have been found to predict to the infant's Strange Situation pattern of attachment (Main & Goldwyn; Fonagy, Steele & Steele, 1991; Fonagy, Steel, Moran, Steele & Higgit, 1993; Grossman, Grossman, Spangler, Suess & Unzner, 1985). Mothers who fall into the secure category on the AAI tend to have children who are judged as secure through the Strange Situation. Correspondingly, detached mothers had anxious-avoidant children and preoccupied mothers had anxious-resistant children. This research suggested that individuals carry "internal working models" (Main & Goldwyn) of attachment relationships that inform their capacity to respond to others The parental state of mind with respect to attachment defines the boundaries of what the parent can affectively respond to visa-vis her child. The parental internal working model is

then "intergenerationally transmitted" through the relationship between parent and child.

Attachment and Unresolved Loss

More recently, a new infant attachment category was formulated - D/disorganized attachment (Main & Soloman 1986). This emerged after researchers reviewed the Strange Situation behavior of infants who were considered unclassifiable in terms of the standard A, B, or C categories. analysis revealed that these infants shared a disoriented, disorganized and dazed appearance during the Strange Situation.

It was found that infants in the D category were strongly correlated with abusive and neglectful parenting - thus D was associated with a high risk population (Carlson, Cicchetti, Barnett, & Braunwald, 1989; Lyons-Ruth, Zoll, Connell, & Odom, 1987). However, Main & Hesse noted that their original, upper-middle class, Bay Area population was not a high risk sample. Yet, it included a significant number of D infants. Further analysis of the AAIs of the Bay Area sample and other low risk populations led these researchers to conclude that the parental factor responsible for the disorganized pattern of attachment was accounted for by parental unresolved mourning around a primary attachment figure. These parents not only endured an early loss, but also evidenced continued, current mourning for that loss. These findings resulted in the addition of the U/unresolved loss classification (Main, DeMoss, Hesse, 1989).

Main and Hesse (1990) observed that fear appeared to play a role in the repertoire of D infants' behaviors. This helped to clarify the association between the D pattern and abusive parenting. It is easy to see how the infant's experience of parental mistreatment would be directly frightening and might result in disorganized, fear informed attachment behavior. The connection is not as readily apparent where parental unresolved loss appears to be the link. Main and Hesse speculated that a parent suffering from unresolved loss may still be "frightened" by her loss experience. As a result, she may display an anxiety that could, in turn, be frightening to her infant. It is emphasized that this is not the sequelae of all encounters with loss. Only losses that are experienced as traumatic are thought to have the power to so profoundly effect the parent-child attachment relationship. Ultimately, the D pattern is thought to emerge from parental lack of trauma resolution. The trauma may result from either a traumatic loss (typical of the low risk population), or from a history of traumatic abuse (typical of the high risk population). The AAI includes scales to distinguish between these two types of trauma, but, ultimately there is only one U score for either type of trauma.

The Link Between the Unresolved and Preoccupied Classifications

Main's research suggested that the U classification was a potent one, associated with the most severe form of

disordered attachment. Less is known about this classification because of its relative newness compared with the other attachment categories (Adam, 1993). Researchers have recently sought to investigate the implications of the Unresolved classification. Benoit, Zeanah, Barton (1989) examined AAI classifications of 50 mothers, an experimental group of 25 whose infants were hospitalized with a diagnosis of failure-to-thrive (FTT) and a control group comprised of 25 mothers of hospitalized infants who were growing normally. These authors found that lack of resolution of mourning the loss of a loved one was present in 52% of the experimental group as well as in 32% of mothers in the control group. While the difference between the control and experimental groups was not significant on this variable, the percentage of mothers receiving the U classification was quite high in both groups, especially in the FTT group. These researchers suggested that the findings support careful assessment of losses and bereavement in individuals from clinical (i.e. hospitalized) and high-risk (i.e. FTT) populations. Additionally, mothers of FTT infants were found to be significantly less secure in terms of attachment, with a significant proportion exhibiting a preoccupied state of mind with respect to attachment. While the association between the unresolved and preoccupied attachment categories is not the salient feature of this study, it is suggested by the results. Adam (1993) used the AAI to compare two clinical populations - suicidal and non-

suicidal adolescents from outpatient and residential treatment centers. He found that the U category was significantly over-represented in suicidal subjects. Additionally, the preoccupied (E) classification was strongly correlated with suicidal behavior. The E pattern was found to interact strongly with U status. Almost all subjects in the E category who endured loss, separation or trauma remained unresolved around these experiences. Adam suggested that an underlying E organization was a significant risk factor predisposing to difficulties in dealing with trauma.

Adam's finding was consistent with the work of Main and Hesse (1990), who found that adult lack of resolution in mourning was significantly associated not only with the adult's having a preoccupied state of mind with respect to attachment, but also with the respective infant's D status. Additionally, for these D infants, the best fitting primary attachment group was found to be the C/anxious-resistant category - which is associated with the adult preoccupied classification. This suggests that adults whose state of mind with respect to attachment is preoccupied may be especially vulnerable to loss and other traumatic experiences, and makes sense of the fact that a higher proportion of C rather than A or B infants were found to be disorganized (Main & Hesse).

A study by Ainsworth and Eichberg (1991) supported most of Main & Hesse's findings. It was found that a mother's unresolved mourning was significantly associated with both her

placement in the preoccupied adult attachment category and her infant's C/D classification. One area of difference noted by Ainsworth and Eichberg was that it was not necessary for a loss to be either an early one, or parental in order for it to have the power to result in an unresolved state of mind for the bereaved. In their sample, the vast majority (8 out of 10 subjects) of those who were unresolved had lost non-parental attachment figures and for half of these subjects the loss occurred in adulthood. On the other-hand, 4 of the 5 subjects who experienced the death of a parent in childhood were themselves secure/autonomous in regards to attachment. Overall, of the 10 mothers in this sample who had experienced the loss of a parent at any age, 8 were themselves secure-autonomous, and only 2 had D babies.

These authors appear to be the only investigators who explored specific factors that characterized the response to loss and the factors that seemed to assist in resolving the loss. Two factors were identified as salient: a sense of family solidarity and the ability to take responsibility for the care of other members of the family.

Attachment, Unresolved Mourning and Perinatal Loss

Main and her colleagues focussed on the earliness of the loss as an important factor in the development of unresolved mourning. Ainsworth and Eichberg broadened the parameters of these factors, demonstrating that a loss of an attachment figure, parental or unrelated, at any point in one's life had

the potential to result in unresolved mourning. The present study has described the trauma of miscarriage - a comparatively "late" and rather different type of loss. Seller et al. (1993) discussed the place of the fetus as an attachment figure in the mother's internal world. Seller noted that some women become highly invested in fantasies of the fetus which may include the image of the perfect child. This image can be invested with:

> "hopes for the future - of parenthood, of family life, of joy and happiness, and also her own needs for the future, of receiving as well as giving love and nurture. She fulfills in this projected person her aspirations for the next phase of her life. In so doing the fetus can be construed as being a source of security and safety, and thus, an attachment figure."

Seller's variation on the definition of an attachment figure speaks to why perinatal loss may be so devastating. Considered with the literature reviewed on attachment, it also raises questions as to the impact of perinatal loss on attachment relationships.

Summary

Much of the literature on pregnancy loss highlighted the powerful forces that may contribute to unresolved mourning after such a loss. Contrary to early theories on the insignificance of miscarriage, pregnancy loss can be more powerful than other types of bereavement with sequelae that may include significant psychiatric symptoms.

To a lesser extent, intergenerational ramifications were touched upon in the literature in terms of women's self

reports of their feelings around pregnancy and, even more minimally, around the new baby. Attenuated feelings of attachment to the fetus were reported, as was a hesitancy to bond with the new infant. Feelings of anxiety and over-protectiveness toward the child were also noted by mothers.

Research into maternal-fetal attachment has produced inconsistent results. This body of literature raised more questions than it answered around the construct of maternal-fetal attachment and its significance in the mother-child relationship.

Attachment theorists have produced elegant and consistent empirical research in the area of intergenerational transmission of internal representations, but have not explored the 'earliest relationship' - maternal-fetal attachment. Nor have these investigators focussed upon the significance of pregnancy loss on attachment relationships, though traumatic loss has become understood to be a powerful factor in attachment relationships. Recently, a link has been made between the preoccupied (E) attachment classification and the Unresolved (U) category - suggesting that those who are organized at the preoccupied level are at risk for disordered mourning in response to loss.

The factors that allow some women to resolve pregnancy loss with relative ease, while others remain traumatized are not well understood. The premise being set forth here holds that one's state of mind with respect to attachment and loss

mediates the way one responds to other losses - such as miscarriage. This issue will be examined in this study in light of the relationship between state of mind with respect to attachment and response to loss.

