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Bunge, Judith Ann

THE NATURE AND MEASUREMENT OF MATERNAL SEPARATION ANXIETY IN EMPLOYED MOTHERS AS IT RELATES TO SOCIOECONOMIC STATUS

The Ohio State University

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THE NATURE AND MEASUREMENT OF MATERNAL SEPARATION
ANXIETY IN EMPLOYED MOTHERS AS IT RELATES TO
SOCIOECONOMIC STATUS

DISSERTATION
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Judith Ann Bunge, B.S., M.S.

* * * * * * *

The Ohio State University
1983

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CHAPTER I

INTRODUCTION

Background

Escalating social and economic changes during the past decades have significantly altered our concepts and expectations about the roles of men and women in our culture. In particular, the rapid increase in numbers of mothers of young children integrated into the labor force has stimulated a large body of research investigating the effects of maternal employment on children's personality development and more generally, on family structure. Interest in this issue is not limited to academicians. Politicians express concern for the welfare of very young children left in the care of nonmaternal providers, and concern for the ultimate outcome of a society which follows such a pattern. Parents worry about the quality and availability of alternative care, while policymakers call for employers to accommodate to these new circumstances with such plans as flextime and employer-sponsored child care. Moulton (1980) comments that since cultural change causes anxiety in proportion to its rapidity, it is not surprising that the sudden emergence of large numbers of women into the "outer world" will cause conflict and will affect everyone in both positive and negative ways until the changes have been integrated (p. 269).
In the past, issues such as these were viewed with less urgency, since those mothers who did work outside the home often postponed employment until their youngest child entered school, or they only worked on a part-time basis (Krogh, 1982; Hoffman, 1979). There were strong cultural expectations which influenced a mother's decision to remain at home during her children's earliest years. Most women were expected to remain at home and rear the children, since woman's unique and valuable contribution to society was viewed as that of giving birth and providing maternal care to her children. Not surprisingly, the role of "good" mother was to provide exclusive maternal care, at least until her children entered school. As Jessie Bernard notes (1974), for some women motherhood and paid work were pursued sequentially, without facing the problem of concurrently integrating the two roles. Russo (1976), in discussing the strength and influence of this perspective on woman's role, calls it the "motherhood mandate." Angrist (1969) suggests that from an early age, many women consciously or unconsciously prepared contingency plans for their lives. They believed that there would probably be distinct periods in their lives, each with different expectations and demands. During the early years of marriage, they would need to devote their primary energies to raising children, while at a later time a career and/or making money would become more important. This discontinuity of roles was taken for granted. Baruch (1967) studied achievement motivation in women during the early 1960s, and found lower levels of achievement motivation among women with very young
children. Patterns of expectations such as these are no longer characteristic for growing numbers of women. According to Hoffman's recent study (1979), maternal employment is now the modal pattern, and there is every indication that this pattern will continue (p. 859).

From 1965 through 1977, the number of employed mothers with children age six and under increased from 15 to 38 per cent, and projections for the future suggest that by 1990 more than half of this group will be part of the labor force (Hofferth, 1979). Of all groups of employed mothers, the most rapid increase in full time employment is occurring among mothers of infants. In 1977, more than one third of all mothers of infants in the United States were working outside the home (Grossman, 1978). By 1980, 42 per cent of all mothers of children three and under were employed outside the home (Children's Defense Fund, 1982). In 1982, Hock, Gnezda and McBride (Note 1) found that in a sample of 620 maternity ward patients delivering their first babies, 65 per cent planned to return to work before their child's first birthday. These current data provide clear indications that mothers of infants will be reentering the work force in significantly higher numbers during the coming decade. This trend implies increasing mother-infant separations on a daily basis. Concern over the effects of these separations continues to be a focus of research efforts.

Controversy in the literature is particularly intense on the subject of possible detrimental effects on infants who are separating from their mothers on a regular basis. John Bowlby theorized in his earlier writing (1951) that mother-infant separations may have serious
effects on the development of attachment between mother and child.

Robertson and Robertson's (1967) research reinforced Bowlby's hypotheses, although these studies were based on the psychological responses to mother absence, of children in highly stressful situations rather than routine separation events. More recently, White & Watts, (1973) and Fraiberg (1977) conclude from their research that a mother is the most potent force in the development of a one to three year old child, and they oppose the concept of full-time employment for mothers of very young children. However, much of the current literature (Hoffman, 1979; Hock, 1980) presents a positive or, at the least, a neutral view of the effects of mothers' employment on children's development.

Michael Rutter (1981) concluded that it may be more important for the child to have a happy and satisfied mother who enjoys her work outside the home, than to have a mother who stays home all day but is unhappy doing so and who is thus less emotionally accessible to the child. Belsky and Steinberg's (1978) review of the effects of day care found no detrimental impact on a child's intellectual or emotional development as a result of routine, short-term separations. Alison Clarke-Stewart (1982) reviewed the results of over two dozen studies on the effects of day care, and found no weakening of attachment between mother and child as a result of the child's day care attendance. An extensive review of over 200 studies conducted during the past 20 years, was recently completed by the National Academy of Science (1982). Titled Families That Work: Children in a Changing World, the authors concluded that there was no evidence of adverse
effects of mothers' employment on children, when quality child care was provided and a stable home environment was evident.

Although public perception of employed mothers is changing, there remains evidence of conflicting ideas about full time employment of mothers with infants. Hare-Mustin and Broderick (1979) found that in their sample of 177 female students and their parents, 50 per cent of the men and 32 per cent of the women believed that it is detrimental to children if their mothers work. A recent study of attitudes in a sample of over 1,000 New York City residents (Yorburg & Arafat, 1975) found general approval of a dual role for women (employment and motherhood), but many fewer respondents approved a dual role for women with very young children. In this urban sample of men and women under 30, single and college educated, 80 per cent of the men and 90 per cent of the women responded favorably to the concept of mothers working outside the home, but only 44 per cent of the men and 54 per cent of the women approved of employment for women with infants and preschoolers.

The effects of short-term separations have been extensively studied, not only in the area of employment-related separations but also as related to other situational and developmental issues. Researchers have examined parent-child separations caused by divorce (Hetherington, 1977), parent-child separations at time of entry into school (Bloom-Feshbach, 1979; Bloom-Feshbach & Gaughran, 1980) and the parent-adolescent separation process (Bloom, 1980). Regardless of the specific empirical or clinical focus of the studies, however, major emphasis has been placed almost entirely on the impact of that
separation experience on the child. Until recently there has been no systematic investigation of the extent or nature of maternal concerns about leaving her child. Effects of separation on the mother have rarely been viewed as centrally important, although there is strong research support for the belief that maternal characteristics and attitudes are associated with children's responses to separation (Hock, 1978; Hock & Clinger, 1981; Vaughn, Gove, & Egeland, 1980; Weinraub & Lewis, 1977; Breit, 1982). Hock (1976) found that a measure of maternal separation anxiety assessed through a home interview at infants' age of eight months was related to infant separation behavior in a laboratory setting at one year of age. A mother's worry and anxiety over leaving her child may also influence her own sense of competence and self-esteem (Hock, 1978; Hoffman, 1979).

Literature dealing with employed mothers (Hoffman, 1979; Paloma, 1972; Birnbaum, 1975) suggests that many employed mothers feel guilt and anxiety over leaving their children with alternative child care providers. Research conducted by Hock (1978) and by Hock and Clinger (1981) indicates differences in the degree of anxious responses to mother-child separations. Hock, Gnezda and McBride (Note 1) define this response as maternal separation anxiety; a mother's concern or worry associated with routine short-term mother-child separations. More specifically it involves the extent to which she feels sad, fearful or nervous about the separation, her concern with the child's distress related to the event, her beliefs about the importance of exclusive maternal care, her investment in work and her investment in the maternal role. In addition, it is related to
mother's attitudes toward her child's development of independence, and the role of separation in promoting that characteristic. A study by Hock, Gnezda and McBride (Note 1) is the only one which specifically describes and measures these concerns. In a sample of 620 employed and nonemployed first time mothers, the researchers assessed maternal separation anxiety one day after infants' birth, and found that 81 per cent of the mothers reported that they expected to worry during mother-child separations and 44 per cent anticipated guilty feelings about leaving their children in alternative child care. Although 49 per cent of the employed mothers reported that their jobs/careers brought them a high level of personal satisfaction, 88 per cent agreed with the statement that they would not regret postponing their careers to be home with their infants.

A major conclusion from these data is that mothers are ambivalent about leaving their infants to return to work. This conflict seems to be a significant part of maternal separation anxiety. Hock (1980) suggests that a woman who is highly invested in the maternal role but who is also employed, finds herself in a potentially upsetting situation. This incongruence may lead to feelings of inadequacy as a mother, and to a lowered sense of psychological well-being. As more mothers of infants join the work force, whether for reasons of financial need or for career satisfaction, more women will be caught between conflicting cultural and personal values, and as mother-child separations increase, it is likely that feelings of anxiety and guilt will intensify. This may be particularly true for women of lower socioeconomic status, who often must work in order to help
maintain minimum financial stability for the family. Alison Clarke-Stewart (1982) suggests that for women who have no choice and who must work for financial reasons, anxiety is significantly heightened by child development experts who advise or expect women with infants to remain at home for the good of their children.

The negative relationship between socioeconomic status and psychological distress has been well documented over the last 35 years (Langner & Michael, 1963; Bohrenwend, 1973). Recent research indicates that for employed women, education level is the specific socioeconomic indicator which best predicts stress and anxiety (Kessler, 1982). Kessler concludes, however, that it is important to examine the complex interrelationships between the factors which comprise socioeconomic status, including income, education and occupational status. Kamerman (Note 2) and Piotrowski (Note 3) note that employment is also a complex variable. Paid employment is not experienced in the same way by all working parents, and job satisfaction and attitudes seem to have an impact on children in the family; the extent of that impact is not yet clear. Piotrowski also states that we know much less about working class parents and the ways in which they view employment, than we do about middle class parental attitudes.

In order to help employed mothers deal with separation experience in an effective manner, additional information is needed about the nature of maternal separation anxiety as perceived by women from differing educational and occupational backgrounds and with differing working orientations. There is no study which specifically focuses on maternal separation anxiety connected with mother-child
employment-related separations among mothers of lower socioeconomic status. This study is designed to describe maternal separation anxiety as it is experienced by this group, and to compare those perceptions with maternal separation anxiety as experienced by women of higher socioeconomic status.

Statement of the Problem

This research will study the relationship between socioeconomic status and its co-variates and maternal separation anxiety, as it relates to short-term employment-related mother-child separations. It will also examine the relationships between socioeconomic status and its co-variates, and work orientation, maternal role investment and perceptions of quality of child care, as they relate to maternal separation anxiety. The objectives of this research are to:

I. Compare levels of maternal separation anxiety as related to employed mothers' socioeconomic status, IQ, education, income and age.

II. Investigate the relationship of maternal separation anxiety and socioeconomic status with work orientation, maternal role investment, perceptions of child care quality, and trait anxiety.

III. Examine the validity of the Maternal Separation Anxiety Scale (MSAS) and the Home Interview measures of maternal separation anxiety for employed mothers of lower socioeconomic status.
Research Questions

To meet these objectives, the following research questions will be explored:

1. Does mothers' socioeconomic status significantly relate to maternal separation anxiety, and if so, does this relationship remain stable from infants' birth to one year?

2. Does mothers' IQ significantly relate to maternal separation anxiety as assessed by the MSAS and the Home Interview?

3. Does mothers' educational level significantly relate to maternal separation anxiety as assessed by the MSAS and by the Home Interview?

4. Do mothers' and fathers' income levels significantly relate to maternal separation anxiety as assessed by the MSAS and by the Home Interview?

5. Does mothers' age significantly relate to maternal separation anxiety as assessed by the MSAS and by the Home Interview?

6. What is the relationship of mothers' IQ, education, mothers' and fathers' income and mothers' age, to SES?

7. Does awareness of separation as a significant issue vary by socioeconomic status and if so, what is the relationship of that awareness to maternal separation anxiety?

8. What are the interrelationships between the measurement of maternal separation anxiety using the MSAS, the measurement of maternal separation anxiety using the Home Interview, and socioeconomic status?
9. What is the relationship between work orientation and maternal separation anxiety?

10. What is the relationship between maternal role investment and maternal separation anxiety?

11. What is the relationship of work orientation to maternal role investment, and to socioeconomic status?

12. What is the relationship between mothers' perceptions of the quality of her child's care and maternal separation anxiety?

13. What is the relationship between mothers' trait anxiety as measured in the maternity ward and maternal separation anxiety?

14. What combination of study variables best predicts maternal separation anxiety?
CHAPTER II

REVIEW OF LITERATURE

Introduction

This review of literature will consider maternal separation anxiety from three perspectives: Spielberger's trait-state model of anxiety, Bowlby's ethological theory of attachment/separation, and the interaction of changing cultural expectations and women's individual characteristics and circumstances. A synthesis of these perspectives is necessary in order to develop a conceptual framework for understanding maternal separation anxiety as it is experienced by women of different cultural and educational backgrounds.

An initial discussion of the theoretical concepts regarding general anxiety will be followed by a consideration of the construct of maternal separation anxiety within that framework. Bowlby's attachment theory provides a rationale for the existence and salience of maternal separation anxiety, while an analysis of the impact of rapidly changing cultural expectations and values on employed mothers, provides an understanding of maternal separation anxiety as a factor in role conflict and resolution. Specifically, the employed mother's investment in the maternal role and her orientation to work and career will be reviewed. Following the presentation of a foundation for understanding the construct of maternal separation anxiety, issues surrounding the measurement of anxiety are also reviewed, since
this topic has a significant impact on the conceptualization of maternal separation anxiety. A final section will present a review of literature on socioeconomic status: its definition, usefulness as a variable and its measurement. These issues are pertinent to this study, since it investigates maternal separation anxiety as experienced by women of varying socioeconomic status.

Anxiety: A Theoretical Framework

Research on anxiety has expanded at an exceptional rate during the past quarter century or more (Zuckerman & Spielberger, 1976), but anxiety has been viewed as a fundamental and critical human emotion for centuries. James Kritzeck, of Princeton's Department of Oriental Studies notes that a medieval Arab philosopher Ala ibn Hazm wrote in an eleventh century treatise that he had constantly tried to find "one end in human actions which all men unanimously hold as good, and which they all seek. I have found only this: the aim of escaping anxiety..." (Kritzeck, 1956, p. 573). Rollo May's classic work The Meaning of Anxiety (1977) discusses the central role played by anxiety in fields as diverse as art, psychiatry and politics. Spinoza, Pascal and most particularly Kierkegaard were philosophers who wrote extensively about anxiety as a critical human emotion (Kierkegaard, 1844/1944). In the nineteenth century, Kierkegaard wrote about the place of Angst (anxiety) in existential thought, as an emotion which occurs as a person makes the transition from one's present way of being, to another and different future way of being. Kierkegaard believes that working through Angst offered the opportunity to fully realize one's
self. Goodman (1981) notes that contemporary psychologists such as Abraham Maslow (1962) and Goldstein (1940) have incorporated this concept into their theories of personality.

Our present understanding of the concept of anxiety is based in great part on the contributions of the writings of Sigmund Freud (1936). Unlike Kierkegaard, Freud conceptualized Angst (anxiety) as a negative, repressive paradigm involved with sexual dysfunction. Subsequently, however, his concept of anxiety evolved and became an essential focus of his comprehensive theory of human emotions. In 1926, Freud developed a signal theory of anxiety, describing it as an emotional response to situations which are perceived as potentially traumatic or harmful. In his later work, Freud suggested that loss or the threat of loss of a source of security and gratification is the primary stimulus for anxiety responses. "Missing someone who is loved and longed for is the key to an understanding of anxiety" (1926). Freud's theoretical approach to anxiety continued to change over the 50 years of his writing, and since that time many other theorists have continued to build upon, and sometimes to completely reject, his conceptions.

Contemporary psychologists who use an empirical or clinical approach to the study of anxiety do so from widely differing theoretical orientations. For example, studies by social learning theorists (Mischel, 1973; Bandura, 1977; Endler, 1980) focus, in Mischel's words (1971, p. 179) on "what the person does, rather than to infer what he has or is...." Neurobiological theories, on the other hand, (Gold et al., 1979; Goldstein, 1978; Selye, 1976) stress the
psychobiological mechanisms underlying anxiety and stress. Although there are numerous conceptual and methodological approaches to the study of anxiety, two major issues seem to be reflected in most of the writing on the topic. First is a concern with the role of cognition as an intervening or moderator variable in expressions of anxiety; second is the emphasis on anxiety as a multidimensional construct, either expressed as an enduring personality characteristic (trait) or as a situation-specific response (state), or both. The research of Lazarus and Averill (1972) and Levitt (1980) play prominent roles in clarifying the complex interactions between cognitive processes and anxiety responses.

Research on the dichotomous trait-state nature of anxiety has been a major focus for a majority of personality theorists, but Charles Spielberger's work (1972) has been the primary influence on the development and general acceptance of the Trait-State theory of anxiety. Spielberger's theory is conceptually and methodologically important, because it synthesizes a number of research threads into one construct, in particular highlighting the role of cognitive appraisal of situations as a trigger to expressions of latent trait anxieties. These characteristics make it especially pertinent as a theoretical framework for viewing maternal separation anxiety as a type of state anxiety.

Spielberger's Trait-State Theory of Anxiety

Spielberger's (1972; 1976) theory defines anxiety as a complex emotional reaction. His theory distinguishes and establishes
relationships between disposition toward anxiety as a stable personality trait (A-Trait) and anxiety as a transitory emotional state fluctuating in duration and intensity (A-State). Spielberger emphasizes the critical role played by cognition in triggering anxiety reactions. Elevated A-states occur, according to Spielberger, when an individual subjectively evaluates a situation as threatening, either to physical well-being or to self-esteem. Threats to self-esteem are considered to be more potent triggers than perception of physical danger. Anxiety states can be activated by perceptions of possible, imagined, impending or direct threats to the individual. A-state reactions are experienced consciously, generally characterized by feelings of nervousness, apprehension or tension. Physiological reactions often accompany elevated anxiety states, with the extent of felt anxiety directly dependent on the degree of threat perceived to be inherent in a situation.

Spielberger's Trait-State anxiety theory stresses the importance of individual personality traits, unique internal (e.g., feelings, needs, attitudes) and external (e.g., specific situations) factors as well as past experiences, in influencing an individual's cognitive assessment of situations. Persons with higher levels of A-Trait anxiety are more likely to perceive a wider range of situations as threatening, leading to more frequent elevated A-States, occurring for longer periods of time and more severely than for people with lower levels of A-Trait anxiety. Spielberger suggests that repeated stimuli leading to A-State anxiety lead to development of coping styles and defense mechanisms with which individuals avoid, reduce or eliminate future anxiety states. Figure 1 pictures Spielberger's model, showing
his theory of the process by which individuals experience anxiety.

While an external stimulus (situation) is evaluated based on the person's disposition toward anxiety (A-Trait) and his/her feelings, attitudes and needs (internal stimuli), cognitive feedback from past anxiety responses will affect appraisal of the degree of threat inherent in the present situation (if the person has had previous experience with the situation). If the person has developed coping strategies for dealing with such a situation, these too will influence the ongoing cognitive appraisal.

Once the situation is appraised, the individual responds in one of the following ways: If the situation is evaluated as nonthreatening,
behavior is not influenced by anxiety. If, however, the situation is perceived as threatening (either to safety or to self-esteem), it will heighten anxiety and trigger an A-State anxiety response. The response will differ depending on whether the person has developed coping and defense mechanisms to decrease his/her anxiety level. In the absence of defense mechanisms or coping strategies, the individual will express anxious behavior. It is possible for the A-State reaction to activate the individual's defense mechanisms, thus reducing the impact of anxiety on his/her behavior. A person may develop predictable patterns of responses to a situation, which may lead to an incorporation of coping strategies into his/her evaluation of the stimulus and allow for redirection of responses away from A-State arousal. The stimulus thus activates a learned behavioral response which ultimately eliminates anxiety connected with a specific situation.

It is clear that Spielberger's Trait-State anxiety theory relies heavily on the interactions of stable individual differences, cognitive appraisal and past experiences in understanding anxiety reactions and behavioral responses to situations. Spielberger (1976) also suggests that the main task of his theory is to discover specific aspects of external stimuli which lead to different levels of A-State responses in individuals who are prone to different levels of trait anxiety. Other researchers (Magnusson, 1978; Endler, 1980) also note the need to increase investigations of the psychological significance of situations, both in a person's perceptions of them and reactions to them. According to Endler (1980), it is crucial to isolate the
types of situations that make individuals anxious and the factors in those situations which they perceive as threatening. In this context, a study of the specific situation of mother-child separation and the maternal response to that situation seems useful.

