In this paper the impact of maternal depression on infant behavior is evaluated through a review of current research. The following topics are discussed: (1) types of maternal depression; (2) impact of maternal depression on infant behavior; (3) attachment behaviors of infants with depressed mothers; and (4) the older child of a depressed mother, including toddler, preschool, school-aged, and adolescent children. Following this, comments and integration of research findings are briefly given, and a final section provides a detailed look at theoretical considerations. In this section, several variables relevant to depression are examined, particularly that of the mother's psychological health; a presentation of the healthier "depressed" mother and the more disturbed "depleted" mother offers a perspective based on the concepts of Melanie Klein. An integration of research and theory is then introduced using the analytic formulations of D. W. Winnicott, examining the sequelae of parenting by a depressed mother who may be inadequate, or not "good enough." Overall, it is found that research on the effect of maternal depression on infant behaviors presents a consistent portrayal of a mother who lacks the ability to appropriately respond to her infant. The review concludes with the hope that answers to questions about the effect of maternal depression on infant emotional development will be found through further research and clinical inquiry which will provide a deeper understanding of the enduring impact of certain maternal depressions on infants. (Contains 69 references.)
THE IMPACT OF MATERNAL DEPRESSION ON THE INFANT:
IMPLICATIONS FOR OBJECT RELATIONS DEVELOPMENT
AND SUBSEQUENT CLINICAL SEQUELAE

by

Barbara Joanne Francis
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AND SUBSEQUENT CLINICAL SEQUELAE

A Doctoral Research Paper
Presented to
the Faculty of Rosemead School of Psychology
Biola University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Psychology

by
Barbara Joanne Francis
November, 1992
ABSTRACT

THE IMPACT OF MATERNAL DEPRESSION ON THE INFANT:
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The detrimental impact of maternal depression on infant behavior is evaluated through a review of current research. Studies assessing attachment styles augment the contention that depressed mothers may be inadequate caretakers. Several variables relevant to depression are examined, particularly that of the mother's psychological health; a presentation of the healthier "depressed" mother and the more disturbed "depleted" mother offers a perspective based on the concepts of Melanie Klein. An integration of research and theory is then introduced using the analytic formulations of D. W. Winnicott, examining the sequelae of parenting by a depressed mother who may be inadequate, or not "good-enough."
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ACKNOWLEDGMENTS

When considering both the academic and emotional aspects of developing this paper, certain people's names come to mind as indispensable co-contributors. First and foremost I think of my daughters, Andrea, Tricia and Jeannie, who make my life an exciting and meaningful adventure. I thank them for simply being who they are, and for putting up with a student-mom for so many years; and, no girls, you don't have to start calling me "Dr. Mom!"

Secondly, my deepest gratitude goes to Dr. Jim Guy, whose understanding, compassion, and encouragement provided a touchstone throughout my entire academic career. I'd also like to express my sincere appreciation to both Dr. Cherry Steinmeier and Dr. Reginald Veurink; this paper could not have been written without their interest, guidance, and expertise. Finally, I wish to thank Bob, my husband and best friend. His unwavering kindness, patience and support through our many years together has provided the relational underpinnings for any growth I've achieved scholastically, professionally or psychologically.
DEDICATION

To Jan,
my good–enough ima.
For believing I'm worth all that you give.
THE IMPACT OF MATERNAL DEPRESSION ON THE INFANT: IMPLICATIONS FOR OBJECT RELATIONS DEVELOPMENT AND SUBSEQUENT CLINICAL SEQUELAE

Introduction

Perhaps the most profound and sacred love song shared among human beings is that which is sung between mother and child. Down through the ages artists and poets alike have immortalized this almost-mystical relationship as being patently unblemished, passionately joyful. Maternal instinct, the term glibly used to label the inherent proficiency of the mother, supposedly is sufficient to impart to the infant all that is needed for the happy, contented baby to develop into a well-balanced, healthy adult.

Unfortunately, the idealized portrait of this earliest-of-relationships is sometimes a misconception. For while the overwhelming majority of mothers are able to provide the love and security needed for normal emotional development, some mothers, because of their own pain and suffering, are not able to impart to their offspring the relationship needed for healthy psychological growth.

Many obstacles can impede the baby getting basic needs met, such as the absence of the mothering figure, physical
illness of the caretaker or infant, or mental illness in the mother. One category of particular significance under the rubric of emotional disturbances is that of maternal depression.

Within the past decade the prevalence of clinical depression has risen astronomically in this country. With the increased number of individuals affected and seeking treatment, has come a plethora of research attempting to redefine diagnostic and prognostic criteria, examine etiologies, and develop effective treatments for those who suffer this pervasive malady.

Among the groups increasingly being examined is that of women with children, in general, and those with infants, in particular. This is due, in part, to the recognition that women are almost twice as likely to develop serious depressive disorders as men (Nolen-Hoeksema, 1987), with women between the ages of 25-44 being at greatest risk (Myers et al., 1984). Until fairly recently, research on maternal depression focused upon variables relating to the mothers' behaviors, rather than on the effect on the conduct or development of the child. But lately a body of literature has emerged revealing that the effects of maternal depression not only modify infant behavior, it impinges upon the baby's relational capabilities as well.

From a symbolic perspective, the importance of the mother-child relationship has been recognized throughout
history, but only with the nascent beginnings of psychoanalytic theory and Sigmund Freud did an awareness of the psychological and developmental significance of this relationship come to light. Telescoping back even further than the school or toddler years postulated by Freud, more recent theorists in the object relations school of psychodynamic theory have looked at the impact of the maternal figure on her infant from the earliest weeks and months of life.

Research paralleling this theoretical construct attempting to examine the effects of maternal depression on mother-infant interactions has found consistent and consonant results: Parenting behaviors exhibited by a depressed caretaker are less than optimal. The infants of depressed mothers tend to engage in adverse, behaviorally measurable responses. Findings by Ainsworth, Blehar, Waters, and Wall (1978) reveal that mothers with characteristics corresponding to depressed mothers have insecurely attached children at 12 months of age, indicating prior deficits in bonding.

While this research is clearly significant, it begs a question that goes far deeper than the behavioral manifestations measured through empirical data: What is the long-term emotional impact of early parenting by a depressed mother? Accepting the possibility that interactions with a depressed caretaker may, in fact,
impact an infant's emotional progress creates obvious implications for the clinician who is continually seeking to understand adult psychopathology. This is particularly salient when considering a possible correlation between early object relations development and adult dysfunction. D. W. Winnicott, pediatrician and psychoanalyst in the British School of object relations, had much to say about the relationship of the mother and the infant. Winnicott coined the term "good enough" mothering to describe that type of mother-infant interaction which provides the baby with what is needed to develop into a healthy, alive adult; he focused his work as an analyst on those individuals who did not receive that "good enough" parenting.

This paper will attempt to evaluate the research on the effects of maternal depression on infants, and to integrate those findings with the theoretical constructs of Dr. Winnicott. Since the term "depression" is somewhat nebulous, clearer definition will be provided through a discussion of the types of the disorder. In addition, an analytic perspective on depression, developed from the work of Melanie Klein, will offer further elaboration on the relationship between the depressed mother and her infant.

It is hoped that empirical research findings synthesized with theoretical data will provide the framework necessary for developing a clinical portrait of
those adult individuals, once infants, whose early object relations included a depressed mother.

Types of Maternal Depression

When considering the potential effects of maternal depression on an infant, several variables must be evaluated. For example, is the depression acute or chronic? Or, what factors involving severity of depression are salient? To answer these questions, there first must be an understanding of what is meant by the term "maternal depression."

In general, there are three major classifications of depression relevant to the study of the mother-infant dyad: Postpartum depression; major depression; and dysthymia. While the latter two are officially categorized in the Diagnostic and Statistical Manual of Mental Disorders--Third Edition - Revised (American Psychiatric Association, 1987), the former provides the richest source of research data for interpretation. Postpartum depression occurs after the birth of a child, is typically short-lived, and varies in intensity. Typically, major depression encompasses more the severe depressive reactions, while dysthymia connotes a chronic, but less severe symptomatology; these two categories may include, but are not limited to postpartum syndromes.
In research, depression is often divided into "mild, moderate, and severe" categories to accommodate assessment instruments; unfortunately, this prevents a critical evaluation of attitudes and behaviors commensurate with the different types of depression. Furthermore, although depression is typically assessed empirically using DSM III-R behavioral and phenomenological criteria, doing so exclusively disallows an understanding of critical dynamic factors necessary for gaining insight into the relational tenor of this paper. Because of these considerations, criterion consistent with a research model will be utilized in assessing the studies presented, while later a theoretical interpretation will be offered to enrich the dynamic understanding of the depressed mother and her infant.