While it is clear that pregnancy loss can be devastating for some, its long term implications have not been fully investigated. The present study seeks to address this by exploring the intergenerational sequelae of pregnancy loss. It is this author's expectation that, regardless of resolution of mourning a past pregnancy loss, the inevitable anxiety and suffering that accompany such a loss are sufficiently powerful that their effects should be apparent in the mother's experience of her new fetus. Additionally, when the loss remains unresolved, and therefore traumatic, the attachment relationship between the mother and her child will be impaired.

Along more qualitative lines, this study will examine the case histories of three subjects with different attachment classifications, who resolved their respective pregnancy losses in different manners, in order to investigate why some women resolve pregnancy loss with relative ease and others remain mired in it.

CHAPTER 2

METHOD

Subjects

The population for this research were participants in a larger study, the "Pregnancy Project," directed by Arietta Slade, Ph.D. at the City College of the City University of New York. The Project is a longitudinal study of mothers and infants that began in the third trimester of pregnancy and followed the dyad into the infant's 28th month. Subjects for the present study include 51 primiparas and their 14 month-old babies.

The subjects were women between the ages of 25 and 40. All were first time mothers-to-be who entered the Project in their last trimester of pregnancy. The subjects were all involved in stable, heterosexual relationships. Most lived in New York City. The sample was overwhelmingly white (94%). Fifty percent of the sample had completed all or some postgraduate training, 41% had completed college. Husbands were similarly educated. Of the subject's, 48% were professionals, 29% worked in public service, business, or other white collar jobs, 15% were artists and the remaining 8% were not working or were full time students. Thus, this is a highly educated, stable middle class population.

Subjects were recruited from Lamaze classes and private obstetricians. Some subjects responded to advertisements in Parent's Magazine; some of the women heard about the Project

from acquaintances. Subjects received a payment of $20 for each visit to the laboratory.

An experimental group of 10 subjects had a history of pregnancy/perinatal loss that was as follows: five women had a history of one miscarriage; two women reported a history of two miscarriages; one woman reported a single miscarriage and an ectopic pregnancy; one woman reported three miscarriages and one woman had a perinatal demise 12 hours after birth. With the exception of the subject who had the perinatal demise, nine subjects' miscarriages occurred at under 15 weeks of gestation. Seven subjects with a pregnancy loss history conceived their first viable pregnancy within six months of the loss, the remaining three subjects conceived within a year of the loss. A control group of 41 subjects had no history of pregnancy loss.

Setting

Data were collected in a three room laboratory at the City College of New York. The facilities included a camera room, a playroom connected to the camera room with a one-way mirror, and a large, furnished sitting room. Videotaped sequences of mother-infant play took place in the play room and interviews with the mothers were conducted in the larger room.

Procedures

The Project protocol involved three visits to the laboratory during the subject's pregnancy and five visits after the baby's birth. At the first visit, subjects were interviewed using the Pregnancy Interview, a semi-structured clinical interview developed by Project staff. This interview will be described below. A battery of psychological tests was administered at the second visit. At the third visit, the Adult Attachment Interview was administered. During the five postpartum visits, mothers were interviewed and mother-infant dyads were videotaped. The baby accompanied the mother to the laboratory at the following ages: four months; ten months; fourteen months and twenty-eight months. Data were collected for the proposed study during the first and third pregnancy visits, as well as at the baby's fourteen month visit, where the Strange Situation was administered. This research paradigm will be described below.

Measures

Maternal Measures

The Pregnancy Interview

The Pregnancy Interview (Slade, Grunebaum, Huganir & Reeves, 1987) is an approximately one hour, audio-taped, semi-structured interview that is given during the third trimester of pregnancy. It examines the woman's affective experience of pregnancy on several levels, including her fantasies and feelings about the fetus, thoughts about the pregnancy itself,

ideas about the process of becoming a parent and reflections on the ways parenthood will influence marriage and other aspects of life.

For women who have endured pregnancy loss, this interview also assesses state of mind with respect to resolution of that loss. While there are no direct questions about prior pregnancy loss on the Pregnancy Interview, women tended to spontaneously bring up their loss(es) and reference them throughout the interview. It would seem that the state of being pregnant reactivates the feelings associated with the prior loss(es), allowing them to emerge during the Pregnancy Interview. Certain subjects' Pregnancy Interviews resonate with a sense of the subject's unresolved grief around her past pregnancy loss, while other subjects seem to have completed their mourning. The interviews of subjects who appear to have the greatest difficulty around resolution tend to be characterized by the subject's disorganization and disorientation around the miscarriage. Guilt or fear appear to have taken on overwhelming proportions of the subject's experience. Often the subject indicates powerful, irrational beliefs of having caused the miscarriage that include a bizarre theory concerning her guilt. The subject may be unable to discuss the current pregnancy at all with out referencing the miscarriage throughout the interview. In contrast, subjects who have apparently resolved their miscarriages are able to discuss the loss with out becoming mired in it. While

sadness about the loss and anxiety concerning the current pregnancy may be expressed, these affects are modulated. The sadness has a retrospective quality; it does not seem to be significantly coloring the current pregnancy experience. The anxiety is appropriate and not unduly influenced by guilt. Overall the loss appears to have been psychically worked through and integrated into the subjects narrative. (See Appendix A for complete Pregnancy Interview).

The Pregnancy Interview Coding System

A coding system was developed for the Pregnancy Interview (Slade, Dermer, Gibson, Graf, Grunebaum, Reeves and Sitrin, 1992). With this system, verbatim transcripts of the Pregnancy Interview may be coded using a 9-point scale for each area examined. Three levels of the pregnancy experience are assessed: (1) Developing Representations of the Baby, (2) Parental Representations and (3) State of Mind. There are three codes that comprise the section on Representations of the Baby: affective tone of the prenatal representation, affective tone of the postnatal representation and degree of elaboration. Two codes are included in the Parental Representation section: confidence/limitations and acceptance of baby & self needs. There are two State of Mind codes: coherence and lack of resolution of mourning a pregnancy /perinatal loss (LRMPL).

The codes relevant to this study include those that address the Representation of the Baby and the LRMPL code. The

former involves three codes that, when considered together, provide a framework for understanding the prospective mother's over-all relationship with her "inside baby," as well as her expectations for her relationship with her infant. The quality of the affective tone is assessed separately for the prenatal and the postnatal representation of the fetus and the infant. The scale points for this code range from (1) High Negative to (9) High Positive, based upon the prospective mother's affective experience around the fetus/anticipated infant.

Another aspect of the representation of the baby involves the extent to which the prospective mother is able to fantasize about, or internally represent, her fetus. This is assessed by the elaboration of baby in-utero scale. The extent to which the subject is able to describe and elaborate her representation is coded within a range of (1) No Elaboration to (9) Very High Elaboration.

The final code in this system is a State of Mind code, the LRMPL. This code assesses women's internal representations of their pregnancy losses in a way that is consistent with Mary Main's (Main & Goldwyn, 1988) scale for disorganization and disorientation in the lack of resolution of loss classification on the AAI. Women who endured pregnancy losses are classified in terms of their resolution or lack thereof, with a scale point of (1) suggesting Definite Disorganization, Disorientation, or Evidence of Confused Thought Processes Regarding the Pregnancy Loss and a scale point of (9)

indicating No Evidence of Disorientation or Disorganization Around the Pregnancy Loss. Scores below five on this scale warrant an U/unresolved classification for the prior pregnancy loss.

The Pregnancy Interview was coded with the Pregnancy Interview Coding System by trained coders. Reliability coefficients were above .90. (See Appendix B for complete Pregnancy Interview Coding System.)

The Adult Attachment Interview

The AAI (George, Kaplan & Main, 1985) is an 1 hour, semi-structured interview that probes the adult's recollection and evaluation of early attachment relationships and experiences. The interview is audio-taped and verbatim transcripts are scored on seven 9-point scales measuring the adult's probable experience with the attachment figures and his/her state of mind with regard to attachment. Adults are classified as D/dismissing of attachment, F/secure-autonomous with respect to attachment, or E/preoccupied by past attachments. In addition, a score of above 5 on the lack of resolution scale warrants an supplemental classification of U/unresolved. The transcripts of the interviews were coded by raters trained to reliability by Dr. Mary Main.

The Brief Symptom Index

The BSI (Derogatis, 1982) is a 53-item self report symptom inventory designed to reflect the psychological symptom

patterns of psychiatric and medical patients as well as non-patient individuals.

Each item on the BSI is rated on a 5-point scale of distress (0-4) ranging from "not at all" (0) to "extremely" (4). The BSI is scored and profiled in terms of 9 primary symptom dimensions: 1. Somatization; 2. Obsessive-Compulsive; 3. Interpersonal Sensitivity; 4. Depression; 5. Anxiety; 6. Hostility; 7. Phobic Anxiety; 8. Paranoid Ideation; 9. Psychoticism. Three global indices are also included: 1. Global Severity Index (GSI); 2. Positive Symptom Distress Index (PSDI); 3. Positive Symptom Total (PST).