Maternal Separation Anxiety as A-State Anxiety

Maternal separation anxiety involves a woman's interpretation of the implications of separation for herself and for her child (Gnezda, Note 3). It occurs in response to actual or anticipated separation experiences (Hock, 1980; Hock, Gnezda & McBride, Note 1) and is expressed as nervousness, worry or guilt. Maternal separation anxiety has been defined (Hock, Gnezda & McBride, Note 1), as a transitory emotional state associated with situations requiring mother-child separations, thus typifying Spielberger's A-State anxiety. The degree to which a woman perceives mother-child separations as threatening to her child's well-being or to her own self-concept is associated with the degree to which she experiences separation anxiety. According to Spielberger's theory, threats to self-esteem carry the strongest possibility for eliciting A-State reactions, so it follows that a woman whose self-concept is primarily centered in her maternal role perceives mother-child separations as a greater threat than a woman who is less invested in motherhood, and she will therefore experience more intense separation anxiety.

In order to understand the different levels of anxiety experienced by women in mother-child separations, it is necessary to investigate characteristics associated with the construct. Spielberger suggests
that stable individual differences, internal values and beliefs, previous experience with similar situations and the nature of the event all contribute to an individual's cognitive appraisal of the degree of threat inherent in a situation. Specifically, for a woman assessing employment-related separations from her infant, this may involve her general (trait) anxiety level, investment in motherhood and/or work, attitude toward nonmaternal care, her cognitive ability and socioeconomic status. The woman's evaluation will result in a corresponding level of maternal separation anxiety, thus influencing actual separation-related behaviors. An understanding of the reasons why mother-child separations might be perceived as threatening to a mother can be found in aspects of ethological theory.

Maternal Separation Anxiety Interpreted Through Attachment Theory

Although maternal separation anxiety as a construct is only now being defined through exploratory and descriptive research, numerous studies (Hoffman, 1979; White, 1972; Birnbaum, 1975, Harrell & Ridley, 1975; Walker & Walker, 1980; Corter & Bow, 1976) do report that working women experience varying degrees of anxiety and guilt over leaving their children in order to return to work. The ethological theory of John Bowlby provides an heuristic basis for conceptualizing separation anxiety of both mother and child.

Bowlby's background and major theoretical orientation is psychoanalytic, but his Freudian training converged with cognitive psychology and with Darwinian ethological perspectives to form a theory of mother-infant attachment. Bowlby first presented his attachment
Bowlby's attachment theory, a child forms a reciprocal and enduring affective bond with his/her primary caregiver, who is most often the mother. The attachment relationship is an instinctive, biologically programmed behavior system designed to ensure species survival. It is the basis from which the child receives protection from harm, comfort and security, and a foundation for exploration. Attachment behaviors are those which promote proximity or contact (Ainsworth & Bell, 1970). An infant initiates attachment behaviors which achieve closeness to the mother and resist separation from her, such as smiling, vocalizing, looking and clinging (Sroufe, 1977; Rajecki et al., 1978). As the infant's attachment behaviors are activated, so too are the mother's. The mother responds to the child's needs by providing protection, physical closeness and nurturance. The maintenance of proximity is therefore a mutual endeavor.

...it is most unlikely that on an ordinary day distance between the two will ever exceed a certain maximum. Whenever it does so, either one or other member of the pair is likely soon to act in such a way that distance is reduced. On some occasions it is the mother who takes the initiative...she calls, or goes to where the child has got to; on others the child may take the initiative either by scampering back to mother or by crying. (Bowlby, 1973, p. 236)

Bowlby suggests that proximity and affectionate interchanges are pleasurable for both the infant and the mother, whereas distance and expressions of rejection are equally disagreeable and painful for both (p. 242). A child's distress over separation from mother engenders corresponding separation distress from the mother (Bowlby, 1969;
Ainsworth et al., 1978; Sroufe, 1979). Separation distress in the child takes different forms depending on the age and development of the child (e.g., crying or clinging in one child, avoidance of contact in another). Anxiety and distress occur when a child's primary attachment figure is physically absent, unresponsive or otherwise inaccessible, thereby removing the source of protection, comfort and security for the child. Since attachment involves a mutually intense relationship, mothers also experience anxiety over separation because it interferes with the ability to provide protection through proximity, security through accessibility, and comfort through physical closeness. Mother-child separations also interrupt the intimacy expressed during mother-child interactions and decrease the mother's ability to share and encourage the child's exploration and discovery of the world. Therefore, it is likely that maternal separation anxiety is a natural consequence of mother-child attachment. Bowlby (1969) points out that separation is difficult for both mother and child and, from an ethological perspective, it is meant to be. Group cohesiveness for both the infant and the adult of the hunting and gathering group was essential to survival. The initial motivating mechanisms are, therefore, aimed at discouraging separation (Bloom, 1980).

Bowlby's ethological theory, which states that a human infant requires an emotionally close, nurturant relationship with a primary caregiver (usually the mother) in order to become a secure and competent adolescent and adult, portrays that relationship (attachment) and loss (separation) as the two experiences which are most formative for childhood and later life. Bowlby's theory of attachment and loss
has had a major influence in research related to the mother-child relationship, and provides a biological and psychoanalytic basis for understanding both maternal and child separation distress. However, Bowlby also recognized the great variation in relationships due to the antecedent variables which both mother and infant bring to this social system. He acknowledged that:

...What a mother brings to the situation is, however, far more complex: it derives not only from her native endowment but from a long history of interpersonal relations within her family of origin (and perhaps also within other families) and also from long absorption of the values and practices of her culture. An examination of these many interacting variables, and of how together they produce the varieties of maternal behavior we see, lies beyond the scope of this work. (Bowlby, 1973, p. 342)

Thus, although ethological theory provides a phenotypical explanation for the presence of maternal separation anxiety, we need to look to other sources for an understanding of how and why contemporary societal factors influence individual maternal concerns about separation.

Culture and Women's Roles

Trait-State anxiety theory provides a basis for conceptualizing maternal separation anxiety as A-State anxiety, and Bowlby's attachment theory clarifies the reasons why mother-child separations may be potentially threatening to a mother. But in order to recognize and fully understand the dimensions of maternal anxiety over leaving her child, it is important to study the sociocultural factors which influence women's perceptions of the dual roles inherent in being an employed mother. In particular, it is important to look at the impact of culture on a woman's cognitive appraisal of potentially anxiety-producing situations.
Averill (1976) suggests that biological bases for emotional responses such as anxiety only contribute elements to, and set limits upon, the social construction of emotional behavior. He believes that emotions are as much a product of complex cognitive processes as are other products of our culture (e.g., religion, art, science, etc.). Sociocultural determinants of thought are also relevant to emotional processes (p. 126). A strong focus of current research efforts on stress and anxiety is the emphasis placed on individual cognitive appraisal of life events, rather than on efforts to categorize specific events or situations as universally stressful (Coyne & Lazarus, 1980; Spielberger, 1972; Beck, 1972; Wills & Langner, 1980). Elements of our culture may contribute to the salience of the anxiety mothers feel about short-term separations from their children. An examination of selected factors will advance our understanding of the cognitive appraisal process suggested as a determinant in mothers' perceptions of separation experiences as threatening or nonthreatening to self-esteem. Two major contributors are hypothesized to be: 1) cultural expectations associated with the maternal role, and 2) cultural expectations associated with women as members of the work force.

Maternal Role Investment

According to Bernard (1974), nearly all women want to have children and nearly all anticipate that motherhood will be part of their lives. Bernard also contends that our culture defines parenting as the appropriate top priority for women. A woman's primary personal investment is placed in her maternal role, and from it she finds her major source of fulfillment. However, research studies present
conflicting results on the pervasiveness of these traditional attitudes toward parenthood. Some literature suggests that to one extent or another, the idealized perception of motherhood continues to be the prevailing mode (Paloma, 1972; Yorburg & Arafat, 1975; Schwartz, 1980; Hoffman, 1979; Gilbert, Holahan & Manning, 1981), while other studies portray erosion of the primary role of parenthood in American thinking (Blake, 1980; Hare-Mustin & Broderick, 1979). Thomson (1980) found in a sample of 378 white married women with young children, that the age of the child determined a woman's plans to work outside the home, reflecting the belief that mother-child separations are harmful to young children. Moore & Hofferth (1979) suggest that in spite of the trend toward smaller families, most women still want children. These authors contend that motherhood is often viewed as a reaffirmation of a woman's femininity, which has been challenged by employment and success patterns. On the other hand, a survey released in May, 1983 of attitudes and opinions of respondents to a questionnaire published by a high-circulation home and garden magazine, shows that of 201,320 respondents, 83 per cent thought that it was not necessary to have children in order to have a fulfilling and happy life; 84 per cent of the respondents were women (What's Happening to American Families, 1983). Although this was not a randomly selected sample, it is an interesting indicator of current trends in thinking about parenthood.

Work Orientation and Maternal/Employment Roles

The impact of rapid social and economic changes may be particularly stressful for women who hold traditional views about
motherhood but who are also employed outside the home, either because of economic necessity or because of investment in a career. The increased number and variety of options open to women may result in anxiety for some, as women must choose between their traditionally child-oriented role and the new roles available to them (Moulton, 1980). Women with traditional views about mothering are now confronted with nontraditional ideas which encourage women to be productive and to achieve fulfillment through paid employment and careers (Pifer, 1979). Hock, Gnezda & McBride (Note 1) report that of a sample of 332 new mothers, 67 per cent planned to return to work before their infants' first birthdays. However, these same women expressed traditional views concerning the importance of exclusive maternal care for infants. The majority of the sample agreed that they (rather than other caregivers) could best meet their child's needs and if given a choice between full time employment and staying home with their infants, a majority also said they would prefer to stay home. Hock, Gnezda & McBride suggest that mothers of infants are especially ambivalent about their decision to return to work. In reporting findings of a longitudinal study examining maternal separation anxiety, Hock (1980) also suggests that the extent of anxiety is related to career orientation and to beliefs about exclusive maternal care. Women who are highly career-oriented and are low in their perception of the child's need for exclusive maternal care tend to express less anxiety over separation.

Hock's (1980) research also examined separation behaviors of mother-child pairs using Ainsworth's Strange Situation Behavior
Instrument (SSBI). These observations suggest that maternal separation anxiety is reflected in the child's separation behavior and is related to the nature of the mother-child relationship. Hock found that infants of working mothers who score high on exclusive maternal care exhibited less effort to maintain proximity with their mothers. She suggests that this behavior may indicate that the mother is experiencing conflict between the belief that she should be caring for her infant herself, and her inability to do because of her work status. Hock further suggests that maternal separation anxiety contributes to this conflict, and as a result of the mother's internal ambivalence, the security of the mother-child relationship is impaired. Therefore, children of these women were less likely to seek comfort from their mothers during reunion (Hock, 1980).

Research by Harris (1979) describes common reactions of working women who leave their children with alternate caregivers. Mothers worry over the quality of their children's care and feel regret over separation from them. Working women worry over damaging the emotional development of their children, and report unhappiness over missing their children. Birnbaum's (1975) study of gifted college graduates who became mothers and career women, found similar guilt feelings about lack of involvement with their children, and fears that separations will hamper their children's development.

A review of studies indicates that even for working women who are highly career-oriented, motherhood is highly salient and role conflicts are frequent. Paloma (1972) found that even for these women, the
maternal role was the more important one when their children were very young.

Jerome Kagan (1978), in discussing the ambivalence of modern American women regarding employment for themselves and nonmaternal care for their children, says the following:

The supposition that infants and mothers must remain together during a child's infancy is strong in current American thought...given the combination of ambiguous evidence, the culture's affection for the centrality of the child-mother bond, and the dominant psychological theory of the century (Bowlby's), it should not be surprising that most mothers would worry about sending their infants to a day care center. Although their apprehension may be legitimate, it gains its validity from intuition, not from sound evidence. (p. 167)

Serious role-related conflicts may result for some, but not all women who pursue paid employment and motherhood at the same time. Role conflict is an important factor in sociological studies of family systems and in sociological theories of stress and anxiety. Kaplan (1980) points out (as does Spielberger, 1972) that life events are experienced subjectively as desirable or undesirable, and if new roles inherent in those events disrupt the individual's normal adaptive/coping systems, frustration of values and failure to achieve personal expectations may result. Maternal employment may be seen as one of those life events. Sociocultural theories of subjective distress postulate that culture change, that is, change in the social world and in the structure of social relationships, leads to heightened levels of anxiety and distress for those persons who are not equipped to cope with new situations and who therefore assess the changes as threatening.
The psychoanalytic view of changing roles and expectations is discussed by Goodman (1981), who describes it as an experience of confusion about "who one might be becoming" (p. 88), and worry over how the future will be reshaped by this new situation. Goodman suggests that this anxiety (often unconscious) becomes part of the transition stage of identity formation; that anxiety occurs when one's present sense of identity is challenged. Adoption of new social roles is not sufficient to alleviate anxiety or to achieve a sense of identity through those roles. Individuals need to establish a hierarchical integration of roles (Erikson, 1968). Thus, for women who attempt to fill the dual roles of employment and motherhood, anxiety is lessened if those roles are effectively integrated into a new ego identity.

Bronfenbrenner (1979), in presenting his ecological theory of human development postulates that development never takes place in a vacuum, but is always embedded and expressed through behaviors in a particular environmental context. Bronfenbrenner describes this continual process as ecological transition, occurring whenever a person's position in the ecological environment is altered as the result of a change in role, setting, or both (p. 26). Therefore, a new mother who has decided to return to work outside the home is experiencing an ecological transition, not only to motherhood but to the new role of employed mother.

In all these theoretical approaches to development and change related to roles and identity, an important factor is the individual's cognitive appraisal and affective response to his/her adoption of new
roles in new situations. A woman may perceive the role of working mother as threatening to her self-esteem (thus increasing her separation anxiety) if her role is incongruent with her present value structure. For example, a woman who is employed but believes a mother should stay home to care for her child may experience higher anxiety. This may also be true for the homemaker who finds herself in an incongruent role because she would prefer to work outside the home. That is, employment preference may be a more important factor than employment per se, as an influence on mother-child separation anxiety.

Hock (1978; 1980) found that working mothers who were highly work oriented (were in a consistent situation) were less likely to be anxious over mother-infant separations, less likely to perceive infant separation distress as a result of mother absence, less likely to interpret infant discontent as a personal affront, and less likely to be concerned about nonmaternal care, than those mothers who were in an inconsistent situation (working but preferring not to be).

In research with 185 working class mothers in Great Britain, Parry & Warr (1980) found that employed and nonemployed mothers did not differ significantly in life satisfaction. Parry & Warr suggested that this finding may have occurred because a high proportion of women in each group had chosen that status, thus making employment preference and employment status congruent.

The previous discussion has focused on the effects of maternal employment status and preference, and investment in the maternal role, on a mother's perceptions of mother-child separations as potentially threatening and anxiety producing. The following section presents a
review of some of the issues regarding the measurement of such anxiety, a topic especially pertinent to an investigation of maternal separation anxiety among women of lower socioeconomic status.

Measurement of Anxiety

Measurement of anxiety is made especially difficult by the vagueness of the operational definitions of its properties. Anxiety is a widely used concept, but there are numerous theoretical orientations to the construct, leading to equally numerous definitions of the nature and measurement of anxiety. Theoretical orientations include social learning, neurobiological, ethological and psychoanalytic, and the measures chosen to assess anxiety reflect each theoretical bias.

A major area of importance to the researcher attempting to understand the construct of anxiety is the trait (global) and state (situation-specific) dichotomy. In 1972, Spielberger noted that much more emphasis had been put on the development of measures of personality traits than on the evaluation of psychological states. Now, however, those positions are reversed, due in great part to the emphasis of social learning theorists on the value of situation-specific anxiety constructs. Social learning theorists' approaches to anxiety focus on the belief that it is much easier and more useful to gather accurate information about the nature and function of anxiety by analyzing specific stimuli (e.g., situations) and the interactions with them, than by dealing with the construct in global (trait) terms (Borkovec, Weerts & Bernstein, 1977). Spielberger's (1972) Trait-State theory is valuable because it measures anxiety on both dimensions, and assesses the interactions between trait and state.
In a survey conducted by Cattell and Schier (1961) they identify over 120 specific procedures used to measure anxiety (as of 1960). In a more recent review, Borkovec et al., (1977) note 191 references made to different rating instruments. A major result of such intense theoretical and research activity has been to describe the construct of anxiety as a complex pattern of behavior (Borkovec et al., 1977), rather than a unitary characteristic. This complex construct is now viewed as multidimensional as well, and is measurable by three different methods.

Behavioral measures have been designed to reflect the direct and indirect effects of physiological or emotional activity on behavior, and include time sampling, analysis of speech acts, etc. Physiological measures of anxiety are assumed to assess autonomic reaction to stress, and include palmar sweat response, heart rate, EEG readings, etc.

Self-report measures are the most popular methods used to assess anxiety. The focus of these measures is the cognitive-phenomenological component of anxiety, that is, the degree of anxiety experienced by the individual. Self-report measures are developed in the form of questionnaires, rating scales, checklists, and interviews. The general term for self-report measures is "inventory."

Measures used to assess behavioral, physiological or cognitive manifestations of anxiety are each vulnerable to different types of measurement error. Physiological measures are the least effective devices, since different autonomic responses are signals of anxiety for different individuals. One person may exhibit anxiety through
trembling or breathing heavily while another only blushes or perspires. These individual differences lead to instability and unreliability of measurement and, as Levitt (1980) points out, the equipment used to measure anxiety can be stressful in and of itself.

The use of behavioral measures is complicated by the difficulty of developing a reliable observational system. Researchers often use laboratory situations in which anxiety is artificially induced, leading to criticisms that subjects may not perceive the contrived situation as stressful or that the expressed anxiety levels are due to experiment anxiety rather than to the desired stimulus.

Self-report evaluations are highly popular, probably because, as Zung and Cavenar (1980) say, they take a short time, they are easy to score and they offer information only the subject can provide. Their reliability is greater than that of physiological measures or projective tests, meaning that they are less affected by extraneous factors in the experimental situation (Levitt, 1980). Although advantages of the self-report technique probably outweigh the disadvantages, drawbacks need to be considered. The most serious concern is that an individual's verbal response may not be an accurate report of his emotional state, either because his/her verbal ability is low or because incorrect responses are provided when they are perceived to be socially desirable. Wilde (1972) points out that the "inventory premise" underlies the adoption of self-report measures; i.e., the assumption that people are willing and able to correctly describe their own feelings and behaviors. Self-report questionnaires are also conducive to habitual response sets and inexact or confusing test
items. Mischel (1971) cites these criticisms and others in his discussion of the generally low predictive validity of self-report measures of personality in general and of anxiety scales in particular. However, these criticisms may be more pertinent to measures of trait anxiety than to state anxiety.

Problems in Interpretation of Anxiety Measures

Although the three methods of measuring anxiety assess three different manifestations of anxiety (i.e., cognition, behavior and autonomic response), classic concerns about the validity of measurement would suggest that concurrent data from the response channels should correlate (Cronbach, 1960). However, correlations between self-report, behavioral and physiological measures are rarely significant. Lang's (1968) study comparing concurrent self-report, interview ratings and behavioral observations of anxiety related to fear of snakes, found that the intercorrelations ranged from -.04 to .70. Lang suggests that the different measures produced different estimates of the intensity of anxiety. Borkovec et al., (1977) surveyed five studies of anxiety, and concluded that correlations within a domain were more frequently significant than correlations between domains. For example, correlations between self-report measures were all significant, but those between behavioral and self-report measures were rarely significant. Borkovec et al., conclude that different instruments within and especially between response domains are measuring different aspects of what is called "anxiety" (p. 403). Researchers also attribute low correlations between measures as an indicator
of the role of individual differences in patterns of anxiety response and of the complex, multidimensional character of the construct (Levitt, 1980; Borkovec et al., 1977).

A chronic problem in the interpretation of social and behavioral measures of constructs such as anxiety is the issue of test validity (Borkovec et al., 1977; Rezmovic et al., 1981; Messick, 1975). This problem is not a new one. Seminal writings by Cronbach and Meehl (1955), Campbell (1960), and Campbell and Fiske (1959) have defined and clarified the four major categories of validity, i.e., predictive, concurrent, content and construct. The original definitions of types of validity have been debated regularly during the past 30 years, and controversy over their interpretation and use continues. The validity issue has relevance for this study, since one of the research questions asks "What are the interrelationships between measurement of maternal separation anxiety using the MSAS (self-report questionnaire) and using the Home Interview" (another form of self-report). Answering this question depends in part on the selection of an appropriate form of validity for investigation. The following pages present brief descriptions of each type of validity.
FOUR MAJOR TYPES OF VALIDITY

PREDICTIVE VALIDITY
(from Cronbach & Meehl, 1955)

Investigator primarily interested in some criterion which he wishes to predict.
Investigator administers the test, obtains independent criterion measure on same subjects and computes correlations. If criterion obtained after test given, it is predictive validity.