**Dysthymia and Major Depression**

Because of the vast body of literature on general depression, and the symptomatic similarities between postpartum and other depressions, this section presents a review of the current research limited to findings related to depression occurring postnatally. Typically, the findings are applicable to the diagnoses of dysthymia or major depression, with variance contingent on severity and length of the disorder.
Postpartum Depression

Postpartum depression is a transitory condition that emerges as a function of childbirth. Three specific syndromes exist within this general classification:

Maternity blues is a transient vacillation in mood often lasting 24 to 48 hours and is characterized by tearfulness, tension, anger and irritability (Hopkins, Marcus, & Campbell, 1984). Anywhere from 50% to 80% of new mothers experience this phenomenon (Pitt, 1973; Robin, 1962).

A far more rare condition is that of postpartum psychosis, which mimics nonpeurperal psychosis and affects only .01% to .02% of new mothers (Herzog & Detre, 1976).

Neurotic postpartum depression parallels, in general, the behaviors of maternity blues, but with a longer course of illness; dysphoria is present, sleep patterns are altered, and feelings of guilt, inadequacy, irritability and anxiety prevail (Cutrona, 1982). The course of these symptoms is typically six to eight weeks, but can last up to one year (Pitt, 1968). A number of epidemiological issues have been researched, but have produced only mixed results and little clarifying data. For example, most researchers have not found evidence for an age variable among postpartum depressives (Hopkins et al., 1984). Marital status research is equivocal, which is probably due to the fact that most research is conducted with married
women. Findings, however, do indicate that prior psychiatric disturbance is related to postpartum depression. Although parity does not seem to impact the probability of experiencing postpartum depression, there is a high probability of reoccurrence following an initial episode of the disorder (Melges, 1968).

The most salient finding in the empirical data is that surrounding the implications of social support. Most studies have found a significant correlation between marital adjustment and postpartum/maternal depression (Cutrona, 1982; Dimitrovsky, Perez-Hirshberg, & Itskowitz, 1987; Field et al., 1985; Fleming, Flett, Ruble, & Shaul, 1988; Livingood, Daen, & Smith, 1983). Several studies have underscored the importance of parental involvement by the spouse, with lack of involvement emerging as a consistent component in feelings of maternal depression (Donovan & Leavitt, 1989; Fletcher & Rassaby, 1980; Gordon, Kapostins, & Gordon, 1965; Paykel et al., 1985). It also appears that relations with parents, physical proximity of family, and social support by those outside the family all play significant roles in determining the course of postpartum depression; no doubt due to the emotional and pragmatic assistance these support networks provide.

One contradictory finding by Hopkins, Campbell, and Marcus (1987) discounts the impact of social support on depression; the researchers conclude, however, that these
results are probably related to the homogeneous sample used. Etiological hypotheses regarding postpartum depression differ according to theoretical understandings.

Psychoanalytic theories, either involving anxiety models or introjected hostility, have had mixed findings in the research (Cutrona, 1982). A psychodynamic formulation based on the reemergence of earlier conflicts related to an inadequate maternal figure (Karacan & Williams, 1970), or conflict regarding the maternal role (Klatskin & Eron, 1970), prove to be primarily clinical in nature with empirical support lacking.

Cognitive-behavioral models, looking at such etiological variables as insufficient self-reward, excessive self-punishment, dysfunctional attribution styles and social skills deficits (Lewinsohn, 1974) have promising, but inconclusive research results (Hopkins et al., 1984).

One final palpable variable is that of the role of biochemical factors due to the birth process itself; however, current research reveals no measurable difference in hormone levels between those women who suffer from postpartum depression and those who do not (Cutrona, 1982).
Impact of Maternal Depression on Infant Behavior:
Research Findings

The body of literature that has recently emerged offers a fairly cohesive exploration of the depressed mother-infant dyad. The research seems to fall into three distinct, albeit closely related, categories: Expressiveness/Interaction; Caretaking/Affection of mother; and Self-efficacy of mother.

Expressiveness/Interaction

Expressiveness and interaction relates to the mother's overall intensity of responsiveness toward her infant and her ability to sense and answer the infant's cues in an appropriate fashion. One aspect of this rubric is that of contingency. Brazelton and Cramer (1990, pp. 107-111) define contingency as a "pattern of appropriate responses to a partner's signals, needs, and emotional communications" as manifested in expressions of availability. In other words, is the child being responded to? Even minor forms of depression affect infants in this area. Perhaps the most well known experimental findings on this come from the "still-face experiment" (Tronick, Als, Adamson, Wise, & Brazelton, 1978). In this prototypical experiment, mothers were asked to maintain a "still-face," or masklike expression for a period of three minutes with their one- to four-month infants. The pattern elicited in
the infants was consistent throughout. They first attempted to avoid the need to engage Mother; this was followed by attempts to "turn off" the environment completely. Finally, the infant attempted to find way to self-sooth.

In a related experiment Cohn and Tronick (1983) investigated the response of 3-month-old infants to simulated maternal depression. Mothers of 3-month-old infants were instructed to interact with either normal and/or depressed face-to-face exchanges with their babies. The "depressed" behavior included slowed speech, reduced facial expression and only limited body movement and touch. The researchers found markedly different behavior on the part of the infant based on the maternal affect.

Depressed condition infants cycled through the negative "wary, protest and look away behaviors" far more than the control group, as well as engaged less in the positive "monitor, brief positive and play" behaviors. Additionally, these adverse patterns continued briefly after the "depressed" mothers switched to normal behaviors. It appears, then, that infants as young as three months are able to detect the affective quality of the mother's responses and adjust their (affective) responses accordingly. Equally important is the preliminary data from the laboratory of Field, Healy, Goldstein, and Guthertz (1990) indicating that infants who spend the first
six months of their lives with a depressed mother develop a
depressed style of interacting. When Mother's depression
dissipates by this time, infants rebound from earlier
depressive behaviors and are more "normal" in their
behavior states. An interesting proposal by Tronick, Als,
Adamson, Wise, and Brazelton (1978) asserts that babies who
manifest depressive symptoms are not actually depressed;
they are rather demonstrating their sense of impotence
brought about by the mother's lack of responsiveness.

Further support for a depressive interactive style was
shown in a study by Field that set out to determine if
"depressed" behavior (e.g., less positive affect and lower
activity level) of 3- to 6-month-old infants seen during
interactions with their depressed mothers generalized to
nondepressed adults (Field et al., 1988). Infants were
monitored both behaviorally and, because there was a
supposition that stress could possibly affect their
behaviors, physiologically (through obtaining heart rates
and saliva samples for the assaying of cortisol levels).

Results show that positive interaction ratings were
significantly lower for depressed mothers and infants
across all behaviors evaluated. Depressed mothers rated
lowest on silence during infant gaze aversion, imitative
behaviors, contingent responsiveness, and summary ratings.
Their infants received the lowest ratings on head
orientation and gaze behavior when interacting with their
mothers. Findings were similar for infants with either their depressed mothers or with a stranger, although some scores actually improved with the stranger, indicating that interactions with strangers may be less stressful than those with a depressed mother. In addition, infants of depressed mothers (versus infants of nondepressed mothers) showed higher heart rates, lower vagal tone and higher cortisol values, indicating that these infants may experience chronic stress. A consistent finding in a study by Zekoski, O'Hara, and Wills (1987) showed that infants of depressed mothers experience more distress specifically when their mother is in a depressed mood state (rather than neutral or elated mood state).

It is evident from the empirical findings that the depressed mother often approaches her infant with a somewhat less-than-nurturing posture. Further support for this contention comes from a study observing interactional and affective variables between 2-month-old infants and their mothers (Cohn, Campbell, Matias, & Hopkins, 1990). Questions regarding negativity of the depressed mother toward the infant, negativity of the infant towards the mother, the degree to which the dyad matches each other's level of affective expression, and the interactional responsiveness between the mother and infant were postulated. Once again, results indicate that the depressed mothers shows increased negative affect toward
her baby. In this case, measured variables were "irritation" and "intrusiveness" during face-to-face interaction. Depressed mothers are also more punitive towards their 3-to-5 month old infants, and exhibit predominantly depressed or anxious behavior states along with flat or tense facial expressions (Field et al., 1985).

Even mildly depressed postpartum mothers show less gazing behaviors, less unconditional positive regard, and more shifting and discontinuity in rocking motions when holding their newborn infants (Livingood et al., 1983).