The BSI was scored by Pregnancy Project staff. Reliability is not an issue with the BSI. Scoring involves an uncomplicated procedure using arithmetic operations of addition and division to two decimal places. Scorers used BSI Score/Profile forms as an aid.

Child Measure

The Strange Situation

This procedure is designed to assess the quality of a child's attachment to his/her mother. It lasts approximately half an hour and consists of eight episodes involving the mother, the baby and a stranger. The mother and the stranger alternately depart in a standard order; the order of leave-taking subjects the child to increasing stress. The child's behavior towards the mother upon reunion is rated and each infant is assigned to one of five possible combinations: (1)

A/anxious-avoidant, B/secure or C/anxious-resistant, with no evidence of disorganized/disoriented behavior, i.e., A or B; (2) classifiable as A, B, or C with disorganized-disoriented features. Such an infant would receive a primary score from the traditional A, B, or C categories and a subscore of d, i.e., C/d; (3) disorganized-disoriented but otherwise classifiable as A, B, or C. In this case a primary D classification is recorded together with the best fitting traditional category, i.e. D/A; (4) disorganized and unclassifiable as A, B, or C. The infant meets the criteria for the D category, but cannot be satisfactorily classified using the traditional A, B, or C system. The infant is therefore both disorganized and unclassifiable, i.e. D/U; (5) unclassifiable as A, B, or C, but not disorganized. In this case the infant would receive a primary score of U and a subscore that reflected the best fitting, "forced" category, i.e. U/B. Videotapes of the Strange Situation were scored by trained coders. Reliability for the A, B, and C groups was .88. Reliability for A, B, C and D groups was .65.

Hypotheses

Quantitative Hypotheses 1a:

Primiparas who have experienced prior pregnancy/perinatal loss will manifest differences in their attachment organization as measured by the AAI, compared to primiparas without such a loss history. Specifically, women with a loss history will fall into the "unresolved" category in

significantly higher numbers than those without a loss history.

Quantitative Hypothesis 1b:

Primiparas with a history of pregnancy/perinatal loss will manifest differences in their pregnancy experience as compared with primiparas without such a history. These differences are expected on indices of the maternal-fetal relationship as indicated by 3 scales on the Pregnancy Interview Coding System that measure the representation of the fetus/baby. Subjects with a history of pregnancy/perinatal loss are expected to score lower on 2 affect scales (fetus/infant), suggesting a comparatively flattened affective tone. These subjects are also expected to manifest diminished articulation of fantasy around the fetus on the elaboration scale.

Quantitative Hypothesis 1c:

The offspring of primiparas with a pregnancy/perinatal loss history will be more insecure as measured by the Strange Situation, than the offspring of primiparas without such a loss history.

Quantitative Hypothesis 1d:

Primiparas with a pregnancy/perinatal loss history will manifest differences in symptomatology as measured by the Brief Symptom Index compared to women without such a loss history. Specifically, it is predicted that women with a

pregnancy/perinatal loss history will score higher on the following scales: somatization, depression and anxiety.

Exploratory Analyses

The following analyses will focus on the pregnancy/perinatal loss group and will explore the relationship between resolution of pregnancy/perinatal loss on the PI, and AAI status in the areas of: resolution of bereavement, security and offspring's attachment. Because of the small sample these relationships could not be investigated empirically, so they will be considered in a qualitative fashion.

Exploratory Analysis 2a

The AAIs and PIs of primiparas with a history of pregnancy/perinatal loss will be qualitatively examined. In particular, the likely relationship between lack of resolution of mourning in relation to attachment and lack of resolution of mourning in pregnancy/perinatal loss will be explored.

Exploratory Analysis 2b:

The relationship between insecure status on the AAI and lack of resolution in mourning a pregnancy/perinatal loss will also be examined qualitatively.

Exploratory Analysis 2c:

The relationship between maternal lack of resolution on the PI and the security status of their children will be examined qualitatively in order to investigate the possibility

that these women will tend to have insecure (avoidant or resistant) offspring who receive either primary or subcategory scores of D/d on the Strange Situation.

CHAPTER 3

RESULTS

To test the hypotheses two approaches are presented. The first approach includes a series of quantitative analyses comparing a group of primiparas with a history of pregnancy/perinatal loss to a group of primiparas without such a history across different variables. The second approach presents detailed descriptive analyses comparing the subjects in the pregnancy/perinatal loss group with each other. This examination is supported by clinical case material.

Comparison of the AAI Unresolved Category

The first Hypothesis (1a) predicted that women with a history of pregnancy/perinatal loss would be classified as Unresolved on the AAI in significantly higher numbers than those without such a history. This was analyzed using a chi square test to evaluate differences on AAI classifications based upon pregnancy/perinatal loss history. This test compares two groups of women in their last trimesters of pregnancy. One group has a pregnancy/perinatal loss history (n=10) and the other group is without such a history (n=41). The results of the chi square test are presented in Table 1. This analysis demonstrates that there were significant differences among subjects' AAI classifications based upon pregnancy/perinatal loss history, $X = 12.068$, $df=3$, $p<.01$ (Fisher Exact Test Correction: $X = 9.614$, $df=3$, $p<.05$). The group with a pregnancy/perinatal loss history was

significantly higher on the Unresolved category, X =9.337, df=3, p<.05. No other differences were found.

TABLE 1

COMPARISON OF AAI CLASSIFICATIONS BASED ON P/P LOSS HISTORY

AAI	MATERNAL HX P/P LOSS (n=10)	NO MATERNAL HX P/P LOSS (n=41)	CHI VALUE
DISMISSING	2	5	.03
SECURE	3	24	.50
ENMESHED	0	9	2.19
UNRESOLVED	5	3	9.34*
TOTAL	10	41	3.12**
FISHER EXACT TEST: CORRECTION			10.88**

* p<.05
** p<.01

Comparison of Maternal-Fetal Attachment

The second hypothesis (1b) predicted qualitative differences in the experience of pregnancy for those women with a history of pregnancy/perinatal loss as compared to those without such a history. Specifically, it was hypothesized that the loss group would demonstrate less attachment to the fetus than would the group without a history of pregnancy/perinatal loss. Certain areas of the Pregnancy Interview were designated as assessing maternal-fetal attachment. These included, maternal degree of elaboration of the fetus, affective tone of the prenatal representation and affective tone of the postnatal representation. This was analyzed using t-tests to evaluate differences on the

Pregnancy Interview based upon pregnancy/perinatal loss history. This analysis compares two groups of women in their respective last trimesters of pregnancy. One group has a pregnancy/perinatal loss history (n=10) and the other group is without such a history (n=34, 7 control group Pregnancy Interviews were not available). The results of the t-tests are presented in Table 2. In this analysis no significant differences were found between women with a history of pregnancy/perinatal loss and those without such a history on the three variables. The variable of elaboration approached significance in the direction predicted, at the p<.13 level.

TABLE 2

COMPARISON OF MATERNAL-FETAL ATTACHMENT BASED ON P/P LOSS HISTORY

PREGNANCY INTERVIEW	LOSS HISTORY (n=10)		NO LOSS HISTORY (n=37)			
	MEAN	SD	MEAN	SD	t(DF)	
PRENTL AFF TONE	5.2	1.23	5.05	2.06	.21(42)	p<.84
PSTNTL AFF TONE	5.3	1.25	4.94	2.20	.49(42)	p<.63
ELABORATION	3.8	1.32	4.76	1.84	-1.54(42)	p<.13

Comparison of Infants

Hypothesis 1c predicted that infants of mothers with a history of pregnancy/perinatal loss would be classified as insecure and as disorganized in significantly greater numbers than

infants of mothers without such a history. This was examined using a chi square analysis to measure differences among infants according to the Strange Situation attachment categories on the basis of maternal pregnancy/perinatal loss history. There are 2 fewer subjects in the experimental group because their Strange Situations were not available. The results are presented in Table 3.

This analysis demonstrates that there were significant differences in the offspring's Strange Situation classifications based upon maternal pregnancy/perinatal loss history, $X = 13.34$, $df = 3$, $p < .01$ (Fisher Exact Test: Correction, $X = 10.00$, $df = 3$, $p < .01$). The group of infants whose mothers experienced prior pregnancy/perinatal loss were significantly higher on the resistant category, $X = 10.00$, $df = 3$, $p < 05$. These results must be interpreted with caution because the number of subjects that comprise the resistant category is quite small. No other differences were found.