CONCURRENT VALIDITY
(from Cronbach & Meehl, 1955).

If test scores and criterion determined at same time, it is concurrent validity.
(from Cronbach, 1970)
Two kinds of information obtained at nearly the same time. Predictive and concurrent the same thing (e.g., correlate new test of mental ability with Stanford-Binet)
Studied when one test is proposed as substitute for another.
Criterion behavior the emphasis (criteria can be school grades, success in training program, etc.)

CONTENT VALIDITY
(from Cronbach & Meehl, 1955)

Establish deductively, by defining a universe and sampling from it.
Compares test tasks with content he wishes to know about. Question is, "Does it test what it purports to test?"
CONSTRUCT VALIDITY

(from Cronbach, 1970)
Methods to investigate construct validity
a. correlations between two tests presumed to measure same construct.
b. look at group differences on same test.
c. evidence of internal homogeneity.
d. stability of test scores.

(from Colby et al., 1983)
The fit of data obtained by means of the test, to primary components of its theoretical definition is construct validity.

(from Messick, 1975)
The process of marshaling evidence in the form of theoretically relevant empirical relations to support the inference that an observed response consistency has a particular meaning.
Construct validity has two major requirements, convergent evidence and discriminant validity.
Much more general concept than predictive or concurrent validity, which are specific to particular criterion variables as well as to particular groups or settings, and more than content validity which is specific to particular domains, tasks or observation conditions.

(from Cronbach & Meehl, 1955)
Test as a measure of attribute or quality which is not operationally defined.
Problem is, "What constructs account for variance in test performance"
When investigator believes no criterion available to him that is fully adequate to define the quality to be measured, investigates construct validity.
Construct validity involved in answering questions such as "To what extent is this test of intelligence culture-free?"
Trait or quality underlying test is of central importance. Proposed interpretation of instrument generates specific testable hypotheses which are a means of confirming or disconfirming the claim—then construct validity.

(from Cambell, 1960)
Trait validity a type of construct validity; need evidence of convergence between highly independent measures, as well as discriminant validity.
Nomological validity the other type of construct validity (less commonly appraised)—how construct fits into larger theoretical network.
An examination of the descriptions of types of validity suggests that construct, rather than concurrent or predictive validity is the appropriate concept for investigating the question of the correlation between two methods used to assess the same hypothesized construct (i.e., maternal separation anxiety). There is no accepted criterion against which the scores and ratings are to be predicted, but there is the attempt to gather evidence of convergence between measures against a construct.

Colby, Kohlberg, Gibbs & Lieberman (1983), in discussing the validity of their measure of moral judgment, suggest that the appropriate validity concept for a developmental measure is construct validity, not prediction to an external criterion. Messick (1975) notes that the concern in construct validity is to account for consistency in item response (or behaviors), rather than to explain a single behavior or item response. Total scores or subscores are typically used to summarize the commonalities, as opposed to treating items as conglomerations of specifics (p. 955). This analysis is the one used with both measures in this study.

Another important issue in interpretation of measurements is the confounding relationship between traits and their measurement methods. Rezmovic and Rezmovic (1981) describe this as a problem, because each method used to assess a construct is actually a trait-method unit in which "observed variance is a combined function of variance due to the construct being measured and the method used to measure that construct" (p. 62). Messick (1975) and Rezmovic et al., (1981) cite Campbell and Fiske's (1959) landmark analysis of the use of a multitrait-multimethod
approach to construct (trait) validity. Campbell and Fiske suggest that by devising a correlation matrix of all multitrait-multimethod correlations, and noting that two methods of measuring the same trait should correlate more highly than measures of different traits obtained by the same method, contaminating method variance can be parceled out, thereby allowing more precise identification of convergence of valid variance. The researcher can then assess not only convergence between similar methods (in this case, self-report measures) intended to measure a behavior or trait, but also between dissimilar measurement methods assessing the same behavior or trait (Nay, 1977).

Rezmovic et al. (1981) in their analysis of approaches to construct validation, discuss their continuing difficulties with explaining method variance in study results. The authors found that method-specific influences did affect correlations between traits, but did not by themselves produce the discrepant patterns. A general personality factor (measured by the PRF) and other as-yet unknown factors contributed to the variances. They suggest that the measures they used tapped several other dimensions than were intended, thus casting doubt on the construct validity of the observed traits. Confirmatory factor analysis (Joreskog, 1979), is suggested as the additional analytic procedure needed to adequately assess multimethod data. Rezmovic et al. (1981) add the comment that "While exploratory studies can generate theories about the underlying structure of data, they are not well-suited to test specific hypothesis about construct validation" (p. 71).
Measurement of Maternal Separation Anxiety

Separation anxiety in young children has primarily been measured by the observation of the child's overt distress, and specifically by the use of the Strange Situation Behavior Instrument (SSBI) developed by Ainsworth & Wittig (1969). In adolescents and adults, separation anxiety has most often been assessed by projective measures (Hansburg, 1972; Breit, 1982). The concept of maternal separation anxiety, as utilized in this study and referring to a mother's nervousness, worry or guilt associated with brief separations from her young child, is not a well-defined concept in empirical research. Assumed to be a transitory emotional state associated with situations requiring that a mother be separated from her child for short periods of time, maternal separation anxiety may be considered a form of state anxiety as defined by Spielberger (1972). Within this context, the measurement of maternal separation anxiety has not been previously addressed. In order to focus on the maternal perspective of mother-infant separation, Hock, Gnezda and McBride (Note 1) developed a 35-item Likert-type questionnaire to specifically assess maternal concerns and feelings related to separation. The Maternal Separation Anxiety Scale (MSAS) was designed to include three underlying dimensions: the presence of maternal worry, sadness and guilt associated with separation; anxiety related to the mother's beliefs about separation promoting or inhibiting the development of the child's sociability and independence; and anxiety related to the mother's interpretation of separation and impinging on her ability to balance her maternal and employment roles and responsibilities. Gnezda (Note 4) has
established construct validity of the MSAS with interview ratings of maternal separation anxiety \((r=.71)\). In her investigation Gnezda established relationships between the MSAS and interview ratings of maternal separation anxiety, with the related variables of maternal role investment, career investment and trait anxiety. McBride's (Note 7) study, using the same measures of maternal separation anxiety (MSAS and interview) as well as a behavioral measure of maternal separation anxiety, established the following correlations: Attitude Toward Non-maternal Care measured with Interview and with self-report questionnaire, \(r=.42\); Factor 1 of the MSAS (maternal separation anxiety) and Factor 1 of the Interview, \(r=.55\). The findings of the Gnezda and McBride studies lend support to the construct validity of the MSAS and Interview measures of maternal separation anxiety. This study will assess the construct validity of the measures with a working class sample, in contrast to the representative sample used by Gnezda (Note 4) and McBride (Note 7).

**Home Interview**

A semi-structured interview will be conducted concurrently with the administration of the MSAS inventory, thus allowing for investigation of construct validity between two methods within the same domain (self-report measures). The interview schedule originally developed by Hock, Gnezda and McBride (Note 1) is used, with the addition of two new scales generated by the primary researcher on this study. Factors on the Home Interview correspond to MSAS factors.

The internal organization of the interview scales and the method of conducting the interview have been developed using an adaptation
of a method developed by de Rivera (1981). de Rivera conceptualized clinical interviews as a method which allows the interviewer to "map" the personal experiences of the interviewee. de Rivera calls his approach a "conceptual encounter," describing it as a method which promotes descriptions of the precise structures of a person's experiences (e.g., maternal separation anxiety).

Conceptual encounter refers to an encounter (similar to Riegel's (1976) concept of dialectical interaction) between the investigator and a person who has agreed to act as a research partner through her willing participation in the interview. In this case the research partner is the mother being interviewed. The investigator is attempting, through the conceptual encounter (i.e., clinical interview) to fully understand an aspect of human experience by anchoring the understanding in the interviewee's behavioral description of the experience and in her perceptions of the experience. The respondent is first asked to respond to a hypothetical situation in which a new mother is beginning a new job and is leaving her infant with a babysitter. The mothers respond to a nonthreatening, generalized series of questions about a hypothetical woman in this situation, rather than to questions about her own feelings in that situation. The researcher then asks questions about the mother's feelings about work, separating from her infant, and motherhood. The researcher continues to probe and attempts to reach understanding of the responses, until each understands the other's perceptions. de Rivera views the dialectical interchange between researcher and "research partner" as the heart of his method. It can produce more precise, in depth conceptualizations
for the researcher and new understandings of her feelings about leaving her infant, for the mother. The dialectical process continues through the interview, with investigator and interviewee working together to build a picture of maternal separation anxiety as perceived by the mother, and to build a better understanding of the concept for both interviewer and respondent.

The interview method was chosen for two reasons. First, it is hypothesized that an interview format conducted by an experienced, sensitive researcher will elicit accurate, thoughtful appraisals of maternal separation anxiety and related issues from mothers lower in SES, education and income. An interview is particularly effective when all contacts between interviewer and subject, beginning with the initial telephone or personal contacts, are designed to establish a comfortable and trust-based relationship. In addition, the structure of the interview and the level of vocabulary used in interview items are organized around this principle. It is felt that the "conceptual encounter" method of clinical interviewing will enhance the effectiveness of the interview, based on these goals.

It might be expected that middle class interviewers are less successful in interactions with working class mothers, but this possible methodological drawback may be largely overcome through appropriate interviewer interaction technique, and a clear understanding of the goals of the interview. Komarovsky (1967), in her classic case study of blue collar marriages, was also concerned with this issue. She found, contrary to expectations, that the blue collar women were remarkably trusting and open in their responses to her
questions, some of which were highly personal. Women, much more so than their husbands, did not seem to be ill at ease during the inter-
views, nor did they seem to indicate in any way that they perceived the investigator as an "expert" or someone to whom they would give socially desirable responses. Komarovsky (1967) notes that they "seemed to be less impressed with academic status than many of the college respondents in my earlier studies" (p. 15). Komarovsky also observed that the self-conscious awareness that she found when inter-
viewing college educated, middle class women was not found with blue collar women. There were no comments such as "Don't you think so?" or "I suppose you'll think I'm stupid, but...," which were frequent among middle class women. Thus, Komarovsky felt that there was no apparent difficulty with the discrepancy in social class between interviewer and subject.

The second reason for choosing an interview measure of maternal separation anxiety is for its utility in construct validation of the MSAS for use with a working class sample. MSAS scores are obtained at two periods in time and the interview is planned to be conducted concurrently with the completion of T MSAS data, by the same group of subjects. This multimethod approach allows for investigation of construct validity issues. Anastasi (1983) suggests that:

Interpretation of constructs or traits identified through factor analysis in groups with differing experiential backgrounds requires a multimethod approach. For such purposes, standardized testing and statistical analyses need to be supplemented by such procedures as field studies, clinical investigations (underlining added) naturalistic observations and controlled experiments. (p. 178)
This study, using a multimethod approach, investigates maternal separation anxiety as perceived by women of different cultural and experiential backgrounds, and in order to clearly delineate these differences, a final section of this chapter provides a review of socioeconomic status as it is defined, utilized and measured by sociologists and psychologists. Factors such as cognitive ability, education, income and SES may be important determinants of the coping strategies which Spielberger (1972) suggests influence the presence or lack of state anxiety, and these factors will be highlighted in the following discussion.

**Socioeconomic Status: Nature and Measurement**

For the past 50 years, social class/socioeconomic status has held an important position among variables included in studies of social phenomena. Strong interest in class and status effects has been sustained in a number of disciplines besides psychology (e.g., sociology, education, anthropology and linguistics). Classic descriptive studies conducted 40 to 50 years ago (Lynd & Lynd, 1929; Warner et al., 1941; Davis & Havighurst, 1946) stimulated a large body of research on social class in relation to child-rearing practices, family structure, socialization and personality. During the 1950s extensive studies such as Kohns' (1959) sociological investigation of blue collar and white collar family value systems, Maccoby & Gibbs' (1954) psychological investigation of social class differences in child-rearing, and Sewells' (1952) study of correlations between patterns of infant care and later personality development, contributed substantially to
knowledge of and interest in socioeconomic effects (see Deutsch, 1966
and Gecas, 1979 for comprehensive surveys of social class research).

The range of research has included the entire continuum of
behavioral science, and that pattern remains the same up to the pres­
ent time. Social class/status research continues to be influenced by
several disciplines and numerous perspectives (Gecas, 1979) and, in
the words of Gecas this has produced "a substantial, at times lively,
often messy and chaotic literature" (p. 365).

There is no dispute over the fact that society is stratified on
a number of dimensions. Obviously, individuals and families vary in
terms of occupational prestige, educational levels, earnings and jobs.
Psychologists and sociologists have agreed that social structure is an
important factor in developmental and sociological research. Caldwell
and Ricciuti (1966) state:

One of the facts which has emerged with remarkable
consistency in psychosocial research of the past fifty
years is that many variables considered important for
development, covary with social class. Indexes of social-
class status have come to be recognized as greatly com­
pressed descriptions of environments in which children
are reared. Thus, instead of representing only status
characteristics, whatever index of social class a research­
er might use actually serves to predict the presence in the
child's life space of certain processes likely to have
influenced his development. (p. ix)

It is this latter point in Caldwell and Ricciuti's statement which
represents a theoretical (and pragmatic) area of disagreement. That
is, how do researchers approach the concept of social class differ­
ences and what are the appropriate criteria to be chosen to represent
different socioeconomic environments?
Psychologists and sociologists approach the definition and measurement of status/class from clearly different orientations (see Otto, 1975; Kessler, 1982; Gecas, 1979 and Mueller & Parcel, 1981 for detailed analyses). Sociologists use the Marxian concept of class to denote socioeconomic differences, which means that economic variables of production, acquisition and ownership of goods, and occupational prestige are those used to define and investigate the concept. Mueller & Parcel (1981) refer to this perspective as the conflict theory of social stratification.

Psychologists, on the other hand, more characteristically center their orientation in the Weberian concept of status, which means they use the variable of differential consumption of valued commodities, and frequently include a focus on the relationship of socioeconomic status to developmental measures (Gottfried, Note 5). Mueller & Parcel (1981) identify this theoretical perspective as functionalist. Although there is little agreement on which of the dimensions is the most important, there is finally agreement on one important issue: that social class or status is a conglomerate of variables, rather than one unitary variable. This view has evolved out of the more simplistic orientation of earlier research of the 1950s and 1960s.

Although the terms social class and socioeconomic status carry somewhat different connotations, there seems to be some consensus among researchers that the two terms may be used interchangeably. We cannot, as Gecas puts it, "afford the luxury of very precise and narrow definitions of major concepts" (p. 366). If we do so, our understanding of the general concept will make very little progress.
Socioeconomic status (SES) is the phrase used in this research, because it better reflects the selected study variables.

Agreement that SES is multivariate does not, unfortunately, preclude controversy over the form of its multiplicity or over the criteria chosen as the best indicators to measure SES. Kessler (1982), in his review of eight surveys of the relationship between SES and psychological distress, notes that current explanations of the interaction are inadequate because of the lack of a consistent operational definition of socioeconomic status. Some researchers (often sociologists) prefer a multiple indicator approach; that is, identifying one single best indicator of SES but including highly correlated co-variates in the assessment. The single best indicator most often used by these researchers during the past decade has been one of several popular measures of occupational prestige. Sociologists usually conceptualize SES as a composite of occupational prestige and other dimensions such as education and income (Mueller & Parcel, 1981).

Other researchers (usually psychologists) view SES as multidimensional. A number of variables such as education, occupation and income are measured and then weighted to form a single SES score. The Hollingshead Index of Social Status (1975) is an example of a multidimensional measure of SES, and includes occupation, education, marital status and sex as its factors. In a review and critique of measures of SES used most often by contributors to the journal Child Development, Mueller & Parcel (1981) criticize the overwhelming use by psychologists, of the original Hollingshead Two-Factor Index of
Social Position (1957) to measure SES. The authors contend that this measure is outdated, does not include all the occupations covered in the U.S. census code list, and is based on data from one unrepresentative community. Otto's (1975) criticism is also representative of sociologists' opposition to multidimensional measures of SES. He condemns their frequent use because "such ensembles tend to be atheoretical and ad hoc..." (p. 325).

Mueller and Parcel suggest, instead, that an occupational prestige measure of SES is the most reliable and valid single measure of an individual's position on the economic, power and prestige dimensions (p. 17). Occupational prestige measures of SES are based on rankings of the prestige of occupations by the general public, and evidence attests to the reliability of those rankings (Hodge, Treiman & Rossi, 1966) across time, regions and subpopulations. Featherman & Hauser (1977) conclude that since monetary and education-related reasons are most often the basis given for the rankings, such measures are valid estimates of social prestige. The Duncan (1961) Socioeconomic Index and the Siegel Prestige Scale (1968) are the most commonly used occupational prestige-based measures of SES. Both can be used to measure occupational prestige for heads of households as well as individuals.

In a paper presented to the April, 1983 Society for Research in Child Development, Allen Gottfried (note 6) compares the Hollingshead Indexes (1957, 1975) and the revised Duncan SEI and Siegel Prestige Scales as measures useful to developmental psychologists. Gottfried notes that a new Hollingshead Index was developed as a response to
the legitimate points of criticism raised over the 1957 Index. The updated Hollingshead Index was revised to include four factors instead of the original two. Occupation has now been keyed to all occupational titles in the United States census (and in fact, some which were considered imprecise by Hollingshead have been further delineated), and validity and reliability data have been based on nationally gathered data. Results show, according to Gottfried, that the Four Factor Index is highly reliable and that its scores are a valid measure of socioeconomic differentiation in the United States (Note 6). Gottfried agrees with Mueller & Parcel (1981) and other critics that the 1957 Two Factor Hollingshead Index is obsolete and should no longer be used, but he states that the new Four Factor Index (1975) is a suitable choice for estimating the social status of individuals as well as families. The 1975 Index was not included in the Mueller and Parcel review article.

This discussion of theoretical disagreements regarding the nature and measurement of socioeconomic status has been provided as necessary background information to a discussion of the measurement of SES chosen for this study. Since SES is identified by so many different criteria and measured by varying indexes, issues which influence the selection of those criteria by a researcher are important to clarify. Gottfried (Note 5) points out that it is important for developmental psychologists not only to carefully document the characteristics of their study samples, but also to use marker variables and whenever possible to use an established SES index (p. 10).
The researcher for this study chose to measure SES with the revised Duncan Socioeconomic Index (SEI) using employed mother's SEI scores, although father's SEI scores were also included in data analysis. The Hollingshead Four Factor Index was also used to measure SES, but it was not chosen as the SES indicator in this data analysis. Correlations between the revised Duncan SEI (1961) and the Hollingshead Four Factor Index (1975) were calculated by Gottfried (Note 5) on his sample of 123 middle class families (skilled workers to professionals) with a highly significant correlation of $r = .79$, $p < .001$. Hollingshead (1975) reports a correlation of $r = .93$ between his occupational scale (partialed out from the total score) and Prestige scores. Correlations calculated between the SEI and Hollingshead measures for this study were found to be almost exactly the same as Gottfried's ($r = .76$, $p < .0001$). Gottfried (Note 5) suggests that despite high correlations among indexes, selecting one over another should not be done arbitrarily.

The revised Duncan SEI occupational prestige indicator was selected as an SES measure for this study for the following reasons. First, revised Duncan SEI scores are equally as reliable and valid in measuring employed women's occupational prestige as they are for the employed man's (this is also true for the Four Factor Hollingshead). The employed woman's SEI score was chosen instead of the head of household score as a more appropriate measure because the factor of interest is the mother's perception about working and her feelings about balancing employment and mothering. A mother's level of anxiety arising from those perceptions is hypothesized to be most
directly influential on her infant's behavior, since the mother is characteristically the primary caregiver in the family (even when employed). Mueller & Parcel (1981) note that if one parent is to be selected, the selection should be made according to the specific goals of the research study.