An extremely important component of the mother-baby relationship is that of synchrony. Through learning her baby's cues a mother can synchronize her own state of attention and inattention to her infant's states, thus teaching him of the reliability and responsiveness of his parent, and at this stage, the entire world. How depression in the mother might affect this critical variable was evaluated by Field et al. (1990) in terms of behavior-state matching and synchrony in mother-infant dyads. This study sought to evaluate the synchrony of the depressed mother-infant dyad under the hypothesis that the dyad would be more asynchronous due to the mother's lessened ability to be emotionally available. Under these conditions an infant would likely experience behavior disorganization due to the mother's unresponsiveness;
instead of synchrony there would be inattentiveness and disturbed affect. The findings were consistent with the hypothesis: Depressed mothers spent more time in negative attentive/affective behavior states than in positive states. Three basic patterns emerged from the depressed mothers. The "disengaged mothers" showed disengaged/disinterested behaviors most frequently, "intrusive mothers" showed angry/rough behaviors most often, and "mixed mothers" displayed both disengaged and angry behavior states most frequently. Regardless of the mothers' pattern of interaction, the infants of the depressed group showed more general negative affect than the infants in the control "nondepressed" group. In addition, the significant amount of time spent together in negative states by the depressed mothers and their infants suggests a contagion effect of negative mood. Overall findings indicate that infants of the depressed dyads resonate more to the mothers' negative behaviors, while infants of nondepressed mothers were more responsive to their mothers' positive responses; in general, however, the total percentage of time spent in matched affective and behavior states was less for the depressed dyad. These findings are similar to those of Zekoski et al. (1987), whose research suggests that infants of depressed mothers are less contingently responsive to their mothers due to the mother's subtle deficits in performance skills.
These deficits are detected by the infant and result in a lack of synchronous interactions.

Findings imply that infants of depressed mothers learn that their behavior has minimal impact on their mothers' behavior, thus responding to a nonresponding mother becomes an aversive stimulus. It is also probable that the mother's reluctance to interact with her baby prevents her from learning and understanding the cues necessary for the development of synchrony; the mother responds more to her own internal needs rather than those of her baby (Livingood et al., 1983).

Anyone observing mother-infant pairs can attest that mothers typically develop a type of "language" to communicate emotionally with their infants. This language, known as "motherese," involves paralinguistic gestures such as timing and rhythm, as well as exaggerations in intonation. Its importance lies not only in sustaining the bonding process between mother and child, but also in the evolution of the baby's affective, cognitive, and social development.

As depressed mothers have been shown to exhibit flattened affect and lowered responsiveness, it was hypothesized that motherese might also be inhibited through prosodical constraint and a lack of modification on the part of the mother towards her infant's vocalizations (Bettes, 1988). Research proved the supposal to be true:
Depressed mothers fail to make adjustments in their vocal behaviors in response to infant vocalization, while nondepressed mothers do so consistently. They also tend to engage in fewer vocal exchanges, or "duets" with their babies (Fleming et al., 1988). Thus, these infants are at a disadvantage in their attempts to "converse" or "play" with their mothers. This is compounded by the intonational characteristics of the depressed mother's infant-directed utterances. As compared to nondepressed mothers, depressed mother's are six times more likely to respond in a nonexaggerated, constricted intonational manner towards their infants. That is, not only do depressed mothers take longer to respond to their infants (and/or respond less), they are also less likely to accentuate their utterances with the affective signals that play a role in affect and state modulation in their baby. Thus, the infant is deprived of the cues that characterize social interaction between infants and their caregivers.

Caretaking/Affection

Even before an infant learns through his mother's eyes or voice he detects the safety and warmth of his world through her touch. It is through this most basic modality that the mother first expresses her feelings to her baby. Research reveals that while depressed mothers do engage in necessary caretaking activities, they extend less
affectionate contacts than their nondepressed counterparts (Fleming et al., 1988). In their study of 3-month-old infants' reaction to simulated depression, Cohn and Tronick (1983) used "minimized body movement and touch contact" with infants as an operationalization of maternal depression. The results of this study are cited earlier; let it suffice to say that the infants responded in sadly negative fashion to depressive behaviors in their mothers. In light of the research, it is not surprising to find that depressed mothers often abort breast-feeding in favor of bottle-feeding by the time their infants are three months old. This rate is higher than the general population, and probably reflects the depressed mother's feelings about bodily contact and affection (Fleming, et al., 1988).

Self-efficacy

The consistent pattern that emerges from the data strongly suggests that the less-than-optimal mothering behavior of depressed women results in impaired interactions between mother and child. Several researchers have attempted to survey how the depressed mother herself perceives this dyadic interplay. By examining attitudes and attributional styles, variables such as self-efficacy and sense of control can be introduced into the equation of mother-infant behaviors. These perceptions are perhaps best evaluated using the concepts in Attribution Theory.
This theory proposes that people attribute motive causes to behaviors they observe; individuals then act upon these perceptions (Kelley, 1973). There are two basic styles of attribution. The first, a "self-serving attributional style" is a characteristic of the self-efficacious person and reflects making internal, stable and global attributions for positive outcomes and external, unstable and specific attributions for negative outcomes. The second style, making external, unstable and specific attributions for positive outcomes and internal, stable and global attributions for negative outcomes is defined as a "depression-prone attributional style." That is, the former category of persons would tend to give themselves credit for a job well done and process explanations outside of themselves for errors or failures; whereas the latter individual would deflect any self-praise in favor of "being lucky" for positive situations, but be self-critical and berating for mistakes made.

Using Attribution Theory as a framework, it was discovered that depressed mothers greatly overestimate their control (i.e., have a high illusion of control) and clearly display a depression-prone attributional style (Donovan & Leavitt, 1989). These mothers respond to an impending cry from their infant with increased cardiac acceleration, implying a defensive reaction to aversive conditioning that masks her perceived inefficacy. A
depressed mother tends to be so self-focused that she believes she is responsible for her infant's behavior, and that the infant's lack of positive responding is due to her, rather than external factors, such as the infant's hunger (Zekoski et al., 1987). This internal locus of control for negative situations seems to direct the depressed mother to behave more punitively and with highly controlling attitudes toward her infant (Field et al., 1985). Coupled with her less positive feelings toward maternal caretaking in general (Fleming et al., 1988) this attributional style can be devastating to the early relationship. The inevitable unwillingness of the infant to interact due to the lack of contingency by the mother is interpreted by Mother as "My baby doesn't love me; I'm a bad mother," "He's not crying...he doesn't need me to pick him up," or, "She's just fussing because she's spoiled." Not surprisingly, depressed mothers have higher rates of complaints regarding difficulties with infant care, and feel more "bothered" by their infants than nondepressed mothers. Concomitantly, infants of depressed mothers respond more quickly to stress than other infants, perhaps because a depressed mother is less likely to be responsive to the infant's need (e.g., by delaysing a feeding or changing a wet diaper); thus, stress is not consistently minimized for the baby (Whiffen & Gotlib, 1989).

According to Brazelton and Cramer (1990), infants of
depressed mothers are constantly frustrated by inconsistency in expectancies established by the mother. Mother may from time to time be responsive, while at other times, be unavailable and rejecting. This pattern sets up a stress syndrome for the infant that includes, not only the previously described gaze avoidance and unwillingness to engage socially, but gastrointestinal hypermotility and autonomic fragility as well. This is consonant with other findings that revealed stress in these infants (Field et al., 1988) which was demonstrated by higher sympathetic arousal and lower parasympathetic arousal, a condition consistent with stress (McCabe & Schneiderman, 1984).

Relevance of Infant's Gender

A critical question that arises in light of these data is whether or not the infant's sex has any bearing on the mother's behaviors. The findings in this area are inconclusive. For example, in one study there was evidence that depressed mothers of boys, although not girls, demonstrated less positive behaviors (Cohn et al., 1990), while Malatesta and Haviland (1986) found that mothers of full-term female infants responded more contingently to negative expressions than did mothers of male babies, implying increased negative expressions among mothers of girls. Clearly, more research is needed in this area.
Attachment Behaviors of Infants with Depressed Mothers

It is impossible to review the findings of the presented research without considering the potential clinical ramifications, particularly in terms of early object relations development. The marked deficiencies within the depressed mother-infant dyad, as verified by the literature, raises the question of flawed primary attachment in these infants. The quality of the mother-child bonding is related to various aspects of the child's functioning at the same and later ages (Egeland & Farber, 1984). It has been hypothesized, for instance, that a poor attachment results in children seeing themselves as unlovable, and mothers as rejecting and unresponsive. Furthermore, insecurely bonded children have been found to have deficits in relational skills towards peers and adults, and are more prone to social withdrawal and anxiety (Radke-Yarrow et al., 1985).

Relevant to the concerns of this paper is the finding that the quality of the mother-child relationship at 3 months is related to the characteristics of the attachment at 1 year of age (Lewis & Feiring, 1989).

Attachment Theory

Attachment Theory is based on the construct that the degree and type of attachment an infant has to her mother
will vary as a function of the style of interactions between the dyad. The development of the Strange Situation (Ainsworth & Wittig, 1969) enables researchers to categorize the varieties of attachments and to draw some conclusions regarding the type of interactions that precipitate infant attachment behaviors.