TABLE 3

COMPARISON OF STRANGE SITUATION CLASSIFICATIONS

BASED ON MATERNAL P/P LOSS HISTORY

INFANT STR SIT	MATERNAL P/P LOSS HX	NO MATERNAL P/P LOSS HISTORY	CHI VALUE
AVOIDANT	2	5	.71
SECURE	4	22	.03
RESISTANT	2	0	10.00*
DISORGANIZED	0	13	2.60
TOTAL			13.34**
FISHER EXACT TEST: CORRECTION			10.00**

*p<.05
**p<.01

Comparison of the Brief Symptom Index

The fourth hypothesis predicted differences between the pregnancy/perinatal loss history group and the group without such a loss history on the Brief Symptom Index. Specifically, it was predicted that women with a pregnancy/perinatal loss history would score higher on the symptoms of somatization, depression and anxiety. This was analyzed using t-tests to evaluate differences between groups. Results are presented in Table 4. A post hoc comparison is also included, contrasting the 2 groups on the BSI norms for non-patients, psychiatric out-patients and in-patient populations on these symptoms. There is one less subject in the experimental group because one subject did not complete the Brief Symptom Index. Results are presented in Table 5.

Women in the loss group were found to be significantly higher on the symptom of somatization, $t(48)=2.18$, $p<.05$. Unexpectedly, the loss group was also found to be significantly higher on positive symptom total (PST), a compilation of all positive (non-zero) symptom responses, $t(48)=2.03$, $p<.05$. The somatization mean for the loss group was slightly higher than the BSI mean for psychiatric in-patients, within 1 standard deviation.

TABLE 4

COMPARISON OF THE BSI BASED ON P/P LOSS HISTORY

BSI	MATERNAL HX P/P LOSS (n=9)		NO MATERNAL HX P/P LOSS (n=41)		
	MEAN	SD	MEAN	SD	t(df)
SOMATIZATION	1.13	.52	.69	.53	2.18(48)*
DEPRESSION	.70	.70	.49	.61	.93(48)
ANXIETY	.78	.63	.65	.68	.51(48)
PST	25.78	12.92	17.98	9.84	2.03(48)*

* $p<.05$

TABLE 5

BSI NORMS RAW SCORE MEANS FOR 3 NORMATIVE SAMPLES

	Non-Pts (n=719)		Out-Pts (n=1002)		In-Pts (n=310)	
	MEAN	SD	MEAN	SD	MEAN	SD
SOMATIZATION	.29	.40	.83	.79	1.02	.91**
DEPRESSION	.28	.46	1.80	1.08	1.87	1.21
ANXIETY	.35	.45	1.70	1.00	1.70	1.16
PST	11.45	9.20	30.80	11.63	31.60	13.40

**Pregnancy/perinatal loss group mean slightly higher than, within 1 standard deviation of, the mean for the BSI in-patient normative sample.

EXPLORATORY ANALYSES

Exploratory analyses 2a and 2b considered just the pregnancy/perinatal loss group (n=10). 2a anticipated a link between lack of resolution on the AAI and lack of resolution on the PI. 2b anticipated a relationship between security status on the AAI and resolution status on the PI. Table 6 provides an overview of the subjects with a pregnancy/perinatal loss history (n=10), indicating AAI classifications, pregnancy/perinatal loss resolution status, infants' Strange Situation classifications, the number of pregnancy/perinatal losses experienced by the subject and, when the subject was unresolved on the AAI, the nature of the trauma.

Within this group, five received classifications of unresolved with respect to an attachment relationship on the AAI, with two of the five secure/autonomous (unresolved-secure) and the remaining three insecure (unresolved-insecure). Two subjects were insecure (dismissive) according to the AAI and three were secure-autonomous. Four subjects were unresolved in terms of a prior pregnancy/perinatal loss on the Pregnancy Interview.

When those who were unresolved on the AAI were compared with subjects who were unresolved on the PI, three of the five subjects (sixty percent) who were unresolved in terms of an attachment relationship were unresolved on the Pregnancy Interview as well. Though it is problematic to assign much significance to such small numbers, the anticipated relationship between the unresolved category on the AAI and lack of resolution on the PI did not appear to be supported when the data was considered in this fashion.

When security status on the AAI was compared with resolution on the PI, all of the three subjects classified as secure-autonomous by the AAI were resolved on the PI. Of the two subjects classified as insecure, one was resolved on the PI and the other unresolved. This suggests that there may be a link between security status and resolution of pregnancy/perinatal loss, but is difficult to interpret in terms of the insecure group.

Another way to examine the data is to consider as a group all the subjects who were judged securely attached, even where they may be unresolved in terms of loss of an attachment figure. All of these secure subjects were resolved in terms of a prior pregnancy/perinatal loss. Of the remaining insecure subjects, all but one (eighty percent) were unresolved in terms of a prior pregnancy/perinatal loss. When the data was considered in these terms, it appeared that subjects who were secure on the AAI tended to resolve their respective pregnancy/perinatal losses, even if the subject was unresolved in terms of an attachment relationship. In addition, the data suggest that an insecure state of mind and, particularly, the combination of insecurity and lack of resolution in terms of an attachment relationship was linked to lack of resolution around a prior pregnancy/perinatal loss.

Exploratory analysis 2c considered the relationship between a mother's capacity to resolve pregnancy/perinatal loss and her child's security status. It was anticipated that mothers who were unresolved on the PI would tend to have insecure (avoidant or resistant) offspring, who receive either primary or subcategory scores of D/d on the Strange Situation. Table 6 includes the Strange Situation classifications for infants of mothers with pregnancy/perinatal loss histories (n=8). The data reveal that 75% of infants whose mothers were resolved in terms of their pregnancy/perinatal loss were themselves secure. In addition, 75% of those infants whose

mothers were unresolved were themselves insecure. There were no primary scores of D/disorganized for these infants and only 2 received subcategory scores of d. The data appear to support the anticipated relationship between maternal resolution of pregnancy loss and security in offspring. Just as the quantitative analysis failed to find an association between the disorganized infant category and a maternal history of pregnancy/perinatal loss, this exploratory analysis did not suggest a relationship between the D classification and maternal lack of pregnancy/perinatal loss resolution.

In the present study, the proportion of matches between PI resolution status and infant security were consistent with Main's (1989) finding that there was a predicted match of 75% between the mother's AAI classification and the A/B/C classification of the infant. Main did not report the percent of matches for the U and D categories (as noted earlier, the adult U/unresolved category is expected to "match" with the infant D/disorganized category).

In this study, when matches were considered in terms of AAI D/F/E/U and Strange Situation A/B/C/D categories, there was only a single match (subject 5) - far fewer matches than the 75% on the basis of maternal PI resolution status and Strange Situation classifications. When the U category was matched according to its secondary security status, and not regarded as a separate attachment category, there were two

more matches (subjects 3 and 9), raising the percentage to 38%.

Another way to consider this data is to define the AAI - Strange Situation matching criteria in a manner that is more consistent with the contrasting two category system of resolved verses unresolved in terms of pregnancy/perinatal loss. When AAI status was matched on the basis of just two maternal categories, security and insecurity, with U expected to match with either of the Strange Situation insecure categories, matches were at 50% (subjects 4,5,7 and 9). When the U category was matched according to its secondary security status classification, matches were at 75%. The data suggest that for women with a history of pregnancy/perinatal loss, infant security status tends to correlate more with maternal resolution of pregnancy/perinatal loss than it does with the either the A/B/C categories or the unresolved category on the AAI.

TABLE 6

SUBJECTS WITH HX OF PREGNANCY/PERINATAL LOSS

RESOLUTION STATUS ON AAI & PI

INFANTS' STRANGE SITUATION CLASSIFICATIONS

SUBJECT	AAI	PI	STR.SIT.	# LOSSES
1	F/Secure	Resolved	No Data	1
2	D/Insecure	Resolved	No Data	2
3	*F/Unresolved-Secure	Resolved	B/Secure	1
4	D/Insecure	Unresolved	C/Insecure	2
5	F/Secure	Resolved	B/Secure	1
6	*E/Unresolved-Insecure	Unresolved	B/Secure	2
7	*E/Unresolved-Insecure	Unresolved	A/Insecure	1
8	F/Secure	Resolved	A-d/Insecure	3
9	*F/Unresolved-Secure	Resolved	B/Secure	1
10	*D/Unresolved-Insecure	Unresolved	C-d/Insecure	1

*#3 Death of father when subject 33.

*#6 Physical and sexual abuse during childhood and adolescence.

*#7 Physical and sexual abuse during childhood.

*#9 Death of father when subject 16.

*#10 Death of subject's infant, when 12 hours old.

Case Examples

To flesh out the significance of the qualitative data it is helpful to consider the subjects in more detail. In the section that follows, three subjects, representative of

different outcomes in terms of attachment status and resolution of mourning a pregnancy/perinatal loss, are discussed with a view to exploring the connections between the subject's attachment status and her state of resolution around a prior pregnancy/perinatal loss.