Second, the revised Duncan SEI provides continuous interval data rather than the discrete groupings of the Hollingshead Index. The latter is more useful in some data analyses, but for this study continuous data allows for more precision in data analysis. Since a small sample size of N=69 allows too few subjects per group for sophisticated analysis, groups identified by the Hollingshead Four Factor Index (a five class system) would have to be collapsed into two larger subgroups, thus losing even more precision. A disadvantage of the revised Duncan SEI continuous variable data is, however, that when analyses need to be calculated using two subgroups (working and middle class) those groups must be determined with cut off points which are fairly arbitrary, often the mean of the distribution. Deutsch (1961) and Gecas (1979) both perceive this as a problem with scales such as the SEI scale.

In addition to occupational prestige scores used as the SES measure, the researcher for this study chose to include mother's education, IQ and income as indicators of socioeconomic status, in order to provide additional explanatory power. Thus, this study is using a multiple indicator assessment of SES rather than a multidimensional measure. Education and income are frequently chosen as SES covariates, and on the basis of empirically gathered data are suggested
by numerous researchers as significant variables to include (Kessler, 1982; Tulkin, 1977; Hess, 1970; Laosa, 1981).

In a review of eight surveys of the relationship between SES and psychological distress, Kessler (1982) found that education was by far the most important SES indicator for predicting distress among women in the labor force. Income was found to be the central predictor of distress only among employed men. Kessler (1982) suggests that attempts to develop models which explain the relationship between SES and distress need to incorporate the effects of stressful life events and individual coping resources, variables which may be strongly influenced by educational achievement. Mother's IQ, shown to be highly correlated with education and SES (Hess, 1970; Gecas, 1979; Deutsch, 1973; Borduin & Henggeler, 1981), was included as an SES indicator to assess the cognitive abilities which contribute, according to Spielberger (1972) to a person's coping skills and to assessment of a situation as threatening or nonthreatening.

Kohn (1969), in his longitudinal study of the role requirements of a job and their effects on the jobholder and his/her family, found that of education and income, "Education is the more potent of the two dimensions, being more strongly related to parental values, to self-values, to judgments about the extrinsic feature of jobs" (p. 132).

Neither education nor income is recommended as the single best indicator of SES by Mueller & Parcel (1981). These authors suggest that when an occupational prestige score is used as the primary indicator of SES, then assessment of education and income levels can provide important supplementary information. This is particularly
true for developmental psychologists whose interests lie in the relationship of SES and its co-variates to developmental concerns, rather than in specifically sociological areas. The central issue for this study is the relationship of socioeconomic status with maternal separation anxiety in employed mothers.

SES and Maternal Separation Anxiety

There is little research which assesses the effects of SES on maternal anxiety about mother-child separations, but the extensive body of research on SES differences in parental values and child-rearing practices provides an heuristic guide. One of the earlier observation studies (Bayley & Schaefer, 1960) found that lower class mothers were less cooperative, less affectionate and more restrictive with their children than were middle class mothers. Walters, Connor & Zunich (1964) observed that lower class mothers were relatively restrictive, low in positive affect and were less involved in playing interactively with their children. Additional research conducted during the 1960s supported these findings (Brody, 1968; Hess & Shipman, 1965).

Bernstein's (1971) research into language patterns of lower class mothers identified a "restricted code" used by lower class persons, as compared with the "elaborated code" of the middle class. William Labov (1969) and others strongly criticized Bernstein's research on the basis of poor methodology and inaccurate philosophy (of cultural deficit). The controversy over reported SES differences in maternal speech and socialization patterns continues in current literature. Dale's (1976) survey of this research concludes that there are
significant differences in vocabulary development and communication abilities. Lower class mothers show evidence of lower verbal ability and lower education levels.

In his comprehensive review of results of studies conducted during the past 40 years of social class effects on socialization, Gecas (1979) concludes that in general, SES is negatively related to parental use of commands and positively related to emphasis on child's self-regulated teaching-learning. Gecas also states that SES is positively related to parental emphasis on independence and achievement in children. A current study of social class and mother-child interactions (Borduin & Henggeler, 1981) reinforces these conclusions regarding verbal interactions. Significant social class differences were found by Borduin & Henggeler in language ability as measured by the vocabulary subtest of the WAIS, and lower class mothers showed significantly higher rates of direct commands to their children.

In a study by Weinraub and Lewis (1973) middle class parents were found to be better educated and older than the working class group and with this sample also, middle class mothers performed better than working class on the vocabulary subtest of the WAIS. Weinraub and Lewis also report that when mothers and their two year olds were observed in a separation situation in a laboratory setting, that demands from the children for the mother to return were not uncommon for the middle class children (particularly boys), but never occurred in the lower class group. The authors suggest that the significant difference may be due to greater feelings of control over others, or greater separation distress among middle class children. Using path analysis,
Weinraub and Lewis found that several variables seem to indirectly affect the child's response to maternal absence. These variables are assumed to influence separation distress in the child by directly affecting the process variables, which in turn directly affect separation distress (p. 10). Maternal verbal abilities were significantly correlated with separation distress of the child; to their effects on the style of mother's departure and on the child's cognitive ability. Tulkin (1973) in his investigation of social class differences in maternal and infant behavior, also found that middle class children were more distressed over maternal absence than working class children.

Researchers whose studies focus on the parental role and on family structure universally suggest that much more needs to be known about the functioning of working class (blue collar) families (Komarovsky, 1967; Kohn, 1982; Hoiberg, 1980; Osipow, 1975). Some studies have added to our understanding of nonmiddle class families. Jacoby (1969) suggests that transition to parenthood is easier for lower class than middle class parents because lower class women are more strongly oriented toward home and family and place greater value on having children, and because parenthood is more likely to interfere with career goals for middle class women. Swinehart (1962) found that middle class mothers express greater worry over their ability to be good mothers.

A study by Ilfeld (1978) of 2,299 respondents in a representative community sample found that from high SES levels to low SES levels, there was a steady decline in self-esteem, and this relationship held true whether the indicator was income, education or occupation. The
significant negative correlation of SES with internal locus of control has been consistently documented through numerous studies (Lefcourt, 1976; Phares, 1976).

Chaya Piotrowski (Note 3) states that working class families continue to be a fruitful area for research. We need to know more about the specific experiences of the blue collar parent at his job, and the ways in which perceptions of his/her employment affect children. Piotrowski further suggests that special attention needs to be focused on descriptions of job-related attitudes and behaviors of working class, full time employed mothers of infants and toddlers. This study will provide added information about these women, their feelings of anxiety and worry over leaving their infants to return to work, and their level of orientation to work and motherhood as dual roles.

Summary

The conceptual framework for maternal separation anxiety requires a synthesis of multideterminants: Bowlby's ethological theory, Spielberger's Trait-State theory of anxiety, and the sociocultural and phenomenological factors affecting mothers' perceptions of mother-child separations. Maternal separation anxiety is an unpleasant emotional state reflecting a mother's apprehension about leaving her child, based on the mother-infant attachment and on maternal perceptions of herself in the role of employed mother. Although maternal anxiety related to separation has not been extensively studied, maternal behaviors have been shown to be a factor influencing
mother-child separations. Multiple methods of assessment are used to assess the construct validity of the Maternal Separation Anxiety Scale for a working class group. This study was designed to explore the nature and measurement of maternal separation anxiety in employed mothers with lower SES, education, income and IQ.
CHAPTER III

METHODOLOGY

The methodology for this research is presented in four sections. The first section provides the selection and description of the study sample, followed in section two with a detailed account of research procedures. In the third section, the variables are defined and the measures and instruments described. The final section describes the analytic procedures used with the data.

Subjects

Sixty five of the subjects for this study were drawn from a population of 620 healthy primiparous mothers who delivered full term healthy infants in one of three hospitals in Columbus, Ohio during October through February, 1981-82. Four subjects were drawn from a second wave population of 320 healthy primiparous mothers who delivered full term healthy infants in one of three hospitals in Columbus, Ohio during March through June, 1982. Subjects from both populations were members of a stratified random sample of employed and nonemployed women (Hock, Gnezda and McBride, Note 1). These women agreed to participate in a longitudinal investigation, of which this study is a part, designed to assess maternal separation anxiety in relation to work status and maternal characteristics. Four
subjects were drawn from the second wave of this study because all subjects from Wave 1 who met the selection criteria had been contacted. No significant differences were found on any variable, between the 65 women from Wave 1 and the four chosen from Wave 2.

All mothers who were Caucasian, employed, age 20-29, married and delivering first infants were considered for inclusion in this research study. Women who were single or teen aged were eliminated from consideration in order to control for anxiety attributed to single and/or adolescent motherhood. Women 30 and over were also excluded because of the belief that as a group, women having their first baby at an older age might also experience different levels of separation anxiety (Robinson, 1982; Coady, 1982; Birnbaum, 1972). The sample was limited to Caucasian women for two reasons; to avoid confounding SES with race, and because of the low number of black women in the larger sample (37 of 620).

All women admitted to three representative metropolitan hospitals during a three month period, who were healthy and who delivered healthy first babies, were asked to participate in maternity ward interviews and to complete a self-administered questionnaire. Of those new mothers, 98.6 per cent agreed to participate in the maternity ward procedures. At the time their infants were three months old, these mothers were contacted by letter and asked to complete and return further information and a questionnaire. Although not all of the women responded to this request, all mothers were nevertheless included in the eligible group for this study. In addition, women were asked in the maternity ward interview to indicate whether they intended
to return to work. All women who were eligible for this study were contacted, regardless of their responses to the employment question. It was felt that a significant number of women would have changed their employment plans during the year after their infants' births.

In addition to the variables already discussed, mothers were considered for inclusion in the study by socioeconomic status. Since this research focused on the relationship of maternal separation anxiety and socioeconomic status, it was important that each social class included in the study be equally represented. Socioeconomic status was determined using the revised Duncan Socioeconomic Index, based on mother's occupation (Stevens & Featherman, 1980). A detailed explanation of the revised Duncan SEI Scale is provided in the Review of Literature. Families receiving general welfare benefits and others classified at the lowest SES levels were excluded by the design of the study, since families with two full-time wage earners were the focus of this study. Mothers' and fathers' incomes were included in data analysis, but were not used as determining SES variables (see previous chapter for a detailed explanation). Mueller and Parcel (1981) conclude in a review of measurement of SES that occupational status is the single best indicator of SES, although income and education are also noted as useful indicators. According to Mueller and Parcel income is useful as a supplementary factor but not the single best indicator, since income and occupational prestige do not vary monotonically. It is clear from an examination of the descriptive data on income (see Table 1, p. 62) that in this study it does not co-vary consistently with occupational prestige. Analysis (with t-tests) of
Table 1
Demographic Characteristics of Working Class and Middle Class Employed Mothers and Fathers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Working Class</th>
<th></th>
<th>Middle Class</th>
<th></th>
<th>df</th>
<th>t-Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{X}$</td>
<td>S.D.</td>
<td>Range</td>
<td>$\bar{X}$</td>
<td>S.D.</td>
<td>Range</td>
</tr>
<tr>
<td>Mothers SES</td>
<td>28.06</td>
<td>6.47</td>
<td>15-39</td>
<td>61.78</td>
<td>12.06</td>
<td>40-77</td>
</tr>
<tr>
<td>Fathers SES</td>
<td>31.69</td>
<td>16.19</td>
<td>17.79</td>
<td>56.64</td>
<td>18.73</td>
<td>21-84</td>
</tr>
<tr>
<td>Mothers Ed.</td>
<td>12.77</td>
<td>1.24</td>
<td>11-17</td>
<td>16.00</td>
<td>1.41</td>
<td>12-19</td>
</tr>
<tr>
<td>Fathers Ed.</td>
<td>12.82</td>
<td>1.58</td>
<td>10.16</td>
<td>16.17</td>
<td>2.39</td>
<td>12-22</td>
</tr>
<tr>
<td>Mothers IQ</td>
<td>106.88</td>
<td>10.83</td>
<td>76-132</td>
<td>122.00</td>
<td>12.10</td>
<td>95-145</td>
</tr>
<tr>
<td>Mothers Age</td>
<td>24.91</td>
<td>2.37</td>
<td>20-29</td>
<td>27.11</td>
<td>1.99</td>
<td>22-29</td>
</tr>
<tr>
<td>Mothers Income</td>
<td>11,985</td>
<td>3,889</td>
<td>5,680-22,400</td>
<td>14,855</td>
<td>4,350</td>
<td>7,500-28,000</td>
</tr>
<tr>
<td>Fathers</td>
<td>18,842</td>
<td>7,777</td>
<td>6,000-42,000</td>
<td>19,014</td>
<td>6,465</td>
<td>3,000-35,000</td>
</tr>
</tbody>
</table>

***p < .0001  **p < .005
group means showed that father's income was the only demographic variable which showed no significant difference between group means. Correlational analysis of data from this study showed only a moderate significant correlation between mothers' income and mothers' SES ($r = .37$, $p < .001$), and a low significant correlation of fathers' income to fathers' SES ($r = .28$, $p < .01$).

Subgroups of the sample were determined on the basis of mothers' SES and education. Working class mothers were those whose Duncan SEI scores were 39 and below, while middle class mothers were those with SEI scores of 40 and above. Efforts were made to include only mothers with 13th grade education or less in the working class group and mothers with more than 13 years of schooling the middle class group. However, six women (16%) included in the working class group had achieved educational levels of 14-17 years and 2 (6%) of the middle class group had only 12th grade educations. However, the mean education level for working class mothers was 12.77 years, and for middle class mothers the mean was 16.00. T-Tests showed this difference to be highly significant ($t(67) = -10.09$, $p < .0001$). Table 1, p. 62 presents descriptive data (mean, standard deviation and range of response) on selected demographic variables, as well as results of students' t-tests on group mean differences. All other (with the exception of fathers' income) mean differences showed highly significant differences at $p < .0001$ or $p < .005$ (mothers' income).

Figure 3, p. 64 presents a flow chart showing the selection of 69 subjects from the population of the longitudinal study of Hock, Gnezda and McBride (Note 1). Of the original population of 620
**Original population**

**Wave I**

| Infants too old at time of sample selection: | 155 |
| Subjects excluded for following reasons: | |
| Under 20 or over 29, | |
| Non-Caucasian, no listed phone, living more than 60 miles from city: | 255 |
| Subjects' educational levels too high or low for SES subgroups: | 56 |
| Subjects contacted: | 184 |
| Not employed, or employed less than 30 hours per week: | 115 |
| Employed full time, agreed to participate: | 65 |
| Refused to participate: | 4 |
| Subjects meeting all criteria contacted from Wave II*, agreed to participate: | 4 |
| Refused to participate: | 0 |

| Total sample: | 69 |

*Wave II refers to a separate study of 320 women. All data were collected using the same methods and criteria as with Wave I. The first four subjects meeting all criteria were drawn from the pool of Wave II.*

Figure 3. Selection of Sample
first-time mothers, 155 (25%) women were not contacted because the infants were already too old at the time of sample selection. Two hundred twenty five (36%) women were not contacted for one or more of the following reasons: non-Caucasian, unmarried, under 20 or over 29, no accessible phone number, or now living in a community too far from Columbus or living out of state. Of the remaining 240 women, 56 (23%) women had education levels inconsistent with SES and were not asked to participate. One hundred eighty four (30% of the original population) women who fulfilled the qualifications for inclusion into one of the two subgroups were then contacted. One hundred fifteen (62% of the eligible 184) were not working or were working part time (full time employment was defined for this study as 30 or more hours of employment per week), and so were not included in the study. Sixty nine employed mothers whose SES and educational levels qualified them for participation as subjects in the study were asked to participate. Sixty five women agreed, and four refused (two working class and two middle class). Permission rate was 94 per cent. Reasons for refusal were not offered. The first six women from Wave 2 who met the qualifications discussed previously were contacted. Two were not working and the other four were employed and agreed to participate in the study. Therefore, the final sample for this research consisted of 69 full-time employed mothers, 35 working class and 34 middle class women.

All participants in the study had been employed previous to the births of their infants. The mean age of the babies at the time mothers returned to work was 12 weeks for working class and 16 weeks for middle class mothers. Results of a student's t-test showed this difference
to be significant ($t(50.5) = -2.09, p<.04$). Babies' mean age at the
time of the subsequent interview was 13.8 months for both subgroups,
with a range of 11-17 months. This age period was selected for its
importance as a critical developmental time in the mother-child rela­
tionship. Toward the end of a child's first year, he/she typically
shows heightened fear of strangers and strange situations, fears which
are relieved by comfort from the major attachment figure, usually the
mother. Infant distress (sometimes acute) over mother absence during
the 12-18 month age span ensures the salience of the issue of employ­
ment-related mother-child separations to the mothers in the study.
Nineteen boys and 16 girls were born to the working class mothers and
20 boys and 14 girls to the middle class mothers, totaling 39 boys and
30 girls for the total sample. Table 10, p. 108 presents data on non-
maternal child care and the number of those arrangements needed since the
infants' births. Two children (3%) were receiving care in day care
centers and 13 per cent were being cared for by their fathers for the
majority of the time, but the large proportion of children (61%) were
being cared for by unrelated babysitters, in the sitter's home.

**Procedures**

Sample selection and interviewing of participants was conducted
from November through April, 1982-83. Demographic information and
maternity ward assessments of the Maternal Separation Anxiety Scale
were available from prior research efforts of Hock, Gnezda and McBride
(Note 1). This researcher participated as a research assistant in the
collection of that data during October through February, 1981-82. The
nursing staff at each hospital provided the researchers and research assistants with daily lists of healthy primiparous mothers who had delivered full term healthy babies. Within 24–48 hours following the infants' births, all possible subjects were contacted and the research project described. Subjects were told that the purpose of the research was to learn more about the feelings of working and nonworking first time mothers toward their babies. They were also asked to project how they expected to feel about leaving their baby in someone else's care. It was explained that if they agreed to participate in the study, they would be contacted again at the time their babies were three months old, and again at some future dates, in order to determine whether their feelings and attitudes change as their infants grow. Written consent was obtained from the subjects, and demographic information was then requested. This information included mother's age, marital status, education, mother's income (if applicable), father's income and total family income, and mother's work plans during the infant's first year. Following the demographic interview, directions for completing the Parent Questionnaire, Part I (the Maternal Separation Anxiety Scale, see Appendix A) and the Parent Questionnaire, Part II (the Taylor Manifest Anxiety Scale, see Appendix B) were explained to the subject. The subject was instructed to complete the questionnaires independent of husband or other visitors, responding to all items. The researcher or research assistant then thanked the subject for agreeing to participate in the research project. The questionnaires were left with the subject and on the following day, the researcher or research assistant returned to the hospital to collect the questionnaires. The initial maternity ward procedure took approximately 15 minutes per subject.
The Parent Questionnaire (MSAS) was again administered to all subjects in the longitudinal study at the time infants were three months old, but those data were not included in this study. The MSAS was again mailed to all subjects when infants were 12 months old and responses to that questionnaire constituted MSAS T2 data in this research. All T1 (maternity ward) and T2 MSAS data on the 69 participants in this study were complete for all subjects.

Home Interviews (see Appendix C) were also conducted with subjects in this study, at the time of infants' ages 11-17 months. The interview protocol was pilot tested with 15 mothers (eight working class and seven middle class) not part of the original population of 620 women contacted for the longitudinal study. All pilot interviews were audiotaped and each was carefully analyzed by the primary researcher, in order to improve the general effectiveness of the interviewer's technique, to assess the degree to which the interviewer encouraged maternal responses, and to correct confusing or superfluous new scale items. Following pilot testing, a refined interview schedule was then used in the following procedures.

At the time infants were 11-16 months old, the primary researcher for this study contacted eligible subjects by telephone to request their participation in a one hour home interview. During the telephone contact, subjects were told that the purpose of the interview was to be a follow up to the Parent Questionnaire (MSAS) which they had completed previously, and concurrently, to the time of the interview. It was explained that although some of the questions were similar, an interview often allowed opportunity for in-depth answers to questions
about feelings and attitudes. In addition, mothers were told that an important part of this research was to learn as much as possible about the ways women with wide varieties of jobs felt about being working mothers. If the mother agreed to participate, an appointment was scheduled at a time convenient for the mother. Since all subjects were employed full time, the majority of the interviews took place during evening hours. However, some women who worked on evening shifts met with the researcher during week days, and some women preferred to schedule daytime interviews on a Saturday or Sunday. The researcher asked that appointments be scheduled at a time when the baby was usually asleep, or when another adult was available to provide child care in a different room. It was explained that a more productive discussion occurred when there was an uninterrupted period of time for interviewer and mother to concentrate on their conversation. This procedure usually, but not always, worked out, as was evidenced by a number of audio tapes on which babbling or crying babies could only too clearly be heard. Subjects were asked, as they were during the initial maternity ward interview, to respond independently to questions; therefore it was requested that husbands not be present. The researcher obtained directions to the subject's home, and on the day before or on the day of the interview, each appointment was confirmed by telephone. Confirmations were helpful, but the researcher had also given her name and phone number to each subject during the initial phone contact and suggested she write it on the calendar next to the day and time of appointment. This seemed
highly useful, since a subject often called the researcher to re-
schedule an appointment.