The test is a 20-minute observational laboratory experiment designed for 1-year-olds. A stress situation is produced whereby infants are provided with a strange (toy-filled) environment, a stranger, and brief separations from Mother. The actual procedure involves the mother entering the toy-filled room with her child; soon afterwards a stranger enters. The mother then leaves the room, returning a few minutes later. At this time, the stranger leaves. After a short time, the mother again exits, leaving her child in an unfamiliar setting. The mother finally returns. (Ainsworth et al., 1978). The quality of attachment is measured by the child's response to the mother upon returning from the separations. "Securely attached" (B pattern) infants actively seek proximity and contact with their mothers when she returns; they then return to exploration and play activities. Infants are classified as "insecurely attached" when they display ambivalence and insecurity throughout the reunion episodes (pattern C), or when they are overtly avoidant toward their mother (pattern A).
Securely Attached Infants

Certain characteristics of the various patterns of attachment reveal a great deal about both the infant and the mother. Securely attached infants use their mother as a secure base for exploration and as a source of comfort following separation. The mothers of these infants have been found to be sensitive to their infants' needs, accepting of typical infant behaviors, expressive of affect (Main, Tomasini, & Tolan, 1979) and more encouraging of reciprocal interaction (Cohler, Weiss, & Grunebaum, 1970). They demonstrate a high degree of soothing behaviors, as well as indicate availability through gazing and vocalization (Smith & Pederson, 1988); affection is displayed through cuddling, hugging and close body contact (Tracy & Ainsworth, 1981).

Insecurely Attached Infants

In insecurely attached infants, on the other hand, exhibit very different behaviors. The A pattern babies, known as anxious/avoidant infants, express little interactive behaviors with their mothers, appear to not distinguish emotionally between the stranger and the mother, and avoid the mother upon her return. These babies reveal intense approach-avoidance behaviors because, while instinctly needing their mothers, experience has taught them that approaching her results in disappointment and
painful rejection. Mothers of these infants have been shown to be particularly rejecting and having a strong aversion to physical contact (Egeland & Farber, 1984; Tracy & Ainsworth, 1981). As a result, the affection they do show their infants is by kissing, rather than hugging or cuddling, which, of course, would entail more bodily contact.

In general, pattern A babies smile less frequently and respond less positively to being physically held and more negatively to being put down (clearly a manifestation of the approach-avoidance dilemma), and when they do cry, they do so for longer periods of time. As expected, mothers of this group lack in their sensitivity as evidenced, among other things, by their interfering, abrupt attitude towards their infant (Lyons-Ruth, Connell, Zoll, & Stahl, 1987). These findings imply that the anxious/avoidant pattern of attachment is related to intrusive, maternal overstimulation that results from an inability to adequately respond to an infant's cues (Smith & Pederson, 1988). Correlating to this is the finding that mothers of anxiously attached babies are less expressive of affect, but far more angry as compared to mothers of securely attached infants (Main et al., 1979), even though this anger may be submerged or denied (Lyons-Ruth et al., 1987). These mothers seem to lack confidence, tend to be tense and irritable, and have less positive feelings about
motherhood. Their difficulty adapting to the needs of their child, causes them to attend to mothering duties in a rather mechanical manner. These difficulties apparently are a result of a lack of interest in mothering (Egeland & Farber, 1984).

Anxious/resistant, or Pattern C, babies are similar to pattern A babies in some respects. They, too, smile less frequently and exhibit approach-avoidance behaviors. Their style of approach-avoidance behavior represents a great deal of ambivalence toward the caretaker; while engaging in active contact seeking they, at the same time, cry, struggle and stiffen when given closeness. Consequently, mothers have difficulty providing comfort. These children exhibit impoverished exploration behaviors, tend to lag developmentally as compared to contemporaries, and are less likely to solicit responses in their mothers (Egeland & Farber, 1984). Mothers of these infants tend to be unskilled and insensitive in their caretaking, although they are, in general, better caretakers than mothers of pattern A babies. Apparently a lack of knowledge, understanding and general ability prevent this mother from providing adequate care to her child (Egeland & Farber, 1984). Low maternal involvement, as measured by verbal communication, high disengagement, flatness of affect, and poor quality relational touching, is the hallmark of this mother (Lyons-Ruth et al., 1987), who provides little
affective stimulation to her infant. Overall, unlike B (secure) infants, babies in the A and C categories have been unsuccessful in deriving security from a maternal attachment. This distortion in their earliest relationship is exemplified by behaviors and attitudes as early as 12-months-old.

Correlation of Research to Depressed Mother-Infant Dyads

Although maternal depression was not a dependent variable in these attachment studies, the attitudes and behaviors expressed by women with anxiously attached children closely match those of women with maternal depression; it is clear that the comportment of depressed mothers is highly consistent with deficient attachment of 1-year-old babies.

Research validating and amplifying this supposition is beginning to emerge. Donovan and Leavitt (1989) found that insecure attachment at age 16-months is associated with maternal depression at 5-months of age. More compelling data was found in examining patterns of attachment of two-and three-year olds in families with depression (Radke-Yarrow et al., 1985). In this study, children with depressed mothers showed definite impairment in attachment, revealing both A and C patterns. A new classification of insecure attachment was developed to
accommodate the behaviors of children with severely depressed mothers. Pattern A/C infants showed both ambivalence and avoidance as evidenced by moderate to high avoidance and moderate to high resistance during reunion, and also displayed one or more of the following: "Affectless or sad with signs of depression," "Odd or atypical body posture or movement," and "Moderate to high proximity seeking." These children are categorized as "very insecure." This combination of behaviors is consistent with Brazelton and Cramer's (1990) conclusions that the one-to two-year-old child with a depressed mother "attempts to console the sad parent. There is an attempt to either actively care for, or more generally, develop precociously undemanding behavior, so as not to burden the depressed parent" (p. 147). Not surprisingly, a component of this particular constellation is extremely uncommunicative mothers (Lyons-Ruth et al., 1987). It is hypothesized that A/C infants develop as a function of an extreme lack of maternal involvement that becomes neglect, hence active resistance on the part of the infant becomes avoidance.

Although it is beyond the scope of this paper to explore, it is noteworthy to mention that children of mothers with bipolar depression were found to be the most vulnerable group for severely insecure attachments (Radke-Yarrow et al. 1985). This is due to the extremes in
affect and resulting inconsistency inherent in that particular disorder.

The data presented are lucid and cohesive in their findings. Not only does burgeoning research indicate that depression in mothers thwarts adequate attachment in infants, the relevant body of literature on attachment corroborates this by the high correlation between behaviors of depressed mothers and those demonstrated by mothers with insecurely attached infants.

The Older Child of a Depressed Mother

Even though the focus of this paper is directed toward the conceptualization of an infant's emotional development and the relational influence of a depressed mother, it is valuable to survey research findings on older children exposed to maternal depression to provide a bridge to theoretical and clinical considerations. In general, behavioral, cognitive, and affective aberrations are evident in these children who are chronically faced with caretakers who are physically present but emotionally absent (Puckering, 1989).

The Toddler

Toddlers of depressed mothers exhibit not only disturbances in attachment, but also in emotional regulation and expressive language (Gelfand & Teti, 1990).
Typically seen problems in these children are eating difficulties, problems in relationships with peers or parents, and poor attention combined with overactivity. The most commonly seen interactive pattern is that of the young child clinging to and comforting her distraught mother (Cox, Puckering, Pound, & Mills, 1987).

The Preschool Child

In terms of her interaction with her preschooler, the depressed mother tends to be lacking in responsiveness, ignoring requests except those of high intensity. Dialogue between mother and child typically involves Mother "floating" and becoming mentally disengaged. Both higher levels of child distress and maternal control are prevalent, resulting in tension, coercion and conflict. One finding contradictory to other data is that more physical contact and affectionate touching can sometimes be seen in preschoolers and their depressed mothers. This clinging behavior, however, is typically initiated by the child as a means of comforting the mother (Cox et al., 1987).

The School Aged Child

A wide range of difficulties is possible in the school-aged child including poor self-concepts and negative attributional styles comparable to those of their parents.
Attentional and cognitive deficits are also more prevalent in this group of children than in the general population (Cogill et al., 1986). Furthermore, peers of these children rate them as abrasive, withdrawn and unhappy (Weintraub, Winters, & Neale, 1986), all characteristics that would be consistent with the internalized problems these children tend to suffer. Age appropriate mastery tasks such as conflict-resolution and affect-regulation skills are disrupted (Lee & Gotlib, 1989).