Subject 3, "Molly," had an unresolved-secure state of mind with respect to attachment, and was resolved in terms of her prior pregnancy/perinatal loss. Molly's baby was judged secure at 14 months.

Molly was 34 and in her last trimester of pregnancy when she took the AAI. She came from a large, Catholic family with 9 siblings. She thoughtfully described feeling loved and supported by her parents, though she also acknowledged her parents' difficulties around managing such a large family. Molly's AAI conveyed her experience of having a special, loving relationship with both her parents. In addition, she authentically expressed a sense of admiration and appreciation for the satisfying, cohesive family life her parents were able to build for her.

Molly did not paint a purely idyllic picture of her childhood. When asked about times she felt hurt or rejected by her parents, she was able to recall such events without either dismissing these feelings, or becoming flooded by them. Instead, she appeared to be realistically considering the difficult times and trying to understand them without imposing blame.

It was Molly's overall cogent and balanced tone that resulted in her classification as secure on the AAI. Her tone, however, shifted when she broached the topic of her father's death, which was, in a sense, tied up with her miscarriage. Molly made several dramatic life changes prior to her father's death. After getting divorced, Molly fell in love with a Jewish man and converted to Judaism. Then, in April, Molly became pregnant out of wedlock. She planned to marry in July. Molly's father died suddenly in May. Molly struggled over her sense of her father's reaction to these events,

> "I had gone through a divorce, um, I had converted to Judaism, I was marrying someone who was Jewish, and I was pregnant with a baby. He knew all this, and in April I called him to let him know I was pregnant with a baby. But they were very happy about it. And as a Catholic, he knew that my wanting to continue with the pregnancy and not have an abortion was much more desirable than, um, saying 'that's OK, Dad, I won't continue with the pregnancy' or anything like that. He wanted - he would want, even though it was terrible to have had it before -to get pregnant before I was married, he, he was very glad I thought it would be advisable to keep the pregnancy. I subsequently lost the baby, or the pregnancy but, um, I you know, at the time of his death all of that had just occurred, you know, and he'd gotten the news about my pregnancy and stuff. So, of course, in my mind, I'm thinking, 'God, he was so worried about all this stuff and having to go to the marriage, second marriage of a daughter, he doesn't even want to be going to a second marriage, let alone it being a Jewish ceremony you know, and plus she's pregnant - I'm sure that caused his death."

The above passage, and others like it throughout Molly's interview, illustrate her lack of resolution around her father's death. It appears that she regarded the confluence

of dramatic changes in her life culminating with her out of wedlock pregnancy as dealing a final blow to her father.

A month after her father's death, Molly had a miscarriage. Molly married her husband, as planned, in July and by September she was pregnant again. When Molly was given the Pregnancy Interview during her last trimester she discussed her feelings about her miscarriage. She was judged to have resolved this loss, evidencing just minor difficulties around resolution. Molly brought up her prior pregnancy loss considerably later than she did the death of her father, whose passing continued to preoccupy her. Molly began to speak of her miscarriage when asked when she first really believed there was a baby growing inside her. She noted her powerful reluctance to acknowledge the reality of her pregnancy,

> "Because of my first pregnancy when I had a miscarriage, I was wanting to deny it really...[I said to my husband] 'Maybe I'm not really pregnant' the whole time, even though he could even see my stomach getting bigger and he kept patting it and saying, 'you say you're not pregnant but you can see your stomach.'...I know I'm a full seven months now, I still am saying, um, I'm happy I can have the baby up to this point...I'm not really used to the idea that I'm really going to be able to have this baby, um, a healthy baby with the ability to be born."

Apart from her self protective tendency to doubt the realty of her pregnancy, Molly appeared intact around the miscarriage. She was aware of her hesitancy to fully acknowledge her pregnancy and curious about it - she, herself, made the link to her pregnancy loss. Molly discussed the miscarriage without becoming mired in it. There were clear

boundaries between her current pregnancy and the aborted pregnancy. Where her miscarriage was concerned, Molly appeared to be without irrational, guilty feelings of the type she expressed around the death of her father. Her overall capacity to discuss the miscarriage resonated with both the coherent tone of the rest of her Pregnancy Interview as well as with the cogency and clarity Molly exhibited on her AAI.

The question of how Molly was able to resolve her miscarriage has added piquancy in that the resolution of the miscarriage appeared to have occurred in the context of Molly's not having resolved the death of her father. It seems likely that a combination of factors led to the resolution. One such factor was the impact of Molly's overarching secure status on the AAI, which provided her with sufficient inner resources to recover from the miscarriage.

Interestingly, it seems possible that Molly's conflicts around the death of her father also contributed to her capacity to resolve the miscarriage. Molly's first pregnancy was suffused with ambivalence: it was unplanned, out of wedlock and ultimately tainted in her mind as contributing to her father's demise. The loss of that pregnancy may have carried with it a measure of relief. At the end of her Pregnancy Interview, Molly is asked about other aspects of her pregnancy that have been important to her but haven't been raised. Molly contrasted her two pregnancies and recalled that her current pregnancy was without "this unexplainable fear"

she felt throughout her first pregnancy. She considered the meaning of the fear she had experienced and surmised,

> "I was very fearful of, um, maybe entering in, or actually having the baby...I wasn't married yet and I was thinking do I really want to have this baby? I'm trying to decide whether I, do I go ahead and marry this person even. Was everything going the way it should be. Was I being clear headed about things. All of those things were entering into my fear except I couldn't articulate it and a lot of times it would just come out in , uh, explosions of mistrust about, uh, my fiance..., or who was I and did I deserve to be getting married again cause I had been divorced? Did I deserve to be having children?...This time I didn't feel like that. Um, I really didn't feel bad at all, so I was surprised. I thought that was hormones. So, um, if it was, it didn't happen this time."

Molly thoughtfully considered the anxiety provoking aspects of her first pregnancy. Though she did not mention her father's death, one may speculate that the confluence of these events may have led to a wish to end the pregnancy out of a belief that, indeed, she didn't "deserve" to have this baby. Perhaps the miscarriage was unconsciously welcomed as appropriate retribution for her transgressions.

Subject 4, "Ellie," was insecure (dismissive) on the AAI and unresolved on the Pregnancy Interview. Her baby was judged insecure at 14 months. When Ellie was given the AAI she was 32 and in her last trimester of pregnancy. Ellie painted a rather vague, impersonal but idealized vision of her relationship with her mother. She stated that she felt secure as a child because her mother would "just be there, like part of the home, without any questions." Underlying her idealization was a perception of her mother as rejecting and

unavailable. These affects were unacceptable to Ellie and, therefore, were not openly acknowledged, but they did emerge in her narrative. She recalled,

> "cutting my finger with a knife once and my father helping me, I can remember that my mother and father were getting ready to go out...and my mother was very keen to get out, but my father was very indulgent with me ...Where as my mother was sort of inclined not to pay it any attention and didn't realize how much I was bleeding. That is the scar on my finger, right there (laughs)."

Ellie expressed more consciously ambivalent feelings about her father, concerning his age and health,

> "...I guess he was thirteen years older than my mother and he, I think he looked old and I was often embarrassed in front of people at school, at my father's appearance, that he looked like an older man. I can remember someone asking me if he was my grandfather...He wasn't very healthy. I guess I had this sort of worry for his health feeling he was frail, rather than robust like most people's fathers seemed to be."

Overall, Ellie conveyed her experience of having been rather indulged as a child. She considered why her parents behaved the way they did toward her,

> "I know they wanted to have a girl child for a long time. They had a child that died, that was a girl that they called Ellie. She died when she was just a week old... So I think they felt that they'd had one taken away from them, they wanted to make another one. So, like I was this thing that they had been waiting for and they felt thrilled to have."

Ellie's father died when she was 17. She did not attend his funeral. She recalled her mother saying 'if I didn't feel like going I didn't have to go.' Ellie retrospectively wished someone had encouraged her to go to the funeral, but she also

recalled that she was "very afraid, very reluctant to cry in front of other people...I felt I couldn't handle that."

Ellie remembered feeling very sad, deprived and nervous following her father's death with respect to how she and her mother would manage without her father's income and his "actually being there to take care of us." But 10 months later Ellie met her husband, 17 years her senior,

> "and everything was wonderful...it's like my life is divided into two halves, separated by when my father died. And since I met my husband, everything has been wonderful. So, sort of as time passed, the feeling of the loss was diminished."

Ellie's history suggested the theme of replacing lost objects with new objects. Ellie's parents replaced their dead baby Ellie with a new Ellie. Ellie replaced her dead father with her new husband, even recreating the age difference that she found so disturbing between her own parents.