Interviews (described further in the measurements section) were
conducted in subjects' homes, with the exception of three women who
preferred talking with the researcher at their places of employment.
These women worked within five minutes of the researcher's office,
but lived over one hour away, and felt they would be more rested if
the interviews were conducted over the lunch hour rather than after
work in their homes. Private rooms for the interviews were found at
each site. In general, all interviews lasted from 50 to 90 minutes,
although one interview took 35 minutes and another lasted for over two
hours. All interviews were audio taped, and a written record of
responses was also taken for each interview.

Interviews were conducted by the primary researcher and a clini-
cal psychology graduate student assistant, both experienced inter-
viewers. The primary researcher had experience interviewing many
persons of all socioeconomic levels, and the graduate research
assistant was trained by Gnezdova and conducted interviews using a
highly similar schedule. In addition, the graduate assistant was
familiar with the administration of the Slosson Intelligence Test and
was using results of that instrument as part of the data for her own
research. Both researchers were female and middle class, one
Caucasian and one non-Caucasian. Additional training was provided by
the primary researcher in procedures specific to this interview
schedule. Strong emphasis was placed on a standard telephone approach
during initial contact, and on the importance of taking extra time at
the beginning of each interview to set a pleasant and relaxed atmosphere. Explanation of the conceptual interpretation of the interview scales was provided, and a discussion between the primary researcher and the graduate assistant continued until understanding was reached on the interview format, approach and content. Eighteen per cent (seven working class and six middle class) of the interviews were conducted by the graduate research assistant and the remaining 82 per cent by the primary researcher. In both cases, working class and middle class interviews were balanced, as was the rating of the written interview scales. That is, interviews of subjects in each subgroup were scheduled equally across the period of data collection to ensure no time-related differences in the approach of the interviewer to subjects.

Interrater reliability for the Home Interview scales was established between the primary researcher and the graduate research assistant, with training provided by one of the researchers principally involved in previous development and use of a majority of the interview protocol (Gnezda, Note 4). Each rating scale was analyzed and reviewed individually, with Gnezda providing guidance on the original scales and the primary researcher providing training on the scales and items developed and pilot tested by the primary researcher for this study (Acknowledgment and Awareness of Separation Anxiety, Origins of Belief, and Perceptions of Quality of Child Care). After discussing the meaning of the interview scales and ratings, the researchers each individually rated five written protocols of the interviews. Ratings were then compared to assess the degree of
correspondence between the three researchers. Discrepancies in ratings were discussed in order to clarify any differences in interpretation. The three researchers then completed independent ratings on 10 additional subjects, using written protocols of the interviews. The responses to each rating scale were made sequentially by the individual researchers.

At the conclusion of each interview, the subject was administered the Slosson Intelligence Test, a short IQ test used as an individual screening instrument for children and adults. Subjects were told before the start of the interview that after a series of questions about motherhood and employment, a short verbal and math quiz would be given. The test was described as a series of questions which would help the researcher know more about the group of subjects, and that it was a quiz often included in studies such as the one in which they participated. Subjects were told that no one was expected to know the answers to all the questions. This explanation seemed to help alleviate the almost universal expressions of anxiety over taking such a test. The researchers consistently attempted to present the test in a nontthreatening, relaxed manner. The Slosson IQ test was always administered at the conclusion of the interview, in order to avoid setting an atmosphere of high anxiety before the interview items were discussed. No subject refused to take the test, and none continued to question its use after initial concerns were expressed.
Measures and Instruments

The variables under investigation in this research were defined and measured as follows:

Maternal Separation Anxiety

This variable refers to a mother's concern or worry associated with routine short-term mother-child separations (Gnezda, Note 4). It involves the extent to which she feels apprehension, fear and nervousness about her child's well-being during mother-child separations. It also includes the degree to which a mother misses her child's physical and emotional closeness and the intimacy of the mother-child relationship during separations. In addition, maternal separation anxiety involves the nature of the mother's beliefs about separation promoting a child's independence and sociability and her employment-related separation concerns.

The variable maternal separation anxiety was assessed by two methods: the MSAS and a semi-structured interview.

Maternal Separation Anxiety Scale (MSAS)

The MSAS is a 35-item 3-factor self-administered paper and pencil questionnaire, developed by Hock, Gnezda and McBride (1983). The items are arranged as a 5-point Likert scale ranging from strongly agree to strongly disagree (see Appendix A). The factors are defined as follows:

Factor 1—Maternal Separation Anxiety

This factor consists of 21 items and represents the presence of worry, sadness and guilt surrounding a separation event. It also
includes the extent to which a mother perceives that her child needs exclusive maternal care, and refers to the mother's beliefs about her child's ability to adapt to nonmaternal care.

Factor 2—Separation Promotes Independence and Sociability

This factor includes 7 items and reflects the mother's interpretation of the extent to which separation experiences contribute to the child's independence and sociability, and the value of those characteristics. It reflects the belief that a child needs experiences with other adults and children away from his/her mother in order to develop social skills and autonomy, regardless of any distress or difficulty experienced by the child during separation.

Factor 3—Employment-Related Separation Concerns

This factor consists of 7 items and reflects a mother's feelings and attitudes about balancing employment and motherhood, and reflects her primary orientation toward one or the other. It reveals personal conflicts as she separates from her child and attempts to integrate employment and motherhood roles.

Scores on each factor of this instrument and a total score for the MSAS range from 7-35, with the higher the mother's scores the higher her separation anxiety. Scores on the factors were generated by summing the items on each factor. Factor 1 was then divided by three so that the range of responses corresponded to the ranges of Factor 2 and 3. Hock, Gnezda and McBride (Note 4) reported the internal consistency reliability coefficient using Cronbach's Alpha to be .90 for Factor 1, .77 for Factor 2, .71 for Factor 3 and .89 for the total MSAS score. In order to verify the stability of the
pattern of items relating to each factor of the scale, Hock, Gnezda and McBride (Note 4) used a coefficient of congruence to compare the similarity of the factor structures resulting from principal component factor analysis of the scale which was administered at two points in time, approximately three months apart. The coefficient of congruence is based on the sum of the products of all item loadings for each factor and range from +1, indicating perfect or inverse agreement, to 0 for no agreement (Harman, 1967). The coefficients of congruence for the three factors of the MSAS were reported as 1.0 (Factor 1), .987 (Factor 2) and .996 (Factor 3) indicating that the factor structure for the MSAS is very stable (McBride, Note 7).

Scores on the MSAS assessed in the Maternity Ward (Time 1) and at 12 months infant age (Time 2) were available from the prior research efforts of Hock, Gnezda, and McBride (Note 1).

Home Interview

Maternal separation anxiety was also measured using the Home Interview. This method is a semi-structured interview schedule developed by Hock, Gnezda and McBride (Note 1) which incorporates and modifies five of Hock's (1976) interview-based 9-point rating scales. Sentence structure and vocabulary on some items were simplified for this study but content remains the same. Two scales were generated and pilot tested by this researcher, and were then added to the original interview. They are, Acknowledgment and Awareness of Separation Anxiety and Perceptions of Quality of Child Care. The majority of the questions on the interview schedule are designed and clustered in order to measure factors corresponding to those of the MSAS, although
a factor analysis was not conducted on the interview items. Figure 4, p. 77 presents the interview subscales which were collapsed to form each of the three interview factors corresponding to the three MSAS factors. In addition to these interview subscales and the two subscales discussed above, the remaining questions measure maternal role investment and work orientation.

Interrater reliability on the rating scales was established using Pearson's r correlation. Maternal separation anxiety (corresponding to Factor 1 of the MSAS) was measured using Hock's Separation Stress (r=.99), Perception of Child's Distress at Separation (r=.94) and Attitude Toward Nonmaternal Care (r=.98) rating scales. Scores on each of these scales were summed and then divided by three in order to obtain the total interview based Factor 1 score, with a response range of 1-9 thus consistent with Factors 2 and 3. Mothers' beliefs about separation as an essential factor in promoting independence and sociability (corresponding to MSAS Factor 2) were measured using an interview scale generated by Hock, Gnezda and McBride (Note 1), with r=.99. Employment-related separation concerns (corresponding to MSAS Factor 3) was assessed using an elaboration of Hock's (1976) and Christman's (Note 9) career orientation rating scale (r=.96). A total interview-based maternal separation anxiety score was generated by summing the scores from the three interview-based factors and dividing by three.

Acknowledgment and Awareness of Separation Anxiety

This variable assesses the degree to which mothers perceive the issue of mother's feelings about separation as an important or valid
Subscales

Separation Stress
Perception of Child's Distress at Separation
Attitude Toward Nonmaternal Care

Separation Promotes Independence and Sociability

Employment-related Separation Concerns

Factor 1
(Maternal Separation Anxiety)

Factor 2

Factor 3

Additional Subscales

Acknowledgment and Awareness of Separation Anxiety
Perceptions of Quality of Child Care
Maternal Role Investment
Work Orientation

Figure 4. Description of Factors and Subscales of the Home Interview
concept. It reflects levels of awareness and concern regarding mother-child separations and their possible effects.

This variable was measured using a newly generated and pilot tested interview scale, based on five projective items. This scale was designed to begin the semi-structured Home Interview with a non-threatening series of questions regarding the feelings of a hypothetical woman beginning a new job and contemplating separations from her infant (see p. 1, Appendix C). Interrater reliability was r=.99.

**Maternal Role Investment**

This variable measures the degree to which motherhood is a woman's primary source of personal fulfillment. It reflects the priority that motherhood assumes in her self-concept.

This variable was measured using a modification of Hock's (1976) 9-point rating. This variable was measured during the Home Interview, Interrater reliability was r=.89.

**Perceptions of Quality of Child Care**

This variable measures the degree of mother's satisfaction with the present arrangements for her child's care. It was measured using a newly-generated, pilot tested scale administered during the Home Interview. The scale consists of six items, using a 9-point rating scale reflecting choices from strongly agree to strongly disagree (see p. 7 of Appendix C). This scale score is obtained by summing responses and dividing by six. High scores reflect high levels of maternal satisfaction with the child's care.
Trait Anxiety

This variable refers to a relatively stable personality characteristic which is defined as the disposition toward heightened levels of anxiety in response to stressful situations or events (Spielberger, 1972). State anxiety is distinguished from trait anxiety by its temporal nature; state anxiety is a temporary response to specific situations and thus varies over time and across events. Trait anxiety is an acquired tendency to perceive a wide variety of circumstances and events as threatening.

This variable was measured using the Taylor Manifest Anxiety Scale (Taylor, 1951; 1953), a subscale of the Minnesota Multiphasic Personality Inventory. The Taylor MAS is a 50 item self-administered questionnaire. Items consist of true-false responses to statements concerning overt responses to anxiety (e.g., blushing), subjective reports of feelings of tension or nervousness, and somatic complaints such as headaches or diarrhea. Other items involve sensitivity to the reactions of others, and feelings of unhappiness or lack of purpose (Graham, 1977).

The Taylor MAS has been widely accepted as the standard measure of trait anxiety (Levitt, 1980). Reliability has been established at .92 using split-half reliability coefficients (Hilgard, Jones & Kaplan, 1951). Using test-retest, Taylor (1953) obtained reliability coefficients of .89, .82 and .81. The Taylor MAS is scored by summing the designated responses, with higher summed scores indicating higher levels of trait anxiety. The TMAS was administered in the maternity ward as Parent Questionnaire Part II (see Appendix B).
Mother's IQ

Mother's intelligence was measured with the Slosson Intelligence Test (Slosson, 1963) (SIT). Richard Slosson (Stewart & Myers, 1974) developed this short intelligence test as an individual screening instrument for use with children and adults. Items are very similar to the Stanford-Binet tasks and to portions of the WISC. The items include both verbal and math questions; administration of the SIT takes an average of 15 minutes. It was designed as a screening instrument for the evaluation of general intelligence. Stewart and Jones (1976) judged the SIT to be (1) better than any group test intelligence; (2) somewhat better than other short measures of intelligence because of its greater task variety, but (3) not as good as the Stanford-Binet or the Wechsler scale because of its lesser range of tasks and its brevity (p. 377). The median correlation between the Slosson Intelligence Test and the Stanford-Binet Scale is .91, found in a review of 12 reported correlational studies. Slosson (1963) established a test-retest reliability coefficient of .97.

During the last 20 years the SIT has been accepted as a valid intelligence test by professionals in a variety of disciplines. The SIT was administered for this study at the conclusion of each interview, with scoring completed at a later time.

Data Analysis

All instruments were scored according to established guidelines. Interrater reliability was completed on those requiring judgmental decisions, and those results were reported in the previous section of this chapter.
Data analyses used in this study were mainly correlational (using Pearson's r). All data are presented in the correlation matrix on page 88, but correlations from that matrix were extracted and presented in tables describing specific results appropriate to each research question. Multiple regressions were also performed to identify interactions of variables affecting maternal separation anxiety. One-way repeated measures analyses of variance were performed on variables measured more than once (MSAS scores). Assessment of the significance of difference between group means utilized t-tests with student's t-distribution. Chi square analyses were conducted to investigate the differences in between group frequency of responses to MSAS items.

Methods of analysis were determined by the specific research questions and will be discussed appropriately. Results of this research are organized and reported under the corresponding research objectives and questions. The statistical analyses are briefly listed below, by objective and question.

In addition to the correlational analyses used to respond to all questions, to investigate Objective I a one-way analysis of variance with repeated measures was performed on group mean differences of $T^1$ and $T^2$ MSAS scores.

To investigate Objective II, question 1, chi square analyses were performed to determine the significance of the differences between working class and middle class frequency of responses to items regarding work preference. Students' t-tests were performed on between group mean differences on a measure of trait anxiety (Objective II, question 5).
To investigate Objective III, question 1, students' t-tests were conducted on between group mean differences of $T^2$ MSAS scores and Interview ratings. Multiple regression analyses, both stepwise and hierarchical, were computed in order to identify which variables best predicted maternal separation anxiety (Objective III, question 2).
CHAPTER IV

RESULTS

The findings of this study will be reported in three sections, corresponding to the three research objectives. The first section reports results based on comparisons of maternal separation anxiety with employed mothers' socioeconomic status, IQ, education, income and age. The second section reports results of analyses of the relationship of maternal separation anxiety and socioeconomic status with work orientation, maternal role investment, perceptions of child care quality and trait anxiety. The third section reports findings on the validity of the MSAS and Home Interview as measures of maternal separation anxiety for employed mothers of lower socioeconomic status. Results are presented following the individual research questions which address each objective.

OBJECTIVE I: To compare levels of maternal separation anxiety as related to employed mothers' socioeconomic status, IQ, education, income and age.

Research Question 1: Does mothers' SES significantly relate to maternal separation anxiety, and if so, does this relationship remain stable from the time of infants' birth to one year later?

Before discussing the statistical analyses appropriate to this question, an overview of the nature of the data from the self-report questionnaire (MSAS) and from the semi-structured Home Interview will be presented. Table 2, p. 84 presents the mean, standard deviation
Table 2
Descriptive Comparison of Employed Mothers Responses to Two Measures of Maternal Separation Anxiety at T\(^1\) and T\(^2\)
Total Group
N = 69

<table>
<thead>
<tr>
<th>Measures</th>
<th>X</th>
<th>S.D.</th>
<th>Range*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MSAS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 1 T(^1)</td>
<td>20.73</td>
<td>3.11</td>
<td>14-28</td>
</tr>
<tr>
<td>Factor 1 T(^2)</td>
<td>19.79</td>
<td>3.01</td>
<td>12.30</td>
</tr>
<tr>
<td>Factor 2 T(^1)</td>
<td>13.66</td>
<td>3.06</td>
<td>7-20</td>
</tr>
<tr>
<td>Factor 2 T(^2)</td>
<td>14.40</td>
<td>4.30</td>
<td>7-32</td>
</tr>
<tr>
<td>Factor 3 T(^1)</td>
<td>22.68</td>
<td>4.21</td>
<td>13-31</td>
</tr>
<tr>
<td>Factor 3 T(^2)</td>
<td>23.11</td>
<td>4.88</td>
<td>13-35</td>
</tr>
<tr>
<td>Total T(^1)</td>
<td>19.02</td>
<td>2.47</td>
<td>13-25</td>
</tr>
<tr>
<td>Total T(^2)</td>
<td>19.10</td>
<td>3.02</td>
<td>10-28</td>
</tr>
<tr>
<td><strong>Home Interview</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(corresponds to MSAS T(^2))</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 1</td>
<td>3.76</td>
<td>1.77</td>
<td>1-8</td>
</tr>
<tr>
<td>Factor 2</td>
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<td>1.96</td>
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<tr>
<td>Factor 3</td>
<td>4.62</td>
<td>2.97</td>
<td>1-9</td>
</tr>
<tr>
<td>Total</td>
<td>3.75</td>
<td>2.01</td>
<td>1-9</td>
</tr>
<tr>
<td><strong>Trait Anxiety T(^1)</strong></td>
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<td></td>
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<tr>
<td>(TMAS)</td>
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<td></td>
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<tr>
<td>13.11</td>
<td>6.90</td>
<td>1-36</td>
<td></td>
</tr>
</tbody>
</table>

*Possible Ranges:

- **MSAS**
  - Factor 1: 7-35
  - Factor 2: 7-35
  - Factor 3: 7-35
  - Total: 7-35

- **Home Interview**
  - Factor 1: 1-9
  - Factor 2: 1-9
  - Factor 3: 1-9
  - Total: 1-9

- **TMAS**: 1-50
and range of responses of the dependent variables in the study. Table 3, p. 86 presents mean, standard deviation and range of responses of the individual scales of the Home Interview measure of maternal separation anxiety.

**Home Interview Ratings**

Total group means measured at 11-17 months infants' age indicated low-moderate levels of maternal separation anxiety about mother-child separations (Total rating $\bar{X} = 3.75$). Ratings on the Home Interview factors and on the Total rating covered the full range of responses. Frequency of responses on individual Home Interview scales were evenly distributed for Separation Stress, Employment-Related Separation Concerns and for Work Orientation. Analysis of remaining scales indicated high levels of happiness with present child care arrangements and generally lower levels of worry about leaving infants in the care of someone else. On the scale Perceptions of Quality of Child Care, 87 per cent of the total group indicated that they were well pleased with the quality of their child's care. Responses to the scale called Attitude Toward Non-Maternal Care showed 59 per cent of the employed mothers expressed little or no apprehension over leaving their child in the care of someone else, while only seven mothers (nine per cent) expressed strong apprehension over nonmaternal child care. Seventy-seven per cent of the mothers perceived mother-child separations as necessary for promotion of independence and sociability in the child, even though the child may experience distress during separation. In addition, 68 per cent of the mothers perceived little or no child's distress at separation, and ascribed the distress they did recognize
Table 3
Pattern of Responses to Home Interview Scales
Total Group
N = 69

<table>
<thead>
<tr>
<th>Individual Scales</th>
<th>$\bar{X}$</th>
<th>S.D.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgment and Aware of Maternal Separation Anxiety</td>
<td>6.49</td>
<td>1.71</td>
<td>2-9</td>
</tr>
<tr>
<td>Separation Stress</td>
<td>4.59</td>
<td>2.37</td>
<td>1-9</td>
</tr>
<tr>
<td>Employment-Related Separation Concern</td>
<td>4.62</td>
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<td>Separation Promotes Independence and Sociability</td>
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<td>Maternal Role Investment</td>
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<td>1.71</td>
<td>3-9</td>
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as related to changes in situational factors or daily routines rather than to upset specifically caused by mother absence. Only three mothers perceived their infants as experiencing a great deal of distress surrounding separation. Ratings on the Maternal Role Investment Scale showed 75 per cent of the total group with very high investment in the maternal role (ratings of 7-9). Only five mothers (seven per cent) expressed low-moderate investment in motherhood, and none said that being a mother was relatively unimportant to her.

MSAS Scores

Total group means of levels of maternal separation anxiety measured one day after infants' birth indicated moderate expressions of maternal anxiety over leaving their babies to return to work (Total score $\bar{X} = 19.02$). Total group mean scores continued to show moderate levels of separation anxiety (Total score $\bar{X} = 19.10$) assessed at infants' age of one year. Means of scores on Factor 2 at both $T^1$ and $T^2$ were significantly lower than the other MSAS scores ($T^1 = 13.66; T^2 = 14.40$), indicating maternal belief that separation experiences contribute in a positive way to a child's independence and socialization.