Children in homes with depression are often subjected to parental irritability, anger, and hostility (Rutter & Quinton, 1984). Depressed mothers tend to voice disappointments and make negative attributions about their children, use guilt-and anxiety-inducing methods of parenting, and implement disciplinary techniques that place high maturity expectations on their offspring (Rutter, 1990).

**The Adolescent**

The impact of maternal depression on adolescents is not well researched. It has been hypothesized, however, that the teenage years, like infancy, is a most difficult epoch to transverse when hampered by the limitations of a depressed parent (Beardslee, 1986). Teens of depressed parents are handicapped as "high risk" young people, having
parents who are unable to assist in the challenges of impending adulthood. A predicted increase in both mood disorders and conduct disorders is consistent with teens having to deal with the angst of adolescence unguided due to a lack of parental involvement (Gelfand & Teti, 1990).

Comments and Integration of Research Findings

A compilation of the research creates a fairly comprehensive portrait of the depressed mother and her infant; unfortunately, the picture that emerges can be far removed from the idealized conception touted by the artist and poet. Findings, although varied, provide enough consistency to weave a particular type of relational tapestry that is sometimes devoid of the basic emotional elements necessary for healthy infant development. Discovering the critical components that contribute to the interweavings of infant psychological growth would appear to be of the utmost importance.

Perhaps the greatest conundrum when considering the effect and pertinent variables in maternal depression is how to define and operationalize the label "depression." Most of the research presented in this paper utilizes strictly behavioral, self-report instruments like the Beck Depression Inventory (BDI). This quick, self-report questionnaire based on cognitive therapy principles, evaluates the severity of depression as well as ascertains
degrees and types of negative thinking (Beck & Rush, 1978). Although utilizing this model is a valid research option, it is problematic when attempting to integrate different types of maternal depression with maternal behaviors. The authors of the cognitive model (Beck, Rush, Shaw, & Emery, 1979) state their awareness of this type of circumscription; they report that, although no existing research suggests that certain psychiatric disorders (such as borderline syndromes) respond or don't respond to cognitive therapy, they believe that impairments in reality-testing preclude the efficacy of their modality.

Another consideration in evaluating these data is that the results are, by definition, behavioral; but assessing strictly behavioral consequences of a depressed mother presents only a small aspect of the total gestalt, for these behaviors may be indicative of far reaching emotional and psychological impairment in the baby. For instance, it is apparent that the early interactions offered by the depressed mother have the capability of leading to a severe deficit in the infant's ability to develop a primary attachment. Perhaps the most detrimental aspect is how this translates to the absence of security, trust and hope in the mothering one--essential factors in healthy psychological development.
Theoretical Considerations: An Object Relations Perspective

While research and theory clearly demonstrate that maternal depression has the potential to damage an infant's capacity for sound object relating, this is impacted by a number of variables, such as length of depression, degree of social support, and severity of dysfunction. To the extent the symptoms are short-lived and mild, the child may rebound. But what if the conditions do not dissipate? What if the mother is simply too ill to be able to establish that critical primary bond with her child? That child, according to D. W. Winnicott, must learn ways to survive with a less than adequate mother; a mother who is not "good enough" to provide the basic necessities of infant emotional nurturing (Winnicott, 1965).

It is with these underpinnings in both maternal depression and infant development that a more thorough base of understanding will conclude this paper. A discussion of depression as a component of the mother's overall psychological functioning will be analyzed to further illuminate the dynamic implications of the depressed mother-infant dyad. Because of the specific relevance of Melanie Klein's analytic model, a discussion of her work in object relations will offer the framework for integrating behavioral findings with dynamic dyadic considerations.
Following this presentation, a synthesis of psychoanalytic constructs combined with the empirical research focuses upon the enduring impairment in the baby of an inadequate (e.g., depressed) mother, as proposed by Winnicott. As will be shown, the injured baby develops into the emotionally damaged adult.

**Chronic Maternal Depression**

As mentioned earlier, the behavioral categorizations inherent in the DSM III-R model negates critical distinctions between types of chronic depression, which greatly constrict sagacity of dynamic components in psychopathology. This is an unfortunate constraint since it can lead to misdiagnosis and inappropriate treatment. In the case of the depressed mother, an understanding of the type of "structure" of the depression is an absolute necessity in determining the potential effects on the infant.

The analytic theoretical formulations of Melanie Klein offer concrete and discriminate depictions of two differing types, or styles, of depression that greatly illuminate issues pertaining to early object relations and the mother-infant dyad (Segal, 1975). It is beyond the scope of this paper to fully explore Klein's rather complex constructs; however, two main ideas that prove critical to an understanding of depression issue from her two "positions,"
or stages of development. These positions are elemental in the infant as well as the adult. They relate not only to age and maturation, but also encompass degree of psychological progression in terms of ego development, types of defenses utilized, and ways of seeing and interacting with the environment.

The "Depleted" Mother

The first, most primitive, position is referred to as the paranoid-schizoid position. This is essentially the first stage of development for the infant and typically persists during the first few months of life when the infant's ego is an incohesive state (Klein, 1975b). If all goes well, the baby progresses to the second stage, or "depressive" position during the second quarter of the first year. If, however, the infant's interpretation of her environmental experiences are powerfully negative, she will not develop, but rather remained fixated at this most primitive of levels; or she may begin to progress to the next level only to regress to this earlier position due to unsatisfactory ego integration. It is within this context that the types of "depression" can be analyzed, as, according to Klein, adults fixated in a particular position during infancy continue to demonstrate the characteristics of that position (Segal, 1975).

For the infant, the paranoid-schizoid position is part of a normal developmental line. Emotional problems occur
only if the infant is unable to negotiate progressive movement towards higher synthesis of the ego. For the adult fixated at this primitive position, psychological functioning may be greatly impaired. Among other characteristics, he or she may suffer with what looks like serious depression; what is actually occurring, however, is a syndrome based on a type of persecutory anxiety that arises from an individual's belief that he or she lives in an unsafe, persecuting world.

From a developmental perspective, the sometimes severe split that occurs in the ego due to the infant's perceptions of the mother (breast) at this stage creates a world that is either good or bad, and objects that are either idealized or devalued. Chaos that ensues from this splitting produces chronic primitive anxiety leading to distortions in reality. Cognitive capabilities are typically highly concrete at this level, rendering symbolic formation inaccessible and object constancy unattainable. Concomitant hostility is retaliatory; there is a desire to destroy any perceived object of persecution. The more the infant experiences the world as an unnurturing place, the more he develops a rigid, narcissistic, black-and-white, paranoid existence that cannot allow for ambiguity, tolerance or other-oriented interactions. As would be expected, defenses used in the paranoid-schizoid position are highly archaic; splitting, projective identification,
idealization, projection, introjection and denial all mobilize to defend against intense primitive anxieties (Klein, 1975b).

It is no surprise that, as an adult, this person is fully incapable of truly entering into a relationship. Not only do the primitive modes of functioning exclude intimacy with another, but the paranoid-schizoid person, who has not experienced enough happiness during her early life, lacks the ability to hope and the capacity to love and trust others (Klein, 1975a). Consonant with this disturbed object relating is a false sense of self-sufficiency that negates an awareness of internal and/or relational needs. These dynamics create an internal world that is virtually unable to recognize others as separate individuals; they are rather "containers" for projective identification, projection and idealization (Segal, 1975) which are utilized to compensate for unmet, unconscious needs.

As can be imagined, the outlay of instinctual energy needed to maintain this massive system of dynamics is enormous; hence, the individual feels chronically depleted, i.e., "depressed." Because of the etiological dynamics, this depression will manifest more predominantly with the vegetative, or negative symptoms, such as lethargy and psychomotor retardation. In addition, it will present as one component of a larger syndrome typically labeled as
personality disorders, such as schizoid, borderline, paranoid, or narcissistic. Hence, the depression classification is inherent in a deficit personality structure that is too underdeveloped to perform in any other manner. Because of the intransigent nature of personality disorders, this type of depression is more difficult to treat and is less responsive to antidepressive medications than uncomplicated depression (Joyce & Paykel, 1989).

The "Depressive" Mother

There is a clear distinction between Klein's paranoid-schizoid position and the "depressive" position. This latter stage develops out of the paranoid-schizoid position as the infant experiences a preponderance of good experiences over bad, and as natural maturation takes place. Klein postulates that during the second quarter of the first year, the normal infant's ego has been strengthened with good objects to the degree that a number of important changes occur in the infant's internal world. Perhaps the most important aspect of this position is that it evokes preparation for possessing the capacity for intimacy in relationships. The reasons for this are complex and highly interactive. Objects, and the outside world, become increasingly integrated, and, thus, "whole." The splitting so prevalent in the paranoid-schizoid position gives way to the capacity for tolerating
ambivalence; the mother is no longer good or bad, she is good and bad. Complex thought processes progress towards symbolic thought, hence not only can inner states be experienced, they can be contemplated and accepted. Along with this is a realization of one's own lack of omnipotence and one's need for others. An increased integration of the ego leads to less primitive defenses, such as displacement, sublimation and identification; defenses are more neurotic in nature. As is apparent from this description, the individual in the depressive position is able to see the world from a more accurate, balanced perspective.