Ellie appeared to ward off painful affects by avoiding distressing situations and loss. These mechanisms worked fairly well for her as a child and in relationships. However, this strategy was not as successful with Ellie's two miscarriages. On the Pregnancy Interview's LRMPL scale, Ellie was just below the borderline between resolved and unresolved around her losses - towards unresolved. Her responses suggested that she was unsettled and slightly disorganized with respect to her miscarriages. Ellie initially noted her subdued mood around her current pregnancy and related it to being nervous because she had two miscarriages during the

prior year. As Ellie struggled with her concerns about her current pregnancy, the metaphor of the "vanishing baby" emerged. This notion came up around her idea that "something could suddenly take the baby away from you." And her sense that "a baby can be here one minute and gone the next."

Ellie's tentativeness about her pregnancy lasted throughout the three trimesters. She recalled her feelings about wearing maternity clothes,

> "I can remember in the fifth month buying a pair of pants with a maternity waist so that it was not very conspicuous. And it made me a little nervous I think. I think moving into wearing bigger clothes was kind of connected with my worrying about the baby vanishing and not turning out, the pregnancy not working out. I sort of felt like if I had, once I committed myself to looking pregnant, that it would be worse if I lost it, because then everyone would have seen - that I was setting myself up. And would know that it was that much more disappointing if I lost it."

Ellie's reluctance to acknowledge her pregnancy by wearing maternity clothes was related to her concerns about the potential for others to recognize her pain. This resonates with her distress about the possibility of being seen crying at her father's funeral. Acknowledging suffering and coping with such affects felt unacceptable to Ellie.

Ellie appeared to have been largely well served by internalizing a strategy for avoiding painful feelings that relied on circumventing situations where pain is acknowledged and replacing lost objects with new ones. This method, however, may have failed her after she had not one, but two miscarriages. The second miscarriage left her without the

ability to replace the loss of the first. It would seem that Ellie's manner of coping left her without the resources to resolve the miscarriages, leaving her somewhat unresolved, shaken and slightly disoriented during her subsequent pregnancy.

Subject 6, "Heather," was 35 and in her last trimester of pregnancy when she took the AAI on which she was both insecure (preoccupied) and unresolved. On the Pregnancy Interview Heather was the most severely unresolved in terms of pregnancy/perinatal loss of the subjects. Her infant was secure at 14 months. As Heather described her upbringing, it became clear that her unresolved score on the AAI was for abuse, rather than loss. In a sense, however, Heather did, indeed, "lose" the experience of a good parent. Heather's biological father left his family which included the subject, her younger brother and her mother, when Heather was 3. Heather, her brother and mother went to live with her maternal grandparents till the mother remarried when Heather was 5. When Heather turned 14 her mother divorced her stepfather and Heather and her brother were sent to live with her grandparents for three years because neither parent "wanted them." Heather recalled an early life with an inappropriate, abusive and intrusive mother. Heather vividly remembered her mother insisting on measuring her adolescent body to see "how my measurements were coming along." She recalled her mother's "hysterical rages", where Heather,

terrified, would try to run away as her mother grabbed handfuls of Heather's hair. Heather spoke of singing in the church choir, dressed in choir robes, and being humiliated as her mother forced her to ride on the back of her motorcycle in her church garb.

Heather viewed her relationship with her stepfather as less conflictual. However, she did relate memories of intrusive behavior, though she did not identify the experience as disturbing in the same way as she did the experiences with her mother. Heather recalled her stepfather,

> "coming into the bathroom when I was sitting on the toilet when I was a little kid, squeezing my small roll that was here and saying something, or whatever, teasing me about it. And I feeling very self conscious. He was just trying to make a joke, to tickle me or something."

When Heather was 16 she met her biological father, and this, too, turned out to be a devastating experience. Her father,

> "treated me like I was some woman he just met... he tried to have intercourse with me...there was a certain amount of molestation that went on...I was able to prevent the sexual intercourse part, which I was happy about."

Overall, the adults in Heather's life were viewed as frightening and unpredictable figures who had to be placated in order for Heather to remain safe. Among the ways Heather sought to understand her difficult upbringing was by embracing alternative religions that emphasize reincarnation. This allowed her to diminish the impact of painful early experiences with the belief that,

> "We have a personality that is there anyway which makes us better able or less able to cope with whatever...I don't know if what I am as a person is really the result of experiences or a combination of factors at play...There's a lot more going on than meets the eye."

This way of thinking helped Heather to believe that there were other influences on her besides her troubled parents. Heather also had a belief in "fate" or destiny. This, too, would seem to have served the purpose of giving an explanation for the difficulties she endured and alleviating the guilt she would have been likely to feel as a victim of parental abuse.

Heather's pregnancy occurred around a year and a half after a miscarriage. It was a planned pregnancy that she very much wanted. She reported that she felt anxious in the beginning because she was bleeding and feared she was having another miscarriage. She went on to state that she felt that she was the reincarnation of a women from 15th or 16th century England who lost her child when the child was 10. She added, "For some reason I still feel guilty about it even though it wasn't my fault." It is difficult to know whether Heather is referring to guilt about the lost 16th century child, or her miscarriage. Her way of thinking seems to merge and disguise guilty feelings and then provide an other-worldly explanation for these painful affects.

The themes of guilt and anxiety about somehow intruding upon the fetus are prominent throughout the interview. Heather had just returned from a hiking trip when she discovered that she was pregnant. She revealed that her first thought was,

> "I was worried because I had a whole bunch of coffee up there and I thought that I did something terrible because I didn't know. I was worried about how I was behaving and how I was interfering with the baby."

Heather fantasized about trying to "psychically connect" with the fetus, but decided not to attempt this because,

> "I've felt like I wanted to leave the baby sort of alone in a way...I feel like the womb must be wonderful and why disturb the baby's piece of mind. In a certain way I don't want to deal with it right now. I feel like when the baby pops out the baby'll be ready to listen. A certain way, like not to interfere."

Heather believed that she had the power to damage the baby by intruding in both mundane and magical ways.

While it is never explicitly stated, the material suggested that Heather felt that she destroyed the miscarried pregnancy; this belief appeared to be behind some of her preoccupations during her current pregnancy. Heather may have developed faith in the mystical in order to cope with and find a way to understand the betrayal and abuse from those who were supposed to protect her. However, it seems that she was not able to escape from powerful feelings of inner-badness and identifications with a mother who was at best intrusive and at worst abusive. It seemed that Heather felt responsible for her miscarriage and terribly afraid of her potential to be damaging and interfering as her mother was. The combination of being a victim of parental abuse and suffering a pregnancy loss, in her case, led to difficulties with resolution related

to her feelings of guilt and fears of her potential to do harm.

It is striking that with Heather's troubled history and current level of odd thought processes, her infant was judged to be secure. Research has suggested that maternal use of regression in the service of the ego, or primary process integration, is associated with infant security on the Strange Situation (Frank, Tuber, Slade, Garrod, 1994). Perhaps Heather's strategy for managing her distress served her infant well, at least in short run. Another possibility is that the baby's father was able to provide a sufficiently secure base for his infant such that Heather did not disrupt the child's security status.

CHAPTER 4

DISCUSSION

The aim of this study was to explore the ramifications of pregnancy/perinatal loss on several types of relationships. The relationship between a history of pregnancy/perinatal loss and the capacity to cope with other types of bereavement was considered. Subsequent pregnancy was examined in terms of how the prospective mother's attachment to her fetus is effected by pregnancy/perinatal loss. The impact of pregnancy/perinatal loss on the attachment relationship between mother and child was explored. Lastly, the differences in psychological symptomatology during subsequent pregnancy between those with a history of pregnancy/perinatal loss and those without were examined.

The first hypothesis predicted that women with a history of pregnancy/perinatal loss would fall into the unresolved category on the AAI in significantly higher numbers than those without such a history. The findings confirmed this hypothesis, implying a relationship between response to bereavement and pregnancy loss.

This finding can be interpreted as suggesting that the impact of a miscarriage colors the way prior bereavements are perceived, resulting in a higher number of "U"s on the AAI among those with a history of miscarriage. This interpretation is consistent with the concept of miscarriage as a tremendously powerful event such that it is mutative,

particularly during subsequent pregnancy. This viewpoint is buttressed by the literature on the psychological meaning of pregnancy. Psychoanalysts such as Benedek (1959) and Bibring (1961) viewed pregnancy as a developmental crisis of profound proportions, where primary object representations reemerge in a way that challenges fundamental defensive structure and calls for a psychological reorganization. The literature on the impact of pregnancy/perinatal loss takes as its premise the tumult of pregnancy. Authors such as Leon (1986) noted that a pregnancy loss leaves the mother with the crisis of pregnancy as well as the crisis of loss to resolve. Issues that touch the core of the individual - identifications, narcissism, sense of self and guilt - must be struggled with in coping with a pregnancy/perinatal loss. If one accepts the concept of the power of pregnancy loss, it seems possible that, especially during a subsequent pregnancy, a woman recalling bereavements might be inclined to perceive them as more distressing or unsettling than would a women without the experience of pregnancy loss.