A one-way analysis of variance with repeated measures was performed on total group mean differences at $T^1$ and $T^2$ MSAS scores, to determine whether employed mothers differed significantly in reported maternal separation anxiety from maternity ward to 12 months later. No significant total group mean differences were found for any MSAS factors nor for Total scores.
Mothers gave a full range of responses to Factor 2 at both T₁ and T₂, and a somewhat limited range of responses to Factors 1 and 3 and on Total MSAS scores. Results on Factor 1 showed that there were no mothers who expressed little or no anxiety at leaving their child, nor concern over the child's ability to adapt to nonmaternal care. Ten mothers (14 per cent) reported that they infrequently felt anxiety or guilt when they were at work and away from their child. Only three mothers (4 per cent) reported strong guilt feelings and frequent worries surrounding the child's care. Responses to Factor 3 at T₁ and T₂ were evenly distributed and indicated that employed mothers generally expressed some conflict associated with integration of motherhood and employment. None of the mothers reported complete confidence in their competence in balancing employment and motherhood responsibilities.

Mothers' SES and maternal separation anxiety

To examine the relationship of mothers' SES to maternal separation anxiety, correlations were computed with MSAS scores at T₁ and T₂ and mother's SEI Prestige scores, and Home Interview ratings with mother's SEI Prestige scores. These correlations are found in Table 4, page 89. Significant moderate negative correlations were found for MSAS Factor 3 at T₁ (r = -.34, p < .001) and for Total score at T₁ (r = -.34, p < .001). At T₂, significant moderate negative correlations were found for Factor 1 (r = -.35, p < .001), Factor 3 (r = -.37, p < .001) and for the Total score (r = .41, p < .0001). No significant correlations were found for any other MSAS scores.
### TABLE 4

Correlations between Measures of Maternal Separation Anxiety, Demographic Variables and Variables Measured at Maternity Ward (T1) and Home Interview (T2)

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</table>

*** p < .0001; ** p < .01; * p < .05; + p < .10; ++ p < .07
**Table of Correlations**

| Variables Measured | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|--------------------|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 8                  |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 9                  |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 10                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 11                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 12                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 13                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 14                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 15                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 16                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 17                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 18                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 19                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 20                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 21                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 22                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 23                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 24                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 25                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 26                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 27                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 28                 |   |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
Therefore, as measured by the MSAS, employed mothers of lower socio-economic status are more likely to experience higher levels of maternal separation anxiety than are employed mothers of higher SES. This finding holds true both in the maternity ward and 12 months later. Lower SES mothers also show higher levels of concern about their ability to balance motherhood and employment, both at the time of their infant's birth and when the child is 12 months old. No significant correlations of mothers' SES with maternal separation anxiety were found for any Home Interview rating (assessed when infants were 11 to 17 months old), although the negative relationship between SES and separation anxiety is also apparent in these ratings.

In order to investigate the stability of maternal separation anxiety as measured by the MSAS, the total group was divided into working class and middle class employed mothers. Group inclusion was determined using revised Duncan SEI Prestige scores. Working class mothers were those whose SEI scores were 39 or below. Middle class mothers were those whose SEI scores were 40 and above. Correlations were computed on MSAS scores at T1 and T2 to determine whether individuals within the two groups were consistent over time in their responses. Table 5, p. 91 shows these relationships. The correlations of MSAS scores at T1 and T2 showed no significant coefficients for women in the working class group. Correlations for women in the middle class group yielded moderate coefficients with the exception of Factor 2 (r = .18, nonsignificant). Significant moderate correlations between T1 and T2 were found for middle class employed mothers on Factor 1, Factor 3 and for the Total Score. These correlational
Table 5

Stability of Working Class and Middle Class Mothers Responses to a Measure of Maternal Separation Anxiety at $T^1$ and $T^2$

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<th>Factor 3 $T^2$</th>
<th>Total $T^2$</th>
<th>Factor 1 $T^2$</th>
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</tbody>
</table>

MSAS

| Factor 1 $T^1$ | .29 | .39** |
| Factor 2 $T^1$ | .18 | .18 |
| Factor 3 $T^1$ | .30** | .40** |
| Total $T^1$ | .17 | .34* |

**p .01
*p .05
+p .07
++p .10
patterns indicated moderate consistency in reported levels of maternal separation anxiety and of employment-related separation concerns for middle class employed mothers, but little or no consistency over time for working class employed mothers.

Research Question 2:

Does mothers' IQ significantly relate to maternal separation anxiety as assessed by the MSAS and by the Home Interview?

Table 4, p. 89 presents the correlations of mothers' IQ with the two measures of maternal separation anxiety. Significant moderate negative correlations were found for all MSAS factors and total scores at both $T_1$ and $T_2$, with the exception of Factor 2, $T_1$ ($r = .23$, nonsignificant $p < .10$). When measured by the MSAS, mothers with higher IQ scores indicated lower levels of separation anxiety, less concern about leaving their infant in nonmaternal care, and fewer perceptions of child upset at the time of separation. In addition, employed mothers with higher IQs also expressed more competence in their ability to balance the demands of employment and motherhood. Factor 2 showed a significant low-moderate negative correlation at $T_2$ ($r = -.22$, $p < .05$) indicating that when their children were 12 months old, employed mothers with higher IQs tended to believe that mother-child separations were necessary for the development of independence and sociability in the child, and those qualities were viewed positively. These mothers felt that such experiences were important, even though the child may become upset over separations from the mother.
Similar patterns of significant low-moderate negative correlations
were found with Home Interview ratings assessed at infants' age of
11-17 months, for Interview Factor 1 \( (r = -0.22, p < 0.05) \) and Factor 2
\( (r = -0.25, p < 0.05) \). No significant relationships were found for IQ
with any other Home Interview rating.

**Research Question 3:**

Does mothers' educational level significantly relate to maternal
separation anxiety as measured by the MSAS and Home Interview ratings?

Correlations between mothers' education and maternal separation
anxiety were examined separately at \( T^1 \) and \( T^2 \) using MSAS scores, and
at 11-17 months infant's age using the Home Interview ratings (see
Table 4, p. 89). Significant low to moderately high negative correla-
tions were found for all MSAS scores at both \( T^1 \) and \( T^2 \), with the
exception of Factor 1 at \( T^1 \), which was negative and approached
significance \( (r = -0.21, p < 0.06) \). Maternal responses to MSAS Factor 1
indicated that in the maternity ward, mothers with higher educational
achievement expressed moderate levels of anxiety over future mother-
child separations, and some concern over their infants' response to
those separations. However, by the time their infants were 12 months
old, the employed mothers with higher educational levels expressed
significantly less anxiety and concern than employed mothers with less
education.

Total MSAS scores assessed at maternity ward and again at the
time infants were one year old showed the highest significant correla-
tion of education with maternal separation anxiety \( (T^1, r = -0.44, \)
That is, the higher an employed mother's educational level, the lower were her feelings of anxiety and worry about leaving her child in order to work.

When correlations were computed using Interview ratings, no signification relationships were found between mothers' education and maternal separation anxiety.

Research Question 4:

Do mothers' and fathers' income levels significantly relate to maternal separation anxiety as assessed by the MSAS and by Home Interview ratings?

Correlations between mothers' income and maternal separation anxiety were examined separately using MSAS scores, and at the time infants were 11-17 months old, using the Home Interview ratings. Significant low to moderate negative correlations were found at both $T^1$ and $T^2$ for Factor 3 ($T^1, r = -.34, p < .001; T^2, r = -.36, p < .001$) and Total scores ($T^1, r = -.28, p < .001; T^2, r = -.38, p < .0001$). Factor 2 showed a significant low negative correlation at $T^1$ ($r = -.24, p < .05$) but was nonsignificant 12 months later, although still negative and approaching significance ($r = -.20, p < .07$). Factor 1 was nonsignificant at $T^1$, but 12 months later a low negative correlation was found ($r = -.29, p < .01$). In summary, mothers with higher incomes expressed lower levels of concern about integrating employment and motherhood when assessed at infants' birth and again when the infants were one year old. In addition, higher income mothers reported lower levels of separation anxiety in the maternity ward and also one year later. On measures of attitudes toward nonmaternal
care, maternal separation stress and perceptions of the child's separation distress, income levels showed no significant relationship with responses, but when the babies were 12 months old, higher income mothers expressed significantly less worry about nonmaternal child care, and perceived less maternal and child distress over employment-related separations.

No significant correlations were found between mothers' incomes and any Interview rating, nor between fathers' incomes and any MSAS score or Interview rating.

Research Question 5:

Does mother's age significantly relate to maternal separation anxiety as assessed by the MSAS and by Home Interview ratings?

As presented in Table 4 (see p. 89) there were no significant correlations between mothers' age and any MSAS scores assessed in the maternity ward, nor with any Interview ratings assessed when infants were 11-17 months old. Significant low-moderate negative correlations were found for all MSAS scores at T1, infants' age 12 months. A one-way analysis of variance with repeated measures was performed on mean differences for MSAS scores at T1 and T2, to determine whether there was a significant difference in levels of separation anxiety of younger mothers, from maternity ward to 12 months later. Significant total group mean differences were found on all MSAS scores, indicating that when assessed by the MSAS in the maternity ward, mother's age showed no significant relationship with the way in which mothers expected to react when they left their infants to return to work. However, after 12 months of employment and motherhood, younger mothers reported higher
levels of separation anxiety, greater perceptions of child's distress at separation and greater concerns about their ability to balance the responsibilities of their dual roles. In addition, younger mothers were more likely to believe that mother-child separations were not essential to the child's ability to become an independent, sociable individual.

Research Question 6:

What is the relationship of mothers' IQ, education, mothers' and father's income, and mothers' age to SES?

Table 6, p. 97 presents correlations between socioeconomic status and selected demographic variables. Mothers' education showed highly significant correlations with SES (r = .79, p<.0001), while IQ (r = .58, p<.0001) and age (r = .59, p<.0001) showed moderately high significant correlations with SES. Correlation of mothers' income with SES was moderately significant (r = .37, p<.001). The relationship between father's income and mother's SES was nonsignificant.

Research Question 7:

Does awareness of separation as a significant issue vary by socioeconomic status and if so, what is the relationship of that awareness to maternal separation anxiety?

The individual scale of the Home Interview called Acknowledgment and Awareness of Separation Anxiety was used to assess the degree to which respondents perceived the issue of mothers' feelings about separating from their children as an important or valid concept. No relationship was found between SES and acknowledgment of the significance of separation-related issues (r = .05). Fifty seven per cent of all employed mothers reported moderately high levels of awareness
Table 6
Correlations between Selected Demographic Variables and Socioeconomic Status

<table>
<thead>
<tr>
<th>Mothers' SES</th>
<th>Mothers' Education</th>
<th>Mothers' IQ</th>
<th>Mothers' Age</th>
<th>Mothers' Income</th>
<th>Fathers' Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>.79****</td>
<td>.58****</td>
<td>.59****</td>
<td>.37***</td>
<td>.09</td>
<td></td>
</tr>
</tbody>
</table>

**** p < .0001   *** p < .001
of mother-child separations as an important developmental issue. When between group responses were analyzed (see Question 1 for group definition) only one working class mother (N=35) and two middle class mothers (N=34) indicated little or no interest in the topic of employed mothers' feelings about separating from infants in order to return to work.

High levels of awareness and concern regarding mother-child separations were indicated by quantitative data analysis, and were substantiated through qualitative analysis of the clinical interviews and through assessment of initial responses to requests for participation in the study. Of the 73 women contacted who fit the demographic characteristics needed for participants in the study, only four declined to participate (two working class and two middle class). All subjects expressed enthusiasm about being a part of the study, even though it was understood that this commitment involved a one hour home interview, which needed to be scheduled around a full days' work plus evening family responsibilities. Most subjects, regardless of socioeconomic status, education or income, were enthusiastic about the opportunity to talk about their feelings regarding working and leaving their infants in the care of someone else. This same eagerness is apparent in almost every interview transcript. The following statements are representative of subjects' responses:

"It's important to get your feelings straightened out, or you'll be miserable."

"Anything that's important to you, you should talk about, and this is very important to me. I'm glad to have the chance to talk!"

"If you're resentful about going to work, you won't do well at work or at home. I think my talking about him so much at work at first, was part of that process. This kind of opportunity is really important, too."
"It's very important to deal with the way you're feeling (about being a working mother) because women have to feel they're doing the right thing or they can't go on."

Correlations were computed between **Acknowledgment and Awareness of Separation Anxiety** ratings and remaining Interview factors as well as MSAS factors, to assess the relationship between understanding of maternal separation anxiety as a significant issue, and expressed levels of that anxiety. Correlations are reported in Table 7, p. 100. No significant correlations were found with any MSAS score at T₁, nor with MSAS Factor 2 at T₂. Interview Factor 2 showed low significant correlation with **Acknowledgment and Awareness of Separation Anxiety** (r = .28, p < .05). With the exception of two Interview scales, all correlations with MSAS scores at infants' age of 12 months and with individual Interview scale ratings at infants' age of 11-17 months were moderate to highly significant. Significant low negative correlation was found with **Work Orientation** (r = -.34, p < .001) and no significant correlation between awareness of separation anxiety and **Perceptions of Quality of Child Care**.

In summary, acknowledgment and awareness of maternal separation anxiety as a significant issue was moderately high among employed mothers regardless of SES, and that awareness was significantly correlated with most measures of expressed maternal separation anxiety at the time infants were 11 to 17 months old.
Table 7
Correlations between Acknowledgment and Awareness of Separation Anxiety and MSAS and Interview Scales

<table>
<thead>
<tr>
<th>Measures</th>
<th>Acknowledgment and Awareness of Maternal Separation Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MSAS</strong></td>
<td></td>
</tr>
<tr>
<td>Factor 1</td>
<td>T1 .09</td>
</tr>
<tr>
<td>Factor 2</td>
<td>T1 .03</td>
</tr>
<tr>
<td>Factor 3</td>
<td>T1 .25</td>
</tr>
<tr>
<td>Total Score</td>
<td>T1 .17</td>
</tr>
<tr>
<td>Factor 1</td>
<td>T2 .26**</td>
</tr>
<tr>
<td>Factor 2</td>
<td>T2 .06</td>
</tr>
<tr>
<td>Factor 3</td>
<td>T2 .39****</td>
</tr>
<tr>
<td>Total Score</td>
<td>T2 .33***</td>
</tr>
<tr>
<td><strong>Home Interview</strong></td>
<td></td>
</tr>
<tr>
<td>Factor 1</td>
<td>.61****</td>
</tr>
<tr>
<td>Factor 2</td>
<td>.28*</td>
</tr>
<tr>
<td>Factor 3</td>
<td>.52****</td>
</tr>
<tr>
<td>Total Rating</td>
<td>.59****</td>
</tr>
<tr>
<td><strong>Individual Interview Scales</strong></td>
<td></td>
</tr>
<tr>
<td>Separation Stress</td>
<td>.69****</td>
</tr>
<tr>
<td>Employment-Related</td>
<td>.51****</td>
</tr>
<tr>
<td>Separation Concerns</td>
<td>-.34****</td>
</tr>
<tr>
<td>Work Orientation</td>
<td>.47****</td>
</tr>
<tr>
<td>Attitude toward Non-Maternal Care</td>
<td></td>
</tr>
<tr>
<td>Perceptions of Quality of Child Care</td>
<td>-.22</td>
</tr>
<tr>
<td>Separation Promotes</td>
<td>.28*</td>
</tr>
<tr>
<td>Independence and Sociability</td>
<td></td>
</tr>
<tr>
<td>Perceptions of Child's Distress</td>
<td>.23*</td>
</tr>
<tr>
<td>Maternal Role Investment</td>
<td>.42****</td>
</tr>
</tbody>
</table>

*** p < .0001  ** p < .001  * p < .05
SECTION II

OBJECTIVE II: To investigate the relationship of maternal separation anxiety and socioeconomic status with work orientation, maternal role investment, perceptions of quality of child care and trait anxiety.

Research Question 1:

What is the relationship between work orientation and maternal separation anxiety?

Mothers' work orientation was measured using a scale included in the Home Interview, assessed when infants were 11-17 months old. In addition, responses to a subscale of Work Orientation were also examined. This subscale is called Work Preference and was designed to identify mothers' work preferences, assuming a choice about working or not working. As presented in Table 4, p. 89, mothers' orientation toward employment showed moderate to moderately high significant correlations with all but one MSAS score at both T₁ and T₂, as well as with all Home Interview ratings. A nonsignificant correlation was found for MSAS Factor 1 at T₁, but a similar trend was evident (r = -.15, p < .10). Mothers who viewed employment as a satisfying or a necessary experience, reported lower anxiety over mother-child separations, fewer worries about leaving their infants in nonmaternal care and greater belief that separations were important to a child's development of independence, even though the experience might be upsetting to the child. In addition, mothers who reported higher levels of orientation to work also expressed greater confidence in their competence for handling the concurrent responsibilities of motherhood and employment.
Table 8, p. 103 presents a descriptive comparison of maternal responses to Work Preference items. To further examine employment preference, analyses were conducted on subjects' responses by working class and middle class, as well as on total group ratings. Duncan SEI Prestige scores of 39 and below identified working class employed mothers. Duncan SEI Prestige scores of 40 and above identified middle class mothers. It is of particular interest to note the pattern of responses to the question, "If you could choose between staying at home with your baby or going to work, which would you choose?" Half of all employed mothers, regardless of group, would choose to stay home full time. Of those who would choose to work, 32 per cent (11) of the middle class mothers would work full time, while 23 per cent (8) of the working class mothers would choose full time employment. Chi square analyses were performed to determine the significance of the difference between group response frequencies. The chi square value for this analysis was not significant ($X^2 = 1.08$) indicating that working class and middle class mothers did not differ significantly in their preferences to work on a full or part time basis. It is also interesting to note that 65 per cent (45) of the total group believed that if working were a necessity, a mother would feel greater anxiety over mother-child separations. Only 11 per cent (8) believed that a mother in that situation would experience lower levels of separation anxiety.

In summary, employed mothers with higher work orientation reported less separation anxiety and less concern over leaving their infants in nonmaternal care, as well as greater confidence in their
Table 8

Descriptive Comparison of Employed Mothers' Responses
to a Measure of Mothers' Work Preference

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Group</th>
<th>Working Class</th>
<th>Middle Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 69</td>
<td>N = 35</td>
<td>N = 34</td>
<td></td>
</tr>
<tr>
<td>Employment/Home Preference (if choice available)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stay home full time</td>
<td>35 51%</td>
<td>18 51%</td>
<td>17 50%</td>
</tr>
<tr>
<td>Work part time</td>
<td>15 22%</td>
<td>9 25%</td>
<td>6 17%</td>
</tr>
<tr>
<td>Work full time</td>
<td>19 27%</td>
<td>8 23%</td>
<td>11 32%</td>
</tr>
<tr>
<td>Anxiety levels/Employment Choice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No choice, greater maternal separation anxiety</td>
<td>45 65%</td>
<td>24 68%</td>
<td>21 61%</td>
</tr>
<tr>
<td>No choice, less maternal separation anxiety</td>
<td>8 11%</td>
<td>3 8%</td>
<td>5 14%</td>
</tr>
</tbody>
</table>
ability to deal competently with employment and motherhood. Half of the total group said they would choose to stay home full time with their babies. A high percentage of the total group believed that maternal separation anxiety would be stronger for mothers who had to work outside the home.

Research Question 2:

What is the relationship between maternal role investment and maternal separation anxiety?

Mothers' investment in the maternal role was measured using a scale of the Home Interview, assessed at the time infants were 11-17 months of age. Correlations were computed separately between all MSAS scores, all Home Interview factor ratings and total score, and maternal role investment ratings (see Table 2, p. 84 for mean, standard deviation and range of response). Significant moderate correlations were found for MSAS Factor 3 at both $T^1$ and $T^2$ ($T^1$, $r = .36, p < .001; T^2, r = .34 p < .001$) indicating that mothers with greater investment in the maternal role also had more questions about the possibility of fulfilling the dual roles of mother and employee. No significant correlations were found for any other MSAS scores. When Interview ratings were examined, moderately high significant correlations were found for all factors and for the total rating, with the exception of a low significant correlation found with Factor 2 ($r = .28, p < .01$).