The depression experienced at this level is one caused by loss, or fear of loss due to the conflict created by ambivalence. The baby who can both love and hate fears that his hatred has damaged the mother. The desire to negate the damage (loss) by reparation to the object results in a state akin to mourning along with deep feelings of guilt (Klein, 1975b). Although this process leads to further integration of the ego and allows for continued emotional progression, the results in the adult are commonly labeled as "depression," as primitive feelings of mourning and guilt are reactivated and reexperienced by a perceived or threatened loss. Often this "uncomplicated" neurotic depression will be exemplified by the more positive symptoms of depression, such as eating and sleeping difficulties; it is also more amenable to
psychotrophic treatment than depression associated with personality disorders (Joyce & Paykel, 1989). Also, during times of duress, the object-relating person in the depressive position will tend to seek comfort from others, while the paranoid-schizoid individual will typically withdraw into isolation.

The "Depleted" Mother versus the "Depressive" Mother

Distinctions between the two categories are not nearly as clear it appears, for while Klein's two positions are separate and discrete, they are fluid in the sense of being a developmental continuum that varies as a function of an individual's constitution and experiences. Accordingly, it is possible to show elements of both positions. In addition, internal and external stressors can cause a regression that is not necessarily part of a defective characterological framework. So while Klein's formulations are extremely helpful in understanding behaviors stemming from internal dynamics, they must be considered within a context of clinical generalities and empirical probabilities, and applied individually.

The implications of this theoretical breakdown of depression, however, are enormous when considering the depressed mother and her baby. To date, depression is commonly lumped into one large clinical category with three divisions (mild, moderate and severe), without considering that the underlying dynamics, hence the style of relational
interacting, may be vastly different. For example, the more primitive paranoid-schizoid depleted mother, because of her reliance on projective identification and splitting sees a teething, crying infant as "bad," or "spoiled," and decides that the baby is punishing her for not being a good enough mother to stop the crying. Harold Searles (1986) refers to this as the mother seeing the child as the transference-"parent" rather than her infant (p. 212). The depressed mother, on the other hand, is able to cognitively and affectively process that the infant is experiencing legitimate pain originating from outside the mother. Even though her depressed mood might prevent her from optimally responding to her infant, the neurotically depressed mother’s emotional perceptions of her baby remain fairly constant.

The depleted mother typically sees her infant as a receptacle of her own unmet, and projected needs, and is, thus, out of touch with the cues and expressed needs of the infant. She does not respond accurately to her child, but rather expects her child to respond accurately to her. Also, because of her reliance on splitting, the depleted mother views her baby as either good or bad, perhaps in an alternating mode depending on the expected or desired behaviors of the baby.

Another concern is the chronic nature of the depleted mother’s interactions with her infant. Since the
underlying problem is characterological in nature, a more unstable and pervasive pattern of interrelational attitudes and behaviors is expected.

Given the variables, it is clear that the ramifications of the mother's dynamic health are equally as important as the diagnosis of "depression" when considering her attitude and behaviors towards her infant. How these formulations interact with infant emotional development are addressed using the concepts of theorist and analyst, D. W. Winnicott.

Winnicott's Theory of Infant Psychological Development

Winnicott's paradigm is centered on the importance of the quality of the relationship between an infant and her primary caretaker (Winnicott, 1987) who, for purposes of this paper, will be assumed to be the mother. It should be stated that his ideas are actually far more complex and encompassing than those presented here; however, it would be beyond the scope of this paper to introduce material not specifically relevant to depressed mothers and their infants.

According to Winnicott, the foundation for the "self" of the infant actually begins during pregnancy and is correlated to the mother's ideas about how her developing infant fits, or fails to fit, into her imagination and the current emotional setting (Winnicott, 1987, pp. 1-14).
"Primary maternal preoccupation" is the phrase Winnicott uses to describe the desired psychological condition of the mother during the weeks before and after the birth of her baby where she is singularly focused upon her infant to the degree that she can sense what her infant might be feeling and is able to respond with finely-tuned sensitivity (Winnicott, 1965, pp. 15-20). The capacity for the mother to enter into this experience with her infant enables her to provide the "holding environment" for the newborn in the early weeks of life, beginning the process of developing a healthy self.

Holding environment, another term coined by Winnicott, describes the mother's capacity to identify with her baby and provide ego support before there is integration of the baby's ego. This construct is central to his ideas surrounding primary infant needs in terms of environmental provision. At the beginning, when physiology and psychology have not yet become distinct, holding includes "especially the physical holding of the infant which is a form of loving" (Davis & Wallbridge, 1981, p. 101). This begins to extend to involve the total environmental provision that includes, for example, protection from physiological insult, adherence to the specific routine of the infant, and a consideration of the baby's sensitivities (such as his senses, reaction to gravity, etc.)—all in a manner which support the baby's emotional needs and growth,
and does not dominate in favor of the mother's needs. At the desired level of relating during these first weeks and months of life, so intricately joined are mother and infant that Winnicott describes them as a "nursing couple," a reflection of the theorist's belief that the development of ego-relatedness and integration of the ego stems from the interactive dance created by the mother's acute sensitivity to the needs of her infant (Winnicott, 1957).

The source of the holding environment is rooted in the concept of the "good-enough mother," a term used to describe the adequate environmental provision provided by the "ordinary, devoted mother." An infant being reared by a good-enough mother comes to believe that, not only is the "environment" reliable and trustworthy, but also that the fulfillment of needs can be achieved through one's own initiation and reaching out to others. The infant at first perceives sensitivity to her needs as "this is just what I needed," but through consistent responsiveness undergoes a brief period of omnipotence, assuming that the met need is based on her own creation. The baby requires this brief period of omnipotence to develop the capacity to later experience a relationship to external reality and even to begin to form a conception of external reality (Davis & Wallbridge, 1981, p. 58).

As the infant becomes less totally dependent on his mother, at about 5-6 months of age, he begins to become
more aware of his environment, and more able to tolerate a
slow shift towards the reality principle through the
mother's steady presentation of the world in small doses.
Progressively, the infant moves from dependence, through
relative dependence, towards, not independence, but
interdependence.

The practical implications of Winnicott's holding
environment and good-enough mother are rooted in common
sense: The mother simply needs to provide sensitivity in
responsiveness to her infant, particularly in the child's
earliest months when he is most dependent. Mother, for
example, needs to return her infant's gaze when he looks in
her eyes; by doing so, the mother not only provides a
experience of intimate connection, she also reflects back
the infant's nascent self. The nutritional aspect of
nursing (or even bottle feeding) becomes a secondary
component to the feeding experience in comparison to the
infant's freedom to touch mother's skin, play with her
face, and suck at a pace determined by the baby; it is here
that the foundations for trust, love, and even play are
introduced. Simply stated, the baby's needs provide the
basis for any given response.

The mother is typically able to fulfill this role if
she feels adequately secure within herself, if she feels
loved in her relationship to the infant's father and her
family, and she feels accepted within the larger context of
the family that constitutes society (Winnicott, 1965, p. 3); Winnicott felt, in fact, that the overwhelming majority of mothers are quite "good-enough." If these conditions are not present, however, and/or if the mother's internalized environment is poor, the mother can have difficulty in her relationship to her baby from the very beginning.

The Trauma of Not Good-Enough Mothering

What are the results of less-than-adequate mothering, according to Winnicott? In general, chronic failure in the holding environment can mean that the infant's line of life is interrupted and her development hindered by the need for a defense against "primitive anxieties" (the severe anxieties experienced before the ego is autonomous and the senses organized) (Winnicott, 1987, p. 37).

These anxieties arise from "impingements," or interruptions in the "continuity of being." Translated into practical terms, impingements are traumas caused by a lack of appropriate response to an infant's cues which result in either overstimulation or understimulation of the baby. While these "environmental failures" typically occur postnatally, the mother's anxiety or depression may create impingements to the infant even before birth (Winnicott, 1988, p. 128).

Winnicott's writings are replete with mundane, yet illuminating examples of impingement. In this particular
example, Winnicott (1964) is describing infant care in an orphanage:

The baby is propped up in a little cot, and a bottle with milk is so arranged with pillows that it reaches his mouth. The nurse puts the teat into the baby's mouth, waits for a few moments, and the nurse goes off to look after some other baby who is crying. At first things may go fairly well, because the hungry baby is stimulated to suck from the teat and the milk comes, and it feels nice; but there the thing is, sticking in his mouth, and in a few moments it has become a sort of huge threat to existence. The baby cries or struggles, then the bottle drops out, and this produces relief, but only for a little while, because soon the baby begins to want to have another go, and the bottle does not come, and then crying restarts.