The related, exploratory examination focussed on just the subjects who had a history of pregnancy/perinatal loss. It was anticipated that within this group there would be a tendency for those who were unresolved on the AAI to also be unresolved on the PI. In addition, it was expected that those who were insecure on the AAI would tend to be unresolved on the PI. The data appeared to support the second hypothesis regarding

security and resolution of pregnancy/perinatal loss. This was most compelling when the AAI unresolved subjects were broken down in terms of their secondary classifications around security/insecurity. All of the secure subjects were resolved in terms of prior pregnancy/perinatal loss. Concomitantly, all but one of the insecure subjects were unresolved on the PI. This suggests that overall state of mind with respect to attachment predicts more accurately how pregnancy loss will be dealt with than does the AAI Unresolved category by itself.

The results of the quantitative and exploratory analyses illuminate and amplify each other. The findings of the quantitative analysis suggest that having a history of pregnancy/perinatal loss and being pregnant effects the way one perceives and discusses bereavements. The exploratory analysis suggests that the capacity to resolve a pregnancy loss is influenced by one's security status as opposed to one's capacity to resolve other bereavements. These findings imply that when pregnant women with respective histories of pregnancy/perinatal losses are scored unresolved on the AAI, the unresolved score represents a state of mind that is mutable. A major factor in its emergence may be the confluence of events - past pregnancy losses and current pregnancy - which create a lens through which bereavements are temporarily perceived. This helps to explain why two subjects received unresolved classifications in otherwise secure transcripts, although the attachment literature suggests that the

unresolved category is associated with insecurity, specifically, the preoccupied category (Ainsworth & Eichberg, 1991; Main & Hesse, 1990). The way bereavements are discussed may represent circumscribed pockets of disorganization that speak to the subject's current internal struggles around death and renewal.

Viewing an unresolved score as transitory under these circumstances also helps explain the implications of the relevant exploratory analyses that suggest that one's security status and not one's state of mind with respect to past losses influence one's capacity to resolve pregnancy loss. Attachment literature maintains that security status is largely static - research has demonstrated its stability over time (Ainsworth, 1991; Sroufe, 1983; Sroufe, 1985). The unresolved category is newer and, consequently, less well studied. The stability of the unresolved classification has not been the subject of research thus far. The findings of this study suggest that one may appear unresolved when in the midst of the unique circumstances outlined in this study. It follows that the state of "unresolvedness" does not represent a fundamental internal working model. Security status, however, is a central organizing feature of the self and, therefore, should play a significant role in determining how pregnancy/perinatal loss are dealt with.

When the specific cases themselves were considered it appeared that different types of past traumas were associated

with varied levels of resolution around pregnancy/perinatal loss. The small size of the sample makes inferences speculative, but examination of the individual subjects suggested that a history of childhood physical and/or sexual abuse may be linked to the subject's expressing the most pathological responses to past pregnancy/perinatal loss during subsequent pregnancy. The two subjects who were abused as children had the most disordered responses to their respective pregnancy/perinatal loss. The remaining three unresolved subjects received the U classification for a loss through death and scored in the more adaptive range for resolution of pregnancy/perinatal loss.

These findings are generally consistent with trauma theory (Herman, 1992). Trauma theory does not specifically examine pregnancy in trauma victims, however, it does address the long term, pervasive impact of abuse. Attachment researchers, as well, have recognized that highly troubled attachment relationships exist where the parent has been a victim of abuse (Benoit, Zeanah, & Barton, 1989; Main & Hesse, 1990; Ainsworth & Eichberg, 1991).

As noted previously, the U category is a relatively recent one and therefore the research around it is rather sparse. At this time, a subject may be unresolved on the AAI for either a traumatic reaction around a death or for a trauma such as physical/sexual abuse. These two different types of traumas are generally not distinguished - the same U is coded

for either trauma. Attachment research conducted to this point has suggested that the outcome in terms of the offspring's attachment organization is essentially the same for either trauma - a disorganized infant attachment (Main & Hesse, 1990; Ainsworth & Eichberg, 1991). This study's findings around traumatic abuse were unexpected - initially the impact of abuse was not considered an aspect of this research. Nonetheless, though highly speculative, these cases suggest that perhaps the nature of a trauma is as important as secure/insecure status in predicting the response to pregnancy/perinatal loss, particularly when the trauma involves parental abuse. It seems probable that the two are, in fact, intertwined. The experience of traumatic abuse in childhood would be likely to significantly impact upon security status. Bowlby (1980) spoke to this in his discussion of the childhood factors that give way to disordered mourning in adulthood. He suggested that even subtle forms of parental abuse (i.e. threats of abandonment and suicide) were likely to produce for the child victim a very troubled and insecure adulthood as well as disordered mourning when the parent died. This implies that an "unresolved" classification that stems from parental abuse may speak more to the way personality is organized than does an "unresolved" classification that relates to bereavement - under the circumstances described in this study. It would seem logical that in the realm of pregnancy and pregnancy loss a prospective mother's experience

with traumatic parental abuse would dramatically color how she copes with all manifestations of impending motherhood - including its loss.

The second hypothesis predicted differences in the way pregnant women represented their respective fetus' on the Pregnancy Interview on the basis of pregnancy/perinatal loss history. Women with a pregnancy/perinatal loss history were expected to demonstrate a flattened affective tone on the affective tone scale and attenuated articulation of fantasy on the elaboration scale suggesting diminished attachment. No differences were found on affective tone between the two groups. Scores on elaboration, however, were found to be approaching significance in the direction predicted.

One way to understand these findings is to consider that this study's subjects were asked about their respective attachment to the fetus in the last trimester of pregnancy - at a time where the fetus stands a good chance of survival outside the uterus - well past the fragile first trimester when most miscarriages occur (and when 9 out of 10 of the subjects experienced their respective pregnancy losses). The prenatal attachment literature suggested that maternal-fetal attachment increases with gestational age, with the advent of quickening during the second trimester seen as a major milestone in the attachment relationship. Perhaps gestational age played a role in these findings. It is possible that significant differences would have been found were the

subjects interviewed at earlier points in their respective pregnancies.

It may be that the prospective mother's affective experience of the fetus is particularly effected by gestational age - perhaps this is especially true for women who have suffered pregnancy/perinatal loss. Their experience with miscarriage may leave them with powerful feelings about the lost pregnancy - affects that are transferred to the new fetus. On the other hand, the freedom to fantasize about the fetus may be the most difficult process for these women to engage in. Imagining a "real" baby after a miscarriage may continue to feel too dangerous. Alternatively, having an affective experience of an active, growing, "inside baby" may become unavoidable.

Another interpretation is that affective tone does not, after all, address the concept of prenatal attachment in the context of the sequelae of pregnancy/perinatal loss. Even without the issue of pregnancy/perinatal loss, the prenatal attachment literature is filled with contradiction and controversy around defining the elements of prenatal attachment - it is an elusive concept to operationalize. Generally, the prospective mother's affective experience of her fetus was considered an aspect of prenatal attachment within this body of literature (Leifer, 1980; Cranley, 1981a &b; Curry, 1987; Muller, 1993). That literature, however, did not assess women's experience of their respective fetus'

subsequent to pregnancy/perinatal loss. Phipps (1985) was the only investigator who examined prenatal attachment subsequent to pregnancy/perinatal loss. His study did not explicitly consider the affective response to the fetus. The role of affect remains unclear with respect to prenatal attachment subsequent to pregnancy/perinatal loss.

The third hypothesis predicted that offspring of primiparas with a pregnancy/perinatal loss history will be more insecure and more disorganized as measured by the Strange Situation. The findings partially confirmed this hypothesis, though with some caveats. It was found that the children of women with a pregnancy/perinatal loss history were significantly higher on the resistant dimension of the insecure category. Because of the small sample, however, the meaning that can be inferred from this finding is limited - only two offspring comprised the resistant category. Nonetheless, this particular finding is consistent with the literature on attachment theory and the Strange Situation. In the present study, infants of mothers with pregnancy/perinatal loss histories were expected to be insecure because it was anticipated that their respective mothers would be continuing to struggle with their own loss experiences. Attachment researchers (Benoit, Zeanah, Barton, 1989; Main, Demoss & Hesse, 1989; Main & Hesse, 1990, Ainsworth & Eichberg, 1991, Adam, 1993) have found that lack of resolution in mourning - the U category - was associated with a preoccupied state of

mind in adults and, correspondingly, resistant and disorganized classifications for the offspring of these adults.