Findings on maternal role investment differed when results of each measure were examined separately. Correlations of maternal
role investment with Interview ratings indicated that women who placed
great importance on motherhood as a source of personal fulfillment
also expressed higher levels of anxiety over mother-child separations
due to maternal employment, greater concern over nonmaternal care and
the child's response to that care, and more worries about being
effective as an employed mother. When MSAS scores at $T^2$ were examined
(assessed close to the time of the Home Interview) significant rela­
tionships were found only for employment-related issues. Even when
maternal role investment was correlated with self-reported maternal
separation anxiety obtained when infants were one day old, a signifi­
cant relationship was also found between maternal role investment and
separation anxiety surrounding the balance of motherhood and employ­
ment.

Research Question 3:

What is the relationship of work orientation to maternal
role investment, and of work orientation and maternal role
investment to socioeconomic status?

As presented in Table 9, p. 106, the relationship of work orien­
tation to maternal role investment was negative and moderately
significant ($r = -.39, p < .001$). No significant correlation was found
between maternal role investment and SES, while a low significant
correlation was found for work orientation and SES ($r = .26, p < .01$).
Employed mothers who were strongly committed to work may also be highly
invested in the maternal role. These findings must be considered in
light of the high proportion of ratings of 7-9 on the Maternal Role
Investment scale (see research question 1 and Table 3). Seventy five
per cent of the total group were rated as highly invested in the maternal role.

Table 9

<table>
<thead>
<tr>
<th>Maternal Role Investment</th>
<th>Work Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal Role Investment</td>
<td>-.39***</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td>.26**</td>
</tr>
</tbody>
</table>

***p < .001    **p < .01

Research Question 4: .

What is the relationship between mothers' perception of the quality of her child's care, and maternal separation anxiety?

Responses to the Interview scale Perceptions of the Quality of Child Care were correlated with MSAS scores at $T^2$ ($T^1$ was administered one day after infants' births) and Home Interview Factors and Total, assessed at infants' age 11-17 months. Low significant negative correlations were found for Interview Factors 1 ($r = -.26$, $p < .02$) and 3 ($r = -.28$, $p < .02$), as well as the Total Interview rating ($r = -.30$, $p < .01$). No significant correlation was found for Interview Factor 2 nor for any MSAS $T^2$ score, although for the MSAS Total score a similar trend was apparent ($r = -.22$, $p < .06$) and approached significance.
Data were also collected for this study on two variables which provided more detailed information on nonmaternal child care arrangements. The first asked for the number of consecutive child care arrangements needed since the infants' births, and the second identified types of nonmaternal care presently used. Ninety one per cent (63) of the families needed only one or two child care arrangements, although one child had five different child care providers during her first 12 months.

Table 10 (see p. 108) presents a description of the types of nonmaternal care presently used by families in the study, and the frequency of the use of each type. No significant correlations were found, either with the number of consecutive child care arrangements needed, or with the type of child care presently in use, and satisfaction with child care. It is important to interpret these findings in light of the limited range of responses to this Interview scale (see Table 3, p. 86 for mean, standard deviation and range of response). Since 87 per cent indicated they were pleased with the quality of their child's present care, correlational results must be cautiously interpreted.

Research Question 5:

What is the relationship between mothers' trait anxiety and maternal separation anxiety?

Trait anxiety was measured using the Taylor Manifest Anxiety Scale, administered in the maternity ward. Correlations were computed with all MSAS scores, Home Interview ratings and Totals. At T1, trait anxiety and Factor 1 showed a significant moderate correlation
Table 10

Description of Types of Nonmaternal Child Care Presently Used and the Frequency of Use

<table>
<thead>
<tr>
<th>Type of Care</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babysitter, unrelated, in baby's home</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Babysitter, unrelated, in sitter's home</td>
<td>42</td>
<td>61</td>
</tr>
<tr>
<td>Day care</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Baby's father, majority of time</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Other relative, in relative's home</td>
<td>15</td>
<td>22</td>
</tr>
</tbody>
</table>

(r = .34, p < .001) and the Total T¹ MSAS score and trait anxiety showed a low significant correlation (r = .37, p < .01). Nonsignificant correlations were found for Factors 2 and 3. Factor 2 at T² was the only other MSAS score which significantly correlated with trait anxiety (r = .27, p < .01). None of the correlations between trait anxiety and Interview ratings were significant. Trait anxiety was significantly correlated with only one other study variable and that was father's education, a moderate negative correlation (r = -.35, p < .001).

These findings suggest that one day after the birth of their infants, those mothers who expressed greater levels of trait anxiety were also more likely to experience higher levels of general maternal separation anxiety.
Nonsignificant correlations were found for trait anxiety and mothers' SES, but in order to further investigate this finding, student's t-tests were performed on group mean differences of working class and middle class employed mothers. Mean, standard deviation and range of responses to the Taylor Manifest Anxiety Scale (TMAS) administered in the maternity ward to assess trait anxiety, are shown below.

**TABLE II**

Pattern of Responses to the Taylor Manifest Anxiety Scale

<table>
<thead>
<tr>
<th>Working Class</th>
<th>Middle Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>S.D.</td>
</tr>
<tr>
<td>14.68</td>
<td>7.71</td>
</tr>
</tbody>
</table>

Significant mean differences were found ($t(67) = 1.95, p < .05$), indicating that working class mothers expressed significantly higher levels of trait anxiety than middle class mothers at the time of their infants' births.

**SECTION III**

**OBJECTIVE III:** To examine the validity of the Maternal Separation Anxiety Scale (MSAS) and the Home Interview measures of maternal separation anxiety for employed mothers of lower socioeconomic status

**Research Question 1:**

What are the interrelationships between the measurement of maternal separation anxiety using the MSAS, the measurement of maternal separation anxiety using the Home Interview, and socioeconomic status and its co-variates?
To investigate the relationship between the MSAS scores and the Home Interview ratings, correlations between the MSAS factors and the equivalent interview-based factors were computed. Correlations between the total MSAS score and the total interview-based ratings were also calculated. $T^2$ MSAS data were used for these correlations, since they represented contemporaneous measures of maternal separation anxiety with the interview ratings. Table 3 includes all data used for this analysis. Table 12, p. 111 presents only the significant correlations between Interview ratings and MSAS scores.

All correlations between the MSAS $T^2$ scores and Interview ratings were positive and all correlations were significant, with the exception of Factor 2. Factor 2 responses may reflect the highly limited range of responses to the Interview scale (see research question 1 and Table 3, p. 86). Seventy seven per cent of the mothers perceived mother-child separations in a generally positive light, and as a sometimes necessary experience which fosters a child's developing independence and sociability. Only 6 (7 per cent) mothers were rated at 6 or above, ratings which indicate the belief that separations are not essential to the child's development of autonomy.

Strong significant correlations were found between MSAS Factors 1 and 3 and the corresponding Interview factors, all significant at $p < .0001$. The correlations between the MSAS Total score and the Total Interview rating showed a highly significant relationship ($r = .61$, $p < .0001$). All other relationships of the MSAS scores and Home Interview ratings were significant, with the correlations ranging from $r = .22$ to $r = .60$. 
TABLE 12
Significant Correlations between Home Interview Ratings and MSAS Scores at T²
Total Group
N=69

<table>
<thead>
<tr>
<th></th>
<th>MSAS Fac.1</th>
<th>MSAS Fac.2</th>
<th>MSAS Fac.3</th>
<th>MSAS Total</th>
<th>Inter. Fac.1</th>
<th>Inter. Fac.2</th>
<th>Inter. Fac.3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 1</td>
<td>.32***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2</td>
<td>.50****</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 3</td>
<td></td>
<td>.75****</td>
<td>.67****</td>
<td>.79****</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.41****</td>
<td>.36***</td>
<td>.44****</td>
<td>.42****</td>
<td>.61****</td>
<td>.48****</td>
<td>.41****</td>
<td>.73****</td>
</tr>
<tr>
<td>Interview</td>
<td>.22*</td>
<td>.48****</td>
<td>.41****</td>
<td>.73****</td>
<td>.61****</td>
<td>.61****</td>
<td>.55****</td>
<td>.96****</td>
</tr>
<tr>
<td>Total</td>
<td>.39****</td>
<td>.61****</td>
<td>.55****</td>
<td>.96****</td>
<td>.72****</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* ****p<.0001  ***p<.001  **p<.01  *p<.05.
In summary, the strong correlations between MSAS scores and Home Interview ratings lends support to evidence of construct validity of the data collected from the two measures of maternal separation anxiety.

Maternal separation anxiety and socioeconomic status and co-variates

In order to investigate the relationship of maternal separation anxiety with employed mothers' socioeconomic status, all MSAS scores and all Interview ratings were correlated with mothers' Duncan SEI Prestige scores. Further analyses were conducted on between group data, using Duncan SEI Prestige scores to identify group status. Mothers with SEI scores of 39 and below were included in the working class group and mothers with Duncan SEI Prestige scores of 40 and above constituted the middle class group.

Table 13, p. 113 includes correlations of the two measures of maternal separation anxiety with mothers' SES. Table 15 presents correlations between measures of maternal separation anxiety, SES and selected demographic variables. The variables were selected on the basis of their hypothesized significant correlations with SES. The correlations found in this study were the following:

<table>
<thead>
<tr>
<th>Mothers' IQ</th>
<th>Mothers' Education</th>
<th>Mothers' Age</th>
<th>Mothers' Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES</td>
<td>.58****</td>
<td>.79****</td>
<td>.48****</td>
</tr>
<tr>
<td></td>
<td>**p&lt;.0001</td>
<td>***p&lt;.001</td>
<td></td>
</tr>
</tbody>
</table>

All correlations between MSAS scores at $T^1$ and $T^2$ and mothers' SES were negative and moderately significant at $p<.0001$ or $p<.001$, with the exception of Factor 2, and Factor 3 at $T^1$. Relationships
TABLE 13
Correlations between Measures of Maternal Separation Anxiety and Selected Variables
Total Group
N=69

<table>
<thead>
<tr>
<th></th>
<th>Mothers' SES</th>
<th>Mothers' IQ</th>
<th>Mothers' Education</th>
<th>Mothers' Age</th>
<th>Mothers' Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 1 $T^1$</td>
<td>-.13</td>
<td>-.37***</td>
<td>-.21</td>
<td>-.09</td>
<td>-.08</td>
</tr>
<tr>
<td>Factor 2 $T^1$</td>
<td>-.20</td>
<td>-.17</td>
<td>-.28**</td>
<td>-.11</td>
<td>-.24*</td>
</tr>
<tr>
<td>Factor 3 $T^1$</td>
<td>-.34***</td>
<td>-.23*</td>
<td>-.36***</td>
<td>-.12</td>
<td>-.33***</td>
</tr>
<tr>
<td>Total $T^1$</td>
<td>-.33***</td>
<td>-.36***</td>
<td>-.41***</td>
<td>-.16</td>
<td>-.28**</td>
</tr>
<tr>
<td>Factor 1 $T^2$</td>
<td>-.35***</td>
<td>-.44****</td>
<td>-.42****</td>
<td>-.31***</td>
<td>-.29**</td>
</tr>
<tr>
<td>Factor 2 $T^2$</td>
<td>-.18</td>
<td>-.22*</td>
<td>-.30***</td>
<td>-.25*</td>
<td>-.20</td>
</tr>
<tr>
<td>Factor 3 $T^2$</td>
<td>-.37***</td>
<td>-.35***</td>
<td>-.27**</td>
<td>-.26**</td>
<td>-.35***</td>
</tr>
<tr>
<td>Total $T^2$</td>
<td>-.40****</td>
<td>-.44****</td>
<td>-.43****</td>
<td>-.36***</td>
<td>-.38***</td>
</tr>
<tr>
<td>Home Interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 1</td>
<td>-.09</td>
<td>-.21</td>
<td>-.15</td>
<td>-.09</td>
<td>-.07</td>
</tr>
<tr>
<td>Factor 2</td>
<td>-.02</td>
<td>-.24</td>
<td>-.05</td>
<td>.02</td>
<td>-.09</td>
</tr>
<tr>
<td>Factor 3</td>
<td>-.01</td>
<td>-.03</td>
<td>-.02</td>
<td>-.01</td>
<td>-.08</td>
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<tr>
<td>Total</td>
<td>-.05</td>
<td>-.19</td>
<td>-.10</td>
<td>-.05</td>
<td>-.09</td>
</tr>
</tbody>
</table>

***p<.0001  **p<.001  *p<.01  *p<.05
between maternal separation anxiety and the selected demographic variables of IQ, education and income reflect a similar pattern. All correlations were negative and low to moderately significant. Factor 1 as measured in the maternity ward showed a significant correlation only with mothers' IQ (r= -.37, p<.001). Correlations between mothers' age and SES showed a significant relationship only at T2, with r1 correlations presenting a consistent negative but nonsignificant relationship.

When Interview ratings were examined, all correlations were found to be nonsignificant between maternal separation anxiety and SES, and between SES and all other selected variables.

Findings from these analyses showed a generally strong relationship of mothers' SES with maternal separation anxiety when measured with a self-report questionnaire assessed in the maternity ward and at infants' age of 12 months. However, no significant correlations were found using a semi-structured clinical interview method, conducted concurrently with the T2 MSAS.

To further investigate these findings, between group analyses were conducted on MSAS scores and Interview ratings for working class and middle class employed mothers and on between group means for MSAS scores at T2 and the contemporaneous Interview ratings. Student's t-tests were performed on scores for MSAS factors and totals at T1 and T2, and on ratings of Home Interview factors and total. At T1, significant differences were found for MSAS Factor 2, (t(67) = 1.97, p<.05), Factor 3 (t(67) = 2.89, p<.005) and for the Total MSAS score
(t(67) = 3.13, p<.002). No significant group mean difference was found for MSAS Factor 1 at T^1 (t(67) = 1.38). Working class employed mothers expressed significantly more anxiety over separating from their infants for full time employment, and more worry centered on their ability to integrate motherhood and work. Working class employed mothers also were significantly less likely to believe that mother-child separations were necessary to promote independence and sociability in children, or to see this as a positive effect.

Student t-tests were also performed on group means for MSAS T^2 scores and Interview ratings (see Table 14, p. 116 for working class and middle class mean, standard deviation and range of responses). Significant differences between groups were found for MSAS Factor 1 (t(67) = 3.60, p<.0005), MSAS Factor 3 (t(67) = 2.28, p<.02), and for the Total MSAS score (t(67) = 3.37, p<.001). No significant mean differences were found for MSAS Factor 2 (t(67) = 1.81) nor for any Interview score.

In summary, the pattern of strong correlations between MSAS and Interview measures of maternal separation anxiety indicated that both methods measured the same construct. However, when the relationship of SES to each measure was examined, a different degree of relationship emerged. In general, SES and selected demographic variables and maternal separation anxiety were strongly negatively correlated only when the questionnaire (MSAS) was used to measure maternal separation anxiety. However, the same negative correlation was found between Home Interview Ratings and SES, but relationships
TABLE 14
Descriptive Comparison of Working Class and Middle Class Employed Mothers' Responses to Two Measures of Maternal Separation Anxiety

<table>
<thead>
<tr>
<th>Measures</th>
<th></th>
<th>Working Class</th>
<th></th>
<th>Middle Class</th>
<th></th>
</tr>
</thead>
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<tr>
<td></td>
<td></td>
<td>N=35</td>
<td></td>
<td>N=34</td>
<td></td>
</tr>
<tr>
<td>MSAS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 1</td>
<td>T&lt;sup&gt;1&lt;/sup&gt;</td>
<td>21.23</td>
<td>2.82</td>
<td>15-28</td>
<td>20.20</td>
</tr>
<tr>
<td>Factor 1</td>
<td>T&lt;sup&gt;2&lt;/sup&gt;</td>
<td>20.98</td>
<td>3.01</td>
<td>16-30</td>
<td>18.56</td>
</tr>
<tr>
<td>Factor 2</td>
<td>T&lt;sup&gt;1&lt;/sup&gt;</td>
<td>14.37</td>
<td>3.10</td>
<td>8-20</td>
<td>12.94</td>
</tr>
<tr>
<td>Factor 2</td>
<td>T&lt;sup&gt;2&lt;/sup&gt;</td>
<td>15.31</td>
<td>4.60</td>
<td>8-32</td>
<td>13.47</td>
</tr>
<tr>
<td>Factor 3</td>
<td>T&lt;sup&gt;1&lt;/sup&gt;</td>
<td>24.05</td>
<td>3.93</td>
<td>13-31</td>
<td>21.26</td>
</tr>
<tr>
<td>Factor 3</td>
<td>T&lt;sup&gt;2&lt;/sup&gt;</td>
<td>24.40</td>
<td>4.82</td>
<td>14-35</td>
<td>21.79</td>
</tr>
<tr>
<td>Total</td>
<td>T&lt;sup&gt;1&lt;/sup&gt;</td>
<td>19.88</td>
<td>2.44</td>
<td>13-25</td>
<td>18.13</td>
</tr>
<tr>
<td>Total</td>
<td>T&lt;sup&gt;2&lt;/sup&gt;</td>
<td>20.23</td>
<td>2.90</td>
<td>14.28</td>
<td>17.94</td>
</tr>
<tr>
<td>Home Interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 1</td>
<td></td>
<td>3.81</td>
<td>1.84</td>
<td>1-8</td>
<td>3.71</td>
</tr>
<tr>
<td>Factor 2</td>
<td></td>
<td>2.94</td>
<td>2.23</td>
<td>1-9</td>
<td>2.85</td>
</tr>
<tr>
<td>Factor 3</td>
<td></td>
<td>4.57</td>
<td>3.08</td>
<td>1-9</td>
<td>4.67</td>
</tr>
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<td>Total</td>
<td></td>
<td>3.77</td>
<td>2.67</td>
<td>1-9</td>
<td>3.74</td>
</tr>
</tbody>
</table>

*Ranges possible:

<table>
<thead>
<tr>
<th>MSAS</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Factor 1</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Factor 2</td>
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<tr>
<td>Factor 3</td>
<td>Factor 3</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>7-35</td>
<td>1-9</td>
</tr>
<tr>
<td>7-35</td>
<td>1-9</td>
</tr>
<tr>
<td>7-35</td>
<td>1-9</td>
</tr>
<tr>
<td>7-35</td>
<td>1-9</td>
</tr>
</tbody>
</table>
were nonsignificant. As measured by the MSAS, an employed mother of lower socioeconomic status was more likely to report higher levels of general separation anxiety, greater concern about balancing employment and motherhood, and was less convinced that mother-child separations were necessary for development of independence and sociability in a child.

Research Question 2

What combination of study variables best predicts maternal separation anxiety?

Multiple regression analyses were computed in order to identify which variables best predicted maternal separation anxiety using both MSAS and Interview measures. The number of individual variables was too large in proportion to sample size (N=69) to permit the execution of a single regression procedure. Accepted statistical procedure dictates the inclusion of no more than one variable for every ten subjects or the beta weights become unstable. Therefore, only six variables were entered into regression for each of a series of analyses. Stepwise regressions were performed on a series of models, determined by correlational data results, in order to identify the variables adding independent contributions to the prediction. A conservative alpha level of .15 was used for entry of variables into the model. Study variables were regressed against the Total MSAS score at $T^2$, and against the total Interview rating (assessed concurrently with MSAS $T^2$ scores). Total scores and ratings were used, since they were reflective of general maternal separation anxiety.
Table 15 presents the stepwise regression models which accounted for the greatest variance in maternal separation anxiety.