After a while the nurse comes back and puts the bottle in the baby's mouth again, but by now the bottle, which looks the same as it did, from our point of view, seems to the baby like a bad thing. It has become dangerous. This goes on and on. (pp. 45-46)

Elements of both neglectful and intrusive impingement are apparent in this example. The infant learns little about trust in another person; to the contrary, he discovers that, at the most basic level, his needs will not be met. He also begins to realize that he must tolerate impingement to survive.

When these impingements occur regularly and pervasively, the baby, not having the mother's ego support, is unable to undergo normal ego development; he instead organizes his functioning around the impingements. When chronic traumas occur at the stage of absolute dependence, they can put at risk the sanity of the person; even when
less severe and at later stages of development, however, impingements can create distortions in psychological and emotional evolution (Davis & Wallbridge, 1981, p. 46).

**Types and Degrees of Illness**

Winnicott saw psychotic illnesses as primarily "environmental deficiency diseases that organized as defenses against the trauma of unthinkable anxiety" (Davis and Wallbridge, 1981, p. 48). There are two categories within his definition of psychosis: The first includes those illnesses rooted in severe distortions in ego-organization, and represented by the schizoid characteristics of "splitting" or dissociations. The specific diagnoses in this category are, from most pervasive to least: Infantile schizophrenia or autism; latent schizophrenia; and schizoid personality.

The second category of psychotic illness is that involving the development of a caretaker self with the organization of a self that is "false". This defensive organization mobilizes to enable the infant to adapt to the impinging environment while at the same hiding the source of all real, personal impulses, called the "True Self" (Winnicott, 1989, p. 43).

In varying degrees, psychotic elements are present (though sometimes hidden) within the personality structure of individuals with these disorders. Essentially, emotional development organizes to insure invulnerability
against the unthinkable anxiety experienced initially at a point of failure in the environment during the stage of absolute dependence.

These infants suffer from privation, or maternal failure at the stage of absolute dependence; while those who initially experience good-enough mothering, but later lose it fall under the category of "deprived." Deprivation reflects development of ego integration and maternal support in the early weeks and months, but later maternal failure at the stage of relative dependence (Davis & Wallbridge, 1981, p. 77). This can be seen in the mother who adores her helpless and totally dependent newborn, but cannot respond adequately as her growing infant begins to separate and become his own emerging person.

When there is significant deprivation in babyhood, an antisocial tendency in childhood is often seen. Behaviors such as bedwetting, stealing, and telling lies are enacted in an attempt to get the environment to acknowledge and make up for the failure(s) that created the damage. Inherent in this acting-out is the hope of the reestablishment of a relationship with a good-enough environment.

**Synthesis of Klein and Winnicott**

While the terminology and focus differ in the works of Winnicott and Klein, their theories actually integrate
quite effortlessly; Winnicott, in fact, used many of Klein's concepts when processing his own ideas. Perhaps the main difference seen between the two analysts is the heart of their respective paradigms: Klein was primarily concerned about the inner world of the infant, while Winnicott centered his concern on the mother-infant dyad. Winnicott's stage of absolute dependence fits quite readily with Klein's paranoid-schizoid position, with progression to the depressive position being commensurate with relative dependence and beyond.

In terms of pathology, the adult fixated at the paranoid-schizoid level clearly fits the psychotic, or at least characterological, individuals described by Winnicott as those not having good-enough mothering. As can be seen in the paranoid-schizoid of Klein, or the schizoid or False Self of Winnicott, the primary deficit lies in the inability to obtain or sustain healthy object relations.

A sad truism seems to be that the infant with the not good-enough mother today is destined (barring treatment) to become the depleted adult of tomorrow.

Depression and the Good-Enough Mother

Research literature presents sufficient evidence that the depressed mother is often an inadequate mother. Correlating these findings with the theoretical understandings of both Melanie Klein and D. W. Winnicott
provide elements for creating clinical formulations when considering offspring of a depressed or depleted mother, whether infant or adult.

Research Findings and Theoretical Considerations

When considering the objectives of this paper, one question becomes most relevant: Is the depressed mother good-enough? From the findings of research, the likelihood that the depressed mother has the capacity for providing the necessary components of good-enough mothering is minimal.

One necessary aspect of good-enough mothering is primary maternal preoccupation during the infant's earliest days and weeks. Depressed mothers show a deficit in their ability to attend and respond to their infants cues (Field et al., 1990; Livingood et al., 1983; Zekoski, O'Hara, & Wills, 1987) and are unable to provide "a pattern of appropriate responses to [their babies'] signals, needs and emotional communication" (Brazelton & Cramer, 1990, p. 108). These and other findings indicate that depressed mothers may not be able to experience the sensitivity necessary to anticipate the feelings and needs of their infants.

The holding environment needed by the infant for ego support is contingent on the mother's capability to be empathic and responsive to her baby's needs. Research shows that depressed mothers score low on imitative
behavior and contingent responsiveness when interacting with their babies (Field et al. 1988); they also demonstrate more negative interactive styles than their nondepressed counterparts (Cohn & Tronick, 1983), including less gazing behaviors, less unconditional positive regard (Livingood et al., 1983), as well as more disengagement, disinterest and irritation (Field et al. 1990).

Furthermore, the flattened affect and lowered responsiveness of the depressed mother appears to inhibit the verbal "motherese" that is critical in soothing and "playing" with an infant (Bettes, 1988; Fleming et al. 1988). Depressed mothers also exhibit less affectionate behavior with their babies (Fleming et al., 1988).

In addition to the apparent lack of ego relatedness presented by these findings, studies on self-efficacy appear to support the contention that depressed mothers often adopt behavior and attributional styles consistent with the depleted mother model presented earlier (Donovan & Leavitt, 1989; Field et al. 1985). This depression-prone attributional style would render the mother too self-focused to see her child outside of her own needs and projections, making good-enough mothering next to impossible. These data indicate that the depressed mother is less-than-adequate in empathy and sensitivity when responding or interacting with her baby; this posture
undoubtedly produces impingement, anxiety and trauma in the infant.

Another worthwhile variable to consider is that of later attachment behaviors. Studies indicate that insecure attachment at 16-months is correlated to maternal depression at 5-months-old (Donovan & Leavitt, 1989), and children with severely depressed mothers were considered to be "very insecure" in research by Radke-Yarrow et al. (1985). Furthermore, a number of studies previously presented reveal that mothers demonstrating behaviors parallel to those of depressed mothers have insecurely attached older infants.

Although a plethora of research supports the contention that depressed mothers may be unable to provide the emotional bonding and support needed for healthy emotional growth in the infant, hypotheses cannot be directly considered without evaluating mediating variables.

Using Winnicott's formulations, it would seem that the apparent lack of good-enough mothering on the part of depressed women would lead to serious emotional difficulties in babies; however, considerations such as length and severity of depression must be examined when speculating on such sequelae. The age of the infant at the time of the depression also appears to be a critical variable because of ego development; the younger the baby, the more the potential for damage.
Klein further illuminates these variables as relating to the mother's maturity and overall emotional health; suggesting that the psychologically-sound mother will relate quite differently to her infant than the emotionally-primitive mother, even though both are labeled "depressed". Although mothering may be temporarily inconsistent in the depressive mother, her own basic ego strength will allow her to be good-enough, or to seek the help necessary to provide her infant with a good-enough environment. On the other hand, the depleted mother's interactions with her child will be chronically dysfunctional, and based on the needs and perceptions of the mother rather than the baby.

Other elements, such as social support and quality of relationship with the baby's father, can ameliorate the impact of maternal depression; this makes sense not only from the standpoint of the mother's depression, but also from the implication that the baby would be exposed to more caretakers than solely the depressed mother.

One final, yet crucial, consideration is that most research is patently behavioral in terms of assessment and interpretation; so while the findings are germane, they are not clinically descriptive. Findings are valuable for raising questions, but they provide little predictive value in determining relational and emotional consequences of
maternal depression, except when viewed within the context of clinical theory.

**Depression and Maternal Failure**

Integrating the literature with theoretical considerations presents a rather mottled portrait of the depressed mother and her infant. What can be said unequivocally is that a continuum of distorted mother-baby dynamics and infant trauma exists when a mother is depressed. Maternal depression is, without question, injurious to infant development, but the degree of this damage is based on multiple variables.