The second aspect of the hypothesis, which predicted a greater number of disorganized infants, was not confirmed. One way to understand this is to consider the implications of the disorganized category. The D pattern is associated with the most severe form of disordered attachment. It is thought to result from a maternal history of trauma. This finding suggests that a maternal history of pregnancy loss was not so disruptive as to result in the disorganized classification for the respective offspring. In addition, this was an especially small experimental group, 2 subjects were missing from the analysis because their Strange Situations were not available. This may have played a role in limiting the significance of the results

At this point, it is interesting to consider the related exploratory analysis (2c) which anticipated that there would be a tendency for offspring of mothers who are unresolved on the Pregnancy Interview to be insecure and disorganized. The sample was too small to be examined empirically, but the data did appear consistent with what was anticipated. Seventy-five percent of the offspring of resolved subjects were themselves secure. Similarly, 75% of offspring whose mothers were unresolved regarding a pregnancy/perinatal loss were themselves insecure.

It was noted that the percent of matches between mother and infant on the basis of PI resolution and the Strange Situation were consistent with Main's (1989) finding that there was a predicted match of 75% between the mother's AAI security status classification and the Strange Situation security classification of the infant. No information was available regarding the percent of matches for the U and D categories. In the present study, when matching was attempted on the basis of AAI D/F/E/U categories with the respective Strange Situation A/B/C/D classifications, matches were only at 12%. Matches on the basis of AAI and Strange Situation secure/insecure classifications were at 50%. and went up to 75% when the unresolved category on the AAI was matched in terms of its secondary security status. The smallness of the sample may have played a role in reducing the percent of matches between the specific AAI and Strange Situation categories. As was true with the comparison of AAI insecure/secure categories and PI unresolved/resolved categories, there was considerable agreement between AAI insecure/secure classifications and PI unresolved/resolved classifications in terms of the Strange Situation. The lack of concordance with the AAI unresolved category and the Strange Situation D category compared to the much higher concordance between the PI unresolved category and Strange Situation secure/insecure categories echoes the findings discussed earlier regarding the transitional meaning of the unresolved

classification on the AAI within this population. The findings suggest that infant security status tends to correlate more with the unresolved category on the PI than it does with the specific D/F/E/U categories on the AAI.

The final quantitative hypothesis predicted differences between the pregnancy/perinatal loss group and the group without such a loss history in terms of psychological symptomatology. Specifically, it was predicted that women with a pregnancy/perinatal loss history would score higher on the Brief Symptom Index's (BSI) scales for somatization, anxiety and depression. The hypothesis was confirmed on the symptom of somatization, but not on anxiety or depression. There was also an unexpected finding: the loss group was significantly higher on positive symptom total (PST), a compilation of all positive (non zero) symptom responses. In addition, on the symptom of somatization, the pregnancy/perinatal loss group scored slightly higher than the BSI mean score for psychiatric in-patients.

One way of understanding these findings is that at this point in the pregnancy - the final trimester - the women with a history of pregnancy/perinatal loss were manifestly expressing their respective anxieties with bodily symptoms. That this group was higher on somatization than were psychiatric inpatients suggests that they were, indeed, discharging a great deal of distress around their respective perceptions of bodily dysfunction. To a lesser extent, these

subjects may have been expressing their distress with a tendency to report a multitude of symptoms, resulting in the high PST score.

The somatization dimension of the BSI focusses on physical complaints that are associated with anxiety (Derogotis, 1982). In a sense, it is complementary to the anxiety dimension, which focusses on the cognitive components of anxiety. It is possible that women with a pregnancy/perinatal loss history are inordinately focussed on their bodies and have access to visceral manifestations of anxiety as opposed to cognitive experiences of anxiety.

Another possibility is that, as with the issue of affect around the fetus in late pregnancy, during the final months of pregnancy cognitive anxiety has diminished but somatic anxiety continues - or even grows as labor and delivery approaches. Perhaps, during this phase, focussing on somatic concerns feels more acceptable or less deniable than overtly expressing feelings of fear and nervousness.

Limitations of the Present Study and Need for Further Research

A limitation of this study was the small size of the pregnancy/perinatal loss group. This was particularly problematic when the members of the group were compared to each other in terms of their resolution of pregnancy loss. It was necessary to analyze differences in a qualitative rather than empirical fashion. The differences found can only be regarded as suggestive of group differences. It would be

useful to replicate this study with larger samples in order to assess the significance of within group differences and to better understand the results.

It would be particularly interesting to explore with a larger sample how different types of trauma relate to the capacity to resolve pregnancy/perinatal loss as well as to the subsequent maternal-infant relationship. In relation to this it bears mentioning that, even with all of its significant limitations, one advantage of this sample was that the pregnancy/perinatal loss group occurred naturally. In order to establish a larger such group it would probably be necessary to specifically recruit women with a history of pregnancy/perinatal loss which would raise other issues of sample bias.

Another limitation of this study was the timing of the measures, which were administered at the end of pregnancy. It would be useful to know how affect, fantasy and psychological symptomatology change over the course of pregnancy. A study that repeated measures over the 3 trimesters would be one way to consider the role of that gestational age plays in the experience of the fetus and of pregnancy for women with a history of pregnancy/perinatal loss.

A related timing limitation involves the findings concerning the significantly greater number of subjects with a pregnancy/perinatal loss history who where unresolved on the AAI. Fully testing the interpretation that a history of

pregnancy loss influences the way bereavements are perceived during subsequent pregnancy would involve administering the AAI to pregnant women prior to miscarriage and again after a miscarriage to examine whether the miscarriage event changes AAI status on the resolution category. Clearly this would be problematic to do, yet it would provide very useful information.

Concluding Remarks

This research raises questions about the genesis of the unresolved classification during pregnancy subsequent to pregnancy/perinatal. In attachment research the unresolved classification is thought to be a manifestation of disordered mourning that is generally a product of a preoccupied state of mind with respect to attachment relationships (Main & Hesse, 1989). In the present study it appeared that rather than emanating from security status, the U category emerged in pregnant women more often when there was a history of pregnancy/perinatal loss.

Interestingly, while a history of pregnancy/perinatal loss predicted the response to bereavement on the AAI, security status tended to predict the response to pregnancy/perinatal loss on the PI. This was less the case when the unresolved classification was the result of traumatic abuse as opposed to bereavement. Under circumstances of abuse security status and response to pregnancy/perinatal loss were consistent.

Ultimately, this implies that the combination of being pregnant and having a history of pregnancy/perinatal loss colors the way bereavements are both perceived and discussed in a way that suggests lack of resolution, regardless of security status. This implies that context, rather than static internal structures, plays a major role in determining one's capacity to resolve a bereavement. The question remains as to why this should be true of the loss of a loved one, but not pregnancy/perinatal loss. Perhaps even those subjects who are basically secure on the AAI tend to displace distressing feelings about the pregnancy/perinatal loss onto other bereavements as a unconscious distancing strategy. This may serve to protect the pregnant women from overwhelming affects too close to the current pregnancy. This would be consistent with the finding that pregnant women with a pregnancy/perinatal loss history are quite high on the BSI symptom of somatization, but not on the more cognitively involved symptom of anxiety. This, too, may be a protective distancing measure - mental awareness of anxiety may be warded off, but the visceral experience of anxiety is too palpable to ignore. Alternatively, for those subjects with a history of parental abuse, the U classification may represent a more stable, overarching feature of their attachment organization. Ultimately it would seem that, at least in assessing subjects under the conditions of the present study, distinguishing the

factors behind the unresolved classification is essential. Once again,
the questions raised by these issues would be well served by further research.

APPENDIX A

THE PREGNANCY PROJECT: PREGNANCY INTERVIEW

Arietta Slade

Laurie Grunebaum

Linda Huganir

Mary Reeves

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

March, 1987

Revised October, 1989

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 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 !

APPENDIX B

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PREGNANCY INTERVIEW

CODING SYSTEM

Arietta Slade
Marjorie Dermer
Leslie Gibson
Francoise Graf
Laurie Grunebaum
Mary Reeves
Allison Sitrin

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

Arietta Slade, Ph.D., The Psychological Center, The City College of New York,
NAC 8/130, 138th Street and Convent Avenue, New York, NY 10031

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 2 codes that comprise the Parental Representation section: Confidence/Limitations & Acceptance of Baby and Self Needs. 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 additional 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._____	(1-7)
		2._____	
		3_____	
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 disappointment 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 decidedly 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 successfully 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 representation, 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 decidedly 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 maneuvers 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 successfully 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 pleasurable, 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 independence 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 a lot 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 fairly 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.

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 asked to 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 reflecting 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 monochromatically 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 feeling 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 striking,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 her experience it often does not agree with previous statements.

The subject may express being very happy about her pregnancy but additional comments sharply 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 depleting, 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 breast feeding 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 stumbles, 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 believable. 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 <u>establish</u> (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.

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