Clearly, the most serious concern in maternal depression is raised through the work of Winnicott and Klein who present a composite of the mother whose failure in mothering is so severe as to render the infant incapable of even the most basic ego development. As Klein describes, because the dynamics of the depleted mother are rooted in chronic characterological deficits, she is simply unequipped to respond to her baby in an emotionally sensitive manner, which would, of course, create chronic and pervasive impingment on the infant. Although other combinations of characteristics undoubtedly coalesce to create a depressed mother who is not good-enough, the depleted mother probably puts her infant at risk more than any other category.
False Self Development and the The Hidden Self

As described earlier, two basic (although overlapping) classifications define the results of not-good-enough mothering. One includes schizoid organization and includes the schizophrenias; the other is that of the False Self personality. Although both entail a psychotic core, the former category is clearly observable as pathological, while the latter ironically gives the appearance of psychological health.

While Winnicott discusses etiology of the former category in terms of basic not-good-enough mothering, he describes in detail the components inherent in False Self development. This type of development occurs when the mother is unable to respond appropriately to her baby's omnipotence, and so substitutes her own gesture instead. The result is an infant who is only able to make sense of her environment by compliance to the mother's gesture. These are often seen as extraordinarily good, or passive babies who "never cause any trouble." Reinforcement often comes from the mother who takes pride in her baby's compliance and passivity, which she sees as indicators of good mothering. The infant builds a false set of relationships based on her adaptation to others rather than the reverse, and even appears to be real and genuine due to her ability to introject those around her.
In later years, the child may make good progress from the point of view of the superficial observer. These children are frequently excessively well-behaved, obedient, socially pleasant and high-achieving. High achievement, in fact, is often a hallmark of the False Self individual. The mother who creates either a too rapid or too early failure in maternal adaptation, or is erratic in her mothering capabilities, forces her infant to survive by exploiting his power to think things out and understand. If the baby has good mental capabilities, his mind becomes a substitute for maternal care and adaptation. The baby essentially mothers himself through his own understanding.

There are varying degrees of False Self development, ranging from the truly split-off, compliant-yet-psychotic False Self which is taken for literally the entire child, to False Self evolution in the healthy child that essentially involves socialization and adaptability. The defining element between these two extremes of a continuum is the degree to which the True Self has access to life and reality. In the healthy individual, False Self involvement ceases when issues become crucial, while in the pathological False Self person, the True Self remains totally hidden, regardless of the circumstances. Hence, False Self development is pathological to the degree that it replaces the spontaneity, creativity and source of personal impulses known as the True Self.
The tragic deception of this "survival technique" is that False Self personalities often appear to be the reverse image of their internal chaos; they are the good babies, the well-behaved toddler, the easy school-aged child, the obedient adolescent and the highly successful adult. They are the kids teachers love to have in their classes; they never cause problems. There are massive social and emotional reinforcements and incentives for both the damaged person and her environment to maintain the pretense of compliancy, a pretense that is perceived as reality. This child will not have the benefit, like those considered deprived due to later trauma, of covertly seeking help through acting out behaviors.

The truth is that, contrary to appearances, the False Self personality feels "unreal" and experiences futility in drawing any meaning from life. Real feelings are rarely experienced; they are split off and hidden in the True Self where they cannot be assaulted. Although object relations are quite disturbed, this caretaking individual gives the impression that emotional connections are authentic.

Little about the False Self individual is authentic; unfortunately, this is missed in homes and schools, in the offices of psychologists, and even in the researcher's lab. Measures on assessment procedures to detect troubled children are typically based on either acting out behaviors, or withdrawal symptoms; the False Self child
typically would show neither. He would, in fact, more than likely present as quite dissimilar to any troubled child. The perceptive observer, however, will see him as too compliant, too willing to "be good," too adaptable. As these children have disturbed primary relationships, there may be a noticeable desire to be with, or please a teacher or other adult who represents the longed for good-enough mother. They are exceedingly dutiful, patently self-reliant, and precocious in mature, adult-like behaviors. The components vary with each individual, but it is certain that this person will invariably "fall through the cracks" when it comes to psychological detection, identification, or assistance due to her high capabilities to successfully perform in chameleon-like fashion within her environment. The one tell-tale deficit area will be that of relationships; for although the False Self individual may be able to maintain social contacts, emotional connectedness and intimacy will prove unobtainable.

The Deprived Child

Although Winnicott believed that the antisocial tendencies of the deprived child provided hope for future "mending", the teacher or parent encountering this youngster might call him "aggressive", "attention-seeking", or "a troublemaker." While more able to express their needs because of nascent ego integration, they too can be severely traumatized by the lack of good-enough
parenting, depending on the same kinds of variables presented throughout this paper. The primary differences between privation and deprivation lies in the degree of ego development, and the subsequent defensive strategies employed by these related-but-distinct classifications.

Clinical Implications of Not Good Enough Mothering

Because of the overt behaviors of the deprived child, it is likely that this individual will be identified in childhood by a teacher or other adult. According to Winnicott, this youngster can best be helped by his family, rather than formal psychological treatment. The adult client who has been deprived needs to be understood at the level at which the deprivation occurred. For example, deprivation in later infancy might lead to depressive anxieties, whereas at age two or three more chronic and sustaining antisocial tendencies would be established (Winnicott, 1989, p. 66).

While detection of more schizophrenic and schizoid manifestations may be apparent in those with privation, the False Self individual is likely to escape discovery by all but the most discerning of therapists. She will often present as successful, competent and stable. It is only when one begins to uncover the severe paucity of relational capabilities that the False Self begins to disintegrate. These individuals are inevitably labeled character disordered, but often not until several layers of False
Self structure are removed through a particular form of therapy developed by Winnicott for those in the privation category. He purported regressive therapy to the place of absolute dependence as the only means of healing severely traumatized people (schizoids and schizophrenics, as well). This is accomplished by providing a "holding environment" through long-term, intensive analytic treatment that allows for a "rebirth" of the True Self.

This form of therapy raises serious questions for the clinician in terms of time and emotional investment and commitment, as well as techniques. While treatment considerations are more easily discernable for other categories, therapeutic intervention for the False Self personality is more complex since the False Self is essentially a very high functioning, but very elusory, psychotic. This fact itself warrants further study and examination of those issues involving the clinical treatment of these severely damaged people.

Summary and Recommendations

Research on the effect of maternal depression on infant behaviors presents a consistent portrayal of a mother who lacks the ability to appropriately respond to her infant. Although studies of attachment behaviors between depressed mothers and their babies are minimal, they are conclusive and correlate strongly to research
revealing disturbed attachment behaviors in mother/infant dyads sharing similar characteristics. Long-term effects of maternal depression vary due to a plethora of determinants, such as length and severity of depression, availability of support systems, and the age of the infant; a critical factor is the global psychological health of the mother, exclusive of her current depression. Analytic theorist, Melanie Klein, describes two basic categories of mental health that allow development of a description of how the healthier "depressed" mother and the more characterological "depleted" mother might interact with her infant based on the mother's internal dynamics.

Integrating the research data with the suppositions derived from Klein provides the framework for an analysis of the work of D. W. Winnicott. It is clear from a synthesis that infants reared by "depleted" mothers (and perhaps others) experience early traumas that result in severe emotional injury. Although this damage is characterized by a psychotic core in the individual, it is often concealed by an adaptive, socially-functioning False Self that prevents detection of the fragmented internal self. When adaptation is not as complete, more schizoid and schizophrenic characteristics are apparent.

Concerns arise when considering False Self ramifications in terms of current investigative practices. Measures utilized to identify troubled children of
depressed mothers are not structured to evaluate those functioning as False Selves; in fact, these children would often be seen as the ones who are not disturbed. Deprived children who, according to Winnicott, are somewhat healthier due to trauma after the nascent establishment of an ego are more likely to be the acting out youngsters who might typically be identified in research studies.

Along parallel lines, currently mothers assessed for depression are generally evaluated by behavioral measures, or verbal report with little distinction made concerning clinical evaluations or descriptions. Considering the significant implications of characterological issues relating to maternal depression, it seems imperative that future research incorporate personality structure variables in order to accurately assess the impact of depressed mothers on their infants.

One other area of concern is that of the research focus on the depressed mother with little consideration of the long range effects on the infant. An appreciation for the enduring injury created by poor maternal care in the early months of life appears to be somewhat lacking. This is, perhaps, also a relevant issue for clinicians who may direct treatment concerns primarily towards a depressed mother without considering how the baby is faring in day-to-day maternal care.
This analysis of the effect of maternal depression on infant emotional development has possibly raised more questions than it has answered. The hope is that answers to these (and other) questions through further research and clinical inquiry will provide a deeper understanding of the enduring impact of certain maternal depressions on infants. Only with these insights can there be hope for those deeply wounded adults who, because of a mother's depression, have never had the chance to truly live.
REFERENCES


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