Table 15
Stepwise Multiple Regression Analysis between Maternal Separation Anxiety and Predictor Variables

<table>
<thead>
<tr>
<th>Step and Variable Entered at Each Step</th>
<th>$R^2$</th>
<th>F ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total MSAS Score at T²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Work Orientation</td>
<td>.30</td>
<td>29.16****</td>
</tr>
<tr>
<td>2. IQ Score</td>
<td>.36</td>
<td>18.97****</td>
</tr>
<tr>
<td>3. Trait Anxiety Score</td>
<td>.38</td>
<td>10.14****</td>
</tr>
<tr>
<td>Total Interview Rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Work Orientation</td>
<td>.19</td>
<td>15.99****</td>
</tr>
<tr>
<td>2. Maternal Role Investment</td>
<td>.27</td>
<td>12.61****</td>
</tr>
<tr>
<td>3. Work Status of Mother of Interviewee during her childhood</td>
<td>.29</td>
<td>9.06****</td>
</tr>
<tr>
<td>4. Mothers' Work Preference</td>
<td>.30</td>
<td>6.92****</td>
</tr>
</tbody>
</table>

****p<.001.

To further examine predictor models of maternal separation anxiety, hierarchical regression analyses were performed, using results of the variable models entered into stepwise regressions as well as hypotheses about the construct, to provide the rationale for entering variables into an equation in a planned sequence. Hierarchical regressions were performed against the total MSAS scores at T² and the Total Interview ratings, the dependent variables. Results of the hierarchical regressions are described in Table 16, p. 119.
Table 16
Hierarchical Models for Maternal Separation Anxiety

<table>
<thead>
<tr>
<th>Model Variables</th>
<th>Cumulative $R^2$</th>
<th>MSAS Total Score</th>
<th>Total Interview Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: Mother's SES</td>
<td>.1668</td>
<td>.0032</td>
<td></td>
</tr>
<tr>
<td>Mother's IQ</td>
<td>.2326</td>
<td>.0430</td>
<td></td>
</tr>
<tr>
<td>Mother's education</td>
<td>.2535</td>
<td>.0486</td>
<td></td>
</tr>
<tr>
<td>Work orientation</td>
<td>.3973</td>
<td>.2004</td>
<td></td>
</tr>
<tr>
<td>Maternal role investment</td>
<td>.3974</td>
<td>.2913</td>
<td></td>
</tr>
<tr>
<td>Mother's income</td>
<td>.4199</td>
<td>.2975</td>
<td></td>
</tr>
<tr>
<td>II: Work orientation</td>
<td>.3032</td>
<td>.1926</td>
<td></td>
</tr>
<tr>
<td>Maternal role investment</td>
<td>.3033</td>
<td>.2764</td>
<td></td>
</tr>
<tr>
<td>Mother's SES</td>
<td>.3788</td>
<td>.2821</td>
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<tr>
<td>Mother's IQ</td>
<td>.3928</td>
<td>.2886</td>
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</tr>
<tr>
<td>Mother's education</td>
<td>.3974</td>
<td>.2913</td>
<td></td>
</tr>
<tr>
<td>Mother's age</td>
<td>.4099</td>
<td>.2921</td>
<td></td>
</tr>
<tr>
<td>III: Work orientation</td>
<td>.3032</td>
<td>.1926</td>
<td></td>
</tr>
<tr>
<td>Mother's work pref.</td>
<td>.3032</td>
<td>.2106</td>
<td></td>
</tr>
<tr>
<td>Maternal role investment</td>
<td>.3034</td>
<td>.2841</td>
<td></td>
</tr>
<tr>
<td>Mother's IQ</td>
<td>.3656</td>
<td>.2855</td>
<td></td>
</tr>
<tr>
<td>Mother's SES</td>
<td>.3941</td>
<td>.2952</td>
<td></td>
</tr>
<tr>
<td>Mother's education</td>
<td>.3982</td>
<td>.2989</td>
<td></td>
</tr>
</tbody>
</table>
Table 17, p. 121 presents a detailed description of regression coefficients for the model which predicts the greatest proportion of variance of scores on two maternal separation anxiety measures. Regression analyses demonstrated that mother's work orientation contributed 14 per cent of the variance of MSAS scores and 19 per cent of the variance of the Total Interview ratings. Mother's SES, IQ, education and income provided no explanatory power for variance in interview ratings, while these variables together accounted for 27 per cent of the variance of MSAS scores. Mother's work orientation was the only variable which provided a significant proportion of the variance for both measures of maternal separation anxiety, and appeared to be a stronger predictor than any single SES or co-variate variable.
### TABLE 17

Hierarchical Regression Analysis of Model I for Maternal Separation Anxiety

<table>
<thead>
<tr>
<th>Measure and R²</th>
<th>Source</th>
<th>DF</th>
<th>Sums and Partial Sums of squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Level of Significance</th>
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<tr>
<td></td>
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<tr>
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<td>Mother's SES</td>
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<td>.5818</td>
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<td>.75</td>
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<tr>
<td></td>
<td>Mother's IQ</td>
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<td>.05</td>
<td>.05</td>
<td>1.04</td>
<td>.31</td>
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<tr>
<td></td>
<td>Mother's ed.</td>
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<td>4.78</td>
<td>4.78</td>
<td>.82</td>
<td>.36</td>
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<tr>
<td></td>
<td>Work orientation</td>
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<td>66.52</td>
<td>66.52</td>
<td>11.45</td>
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<td></td>
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<tr>
<td></td>
<td>investment</td>
<td>1</td>
<td>.56</td>
<td>.56</td>
<td>.10</td>
<td>.75</td>
</tr>
<tr>
<td></td>
<td>Mother's income</td>
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<td>14.00</td>
<td>14.00</td>
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<td>.12</td>
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<tr>
<td></td>
<td>ERROR</td>
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<td>360.33</td>
<td></td>
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<tr>
<td></td>
<td>Total</td>
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<td>5579.91</td>
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</tr>
<tr>
<td></td>
<td>Mother's SES</td>
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<td>2.03</td>
<td>2.03</td>
<td>.03</td>
<td>.85</td>
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<tr>
<td></td>
<td>Mother's IQ</td>
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<td>46.66</td>
<td>46.66</td>
<td>.74</td>
<td>.39</td>
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<tr>
<td></td>
<td>Mother's ed.</td>
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<td>21.64</td>
<td>21.64</td>
<td>.34</td>
<td>.56</td>
</tr>
<tr>
<td></td>
<td>Work orientation</td>
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<td>418.94</td>
<td>6.63</td>
<td>.01</td>
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<td>Maternal role</td>
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<td></td>
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<tr>
<td></td>
<td>investment</td>
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<td>535.24</td>
<td>8.47</td>
<td>.005</td>
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<td>62</td>
<td>3919.55</td>
<td></td>
<td>63.21</td>
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</tr>
</tbody>
</table>
CHAPTER V

DISCUSSION

This study was stimulated by the trend toward increased labor force participation of mothers of infants, and was the first to investigate maternal attitudes, beliefs and feelings of women of lower socioeconomic status, related to short-term, employment-related separations. This research studied maternal separation anxiety as it relates to socioeconomic status, education, income and IQ. Although previous literature has examined the effects of employment-related separations on the infant, the impact of these separations on the mother has rarely been studied. This research provides the first empirically-based investigation of working class mothers' feelings about leaving their children in order to return to work, and suggests interesting implications concerning work orientation of lower SES women and the impact of socioeconomic status on mothers' feelings toward leaving infants for short-term separations. The findings also present important issues regarding multi-method approaches to measurement of state anxiety, and implications for further research and analysis.

The discussion of the findings and implications of this research is organized in three sections. The first section provides an interpretation of maternal separation anxiety as it relates to socioeconomic status, education, income, age and IQ. The second section examines the
validity of two self-report measures (MSAS and Home Interview) which measure maternal separation anxiety of women with lower SES, education, income and IQ. The final section addresses findings which relate to the relationships of SES and maternal separation anxiety with work orientation, maternal role investment, perceptions of quality of child care, and trait anxiety.

**Section I: Maternal Separation Anxiety and Socioeconomic Status**

The findings of this research reveal a significant relationship between mothers' SES and levels of maternal separation anxiety, as measured by the MSAS. Lower SES mothers experience higher levels of maternal separation anxiety, both in the maternity ward and 12 months later. Lower SES mothers are also more concerned about their ability to "do it all"—to be effective at work as well as at home as a mother. Gnezda (Note 7), although not looking specifically at SES differences, reported a similar relationship between SES and maternal separation anxiety in her analysis of employed mothers' work preferences. Mothers with lower SES (as measured with the revised Duncan SEI occupational prestige score, as it is in this study) experienced greater separation anxiety association with balancing motherhood and employment at the time they returned to work.

When further analysis was conducted of the consistency of individual responses of mothers between the maternity ward and the time infants were 12 months old, it was found that middle class mothers showed general consistency in their reported levels of maternal separation anxiety, while working class mothers showed little or no
consistency over time. These results may be attributed to a number of factors. There may be greater heterogeneity in the working class group, greater individual differences in perceptions of the realities involved in being a working mother, or greater individual differences in coping styles and adaptive strategies. Komarovsky (1967), in her study of working class families, comments that although she thought her sample was fairly homogeneous, as she conducted in-depth interviews she realized that it was more heterogeneous than was at first apparent. Deutsch (1973) and Caldwell (1973) both suggest that on some variables, within group differences can and do exceed differences between classes.

Levels of perceived maternal separation anxiety measured in the maternity ward and at 12 months infant age, were also found to be significantly higher among women who were less well educated, had lower IQ scores and lower income levels. As personality theorists emphasize (Spielberger, 1972; Lazarus & Averill, 1972; Borkovec et al., 1977), anxiety is a complex emotional reaction, and cognition plays a significant role as a moderator variable. For mothers with lower SES, lower levels of educational achievement and lower IQs, their heightened separation anxiety and concern over balancing employment and motherhood may reflect a cognitive lack of ability to deal with situations in ways which would reduce anxiety states. Spielberger (1972) notes that persons can avoid or reduce anxiety states through the development of coping strategies and defense mechanisms, but that the process is strongly affected by individual personality traits, attitudes and needs, and the extent of the threat to self-esteem perceived in
external situations. Coping strategies actively shape the course of on-going person-environment interactions, and are strongly influenced by a person's cognitive ability to appraise and deal with specific situations.

Mothers with lower education, IQ and income expressed concern about leaving their children in nonmaternal care, perceived more child distress at the time of separation, and expressed less confidence in their ability to balance the demands of employment and motherhood. In the maternity ward, mothers with less education expressed moderate levels of anxiety over future mother-child separations and moderate concern over their infants' expected responses to those separations. But by the time their infants were 12 months old, less well educated mothers showed significantly higher levels of these feelings, and were less willing to say that mother-child separations are necessary for a child's development of independence or sociability.

In the maternity ward, mothers who were younger showed no higher levels of maternal separation anxiety they expected to experience in the future as they left their infants. However, when assessed again after 12 months, younger mothers reported significantly higher maternal separation anxiety, perceptions of more child distress over separation and greater concern about their ability to work and be a mother. They were also significantly more likely to see mother-child separations as nonessential to the child's ability to be an independent individual, nor to see this quality as a positive outcome.
A similar pattern emerges from these findings. An employed mother who has lower socioeconomic status, is less educated, has a lower IQ, earns less money and is younger, shows increasing levels of anxiety and worry over leaving her infant in order to work, and over her competence in this dual role. She also expresses greater concern over her child's ability to adapt to nonmaternal care. She also is more questioning about the value of nonmaternal care and mother-child separations to her child's development of independence and sociability. Gnezda (Note 4) also found that mothers with less education reported greater anxiety associated with promoting infant independence and sociability and expressed fewer positive responses to the need of an infant to develop these characteristics. Kessler (1982), in his review of eight surveys used to estimate the importance of factors which predict psychological distress, finds that, for women in the labor force, education is the most important single predictor of distress. An employed mother with less education and lower SES may be concerned that the attachment between herself and her child will be weakened by mother-child separations and by placement in nonmaternal care (Bowlby, 1951; Kagan, et al., 1978). She may perceive her child's growing independence as a threat to her motherhood role, and a clear indication of her lessened importance to the child.

As is expected, all relationships between the demographic variables of mothers' SES, IQ, education, income and age are significant. Mothers' education is most highly correlated with SES ($r=.79$), but all other correlations are of the magnitude of .37 to .59. The pattern
of interaction between the variables and maternal separation anxiety suggests that education levels and IQ may influence the mother's cognitive ability to assess situations as threatening or non-threatening.

Despite the findings indicating that employed mothers with lower SES, education IQ, income and age experience higher levels of maternal separation anxiety, especially at the time their infants are 12 months old, it is important to recognize that all mothers in the sample expressed at least moderate levels of maternal separation anxiety, as measured with both the MSAS and the Home Interview. This finding is consistent with previous research literature (Gnezda, Note 1; Harris, 1979; Hoffman, Note 10; Paloma, 1972). It is also interesting that all employed mothers, regardless of SES, expressed generally high levels of awareness of maternal separation anxiety as an important issue, because of its effect on both themselves and their infants and its secondary effect on family happiness. The level of interest and enthusiasm regarding discussions of short-term separations of mother and child, was striking.

When the relationship of father's income to SES was investigated, an interesting pattern emerged. As noted previously, a moderately significant correlation was found between mother's income and maternal separation anxiety as measured by MSAS. The same negative correlational pattern was found with Interview ratings, though statistically nonsignificant. Correlations were strongest between mother's income and employment-related separation concerns, indicating that mothers with lower incomes were highly concerned over their ability to juggle
motherhood and employment. However, no relationship was found between father's income and maternal separation anxiety measured by both self-report measures. This finding implies that maternal separation anxiety is a reflection of a mother's own cognitive assessment of the effects of mother-child separations on herself and her child, rather than on the ability of her husband to provide adequate financial support for the family. This is a particularly interesting finding in the light of the fact that father's income has often been considered a popular index of family status and stability (Deutsch, 1973; Gecas, 1979, Mueller & Parcel, 1981).

All the findings discussed up to this point have referred to maternal separation anxiety as measured by the MSAS, a questionnaire administered in the maternity ward and again when the infants were 12 months old. When maternal separation anxiety is measured using the Home Interview, an alternate method conducted concurrently with the second MSAS, the pattern of results is the same, but not statistically significant. With the exception of mother's IQ, none of the significant relationships of SES with the MSAS scores were duplicated with Interview ratings. Low to moderate negative relationships were found between mother's IQ and Interview ratings on Factors 1 and 2, indicating that to some extent employed mothers with lower IQs expressed greater anxiety over separating from their infants, greater concern over nonmaternal care and their children's reactions to separations, as well as greater belief that mother-child separations are not necessary for the child's development of independence. This is true when measured with both forms of self-report, though correlations
are weaker when measured with the Home Interview. The discrepancy between questionnaire and Interview methods will be discussed in the next section of this chapter.

Section II: Validity of MSAS and Home Interview Measures of Maternal Separation Anxiety for Lower SES Mothers

The MSAS and the Home Interview were used to assess maternal separation anxiety with the employed mothers in this sample. Validity of the two measures was considered through correlational and hierarchical analyses at $T^2$ of the data collection, the time when infants were from 11 to 17 months of age. This is a period when infants are expected, developmentally, to evidence higher levels of separation stress and when mothers might therefore experience maternal separation anxiety as a highly salient emotion (Kagan et al., 1978).

Findings reveal that correlations between the MSAS $T^2$ scores and Interview ratings were significant and positive, with the exception of the factor measuring maternal belief in separations as necessary and facilitative of the development of child independence and sociability. The relationship between Factors 1 and 3 of the MSAS and their corresponding Interview factors was strong and significant, and correlations between the Total MSAS score and the Total Interview rating was highly significant ($r=.61, p<.0001$). All other relationships of MSAS scores and Home Interview ratings were also significant. This pattern lends support to the construct validity of the measures. Added support is received from similar
results found from the Gnezda (Note 4) and McBride (Note 7) studies.

Construct validity is a term sometimes conceptualized differently by different researchers (Cronbach & Meehl, 1955; Campbell, 1960). An examination of literature on types of validity indicates that construct, rather than concurrent or predictive validity is the appropriate concept for investigating correlations between two methods used to assess an hypothesized construct (e.g., maternal separation anxiety). Colby et al., (1983) suggest that construct validity is the appropriate concept for a developmental measure, although Rezmovic and Rezmovic (1981) note that exploratory studies (such as this one) are "not well-suited to test specific hypotheses about construct validation..." (p. 71).

The nonsignificant correlation for Factor 2 (maternal belief in separations as necessary and facilitative of a child's independence and sociability) may have been due to the limited range of responses found with this factor in the Interview. Seventy seven per cent of the mothers perceived mother-child separations in a generally positive light, with only 7 per cent of the mothers rating separation as not essential to a child's development of independence. Additional analysis of the individual items comprising Factor 2 is necessary in order to understand the nature and presentation of this concept.

A pattern of strong correlations between the two measures of maternal separation anxiety indicates the strength of the construct. However, a puzzling finding arises from an analysis of the relationship of mother's SES, education, IQ, income and age to each of the measures. Mothers with lower SES, IQ, education, age and income expressed
significantly higher levels of separation anxiety as measured by the questionnaire (MSAS), but they did not express higher levels of separation anxiety when measured by a clinical interview. A similar pattern emerged from the Interview ratings, but all correlations were nonsignificant. Thus, the degree of relationship of the questionnaire to the demographic variables is greater than the strength of their relationship with the Interview. A number of possibilities can be suggested to account for these anomalous findings.

First, the self-administered questionnaire (MSAS) may be the more reliable and valid measure of maternal separation anxiety. The MSAS was administered to 620 mothers (Hock et al., Note 1) who were generally within the middle class range, although high and low SES groups were represented. A principal components factor analysis of the original 68-item instrument revealed a three-factor solution. Factor analytic and item analysis procedures were used to reduce the scale to the final 35-item version. Cronbach's Alpha established internal consistency at .89. Factor analysis done at T1 and T2 revealed a stable factor structure. Discriminant analysis was established with a measure of trait anxiety, the Taylor Manifest Anxiety Scale. The TMAS and MSAS showed a low-moderate correlation of r = .34 (Hock, Gnezda & McBride, Note 1). This relationship is in accord with Spielberger's theory (1972) which predicts low-moderate relationships between trait and state. It is clear that the MSAS is not measuring a general disposition to anxiety, but instead, measures the dimensions of maternal anxiety specifically related to concerns about mother-infant separations, and thus is a state anxiety measure.
In addition to evidence of internal consistency and discriminant validity, the MSAS was assessed by Hock, Gnezda & McBride (Note 1) from a social desirability factor as well. The Edwards Social Desirability Scale (1957) was administered during the development of the MSAS, with resulting correlations of \( r = -.37 \), indicating an appropriate relationship between questions and socially desirable responses. In addition, the researchers balanced responses categories to items, in order to eliminate habitual response sets.

The psychometric strength of the MSAS as a reliable and valid instrument for measuring maternal separation anxiety was established on a primarily middle class group. It is not yet clear whether the instrument is equally reliable or valid as a measure of lower socioeconomic groups' responses to maternal separation anxiety measures. It may be useful to briefly discuss three ways in which the characteristics of the self-administered questionnaire method may affect this groups' responses.

First, it may be that lower SES women with less education and lower IQs respond more accurately to a self-administered questionnaire than to interview questions from another individual. On the other hand, it may be that responses to the MSAS are not meaningful because the level of verbal ability needed to adequately understand the MSAS items may be higher than that possessed by these women. However, responses to the MSAS do not indicate a random pattern as might be expected if this were the case. Scores of lower SES, less educated and lower IQ women showed a consistent response pattern to items on the MSAS, rather than a variable pattern which would suggest that the wording of only some items was confusing or different to understand.
Second, the demand characteristics of the MSAS require that subjects make judgments about specific statements regarding their own feelings and attitudes. For example, they are asked to respond to this statement (on a 5-point scale, strongly disagree to strongly agree): "I worry when someone else cares for my child." Cognitive ability is a strong component of the decision-making process, and a self-administered questionnaire demands the use of that process when responding to each item. The interview method, on the other hand, may eliminate some of the reasoning inherent in questionnaire responses because of the less structured aspects of the task. The interview process allows for extensive discussions of feelings, and does not force a subject to rate herself on a specific statement. Judgments of presence or absence of anxiety over leaving the infant are made by the interviewer, rather than by the respondent alone. That is, the interviewee is talking about her feelings and beliefs, but the ratings are made by the interviewer. The interview process may diffuse the intensity of expressed anxiety, leading to misinterpretation by the interviewer.

Third, the self-administered questionnaire may be a valid measure of maternal separation anxiety among working class employed mothers because it provides a series of formulated statements about mothers and babies to which they are asked to respond. In contrast, the task inherent in a clinical interview requires a high degree of ability to reflect upon and verbalize feelings and attitudes. Researchers (Komarovsky, 1967; Kohn, 1982) have noted lower levels of self-awareness, less time and value placed in reflecting about one's own feelings, and less consciousness of internal cognitive processes among those of
lower SES and education. An interview, then, may demand more "self-consciousness" than a self-administered questionnaire, and the respondent may therefore be communicating a lower level of anxiety than is actually felt. On the other hand, it may be argued that those same interview characteristics may enhance the validity of the interview as a method of measuring separation anxiety.

An experienced, sensitive interviewer who effectively probes for clarification of subject responses and allows time for thoughtful, in-depth responses to questions may elicit more accurate perceptions of attitudes and feelings about mother-child separations. The use of an interview schedule which has been carefully developed to encourage trust between the interviewer and respondent, and setting a comfortable environment, should also lead to more accurate perceptions. The interview schedule used for this study was designed to meet these objectives, using de Rivera's (1981) conceptual encounter approach to clinical interviewing. In addition, both interviewers were experienced, trained professionals and the interview format was pilot tested extensively. Komarovsky (1967) found, in her classic study of working class families, that middle class interviewers were not viewed as authority figures to whom socially desirable answers needed to be provided. Instead, she found a lack of the self-conscious awareness that she noted frequently among college educated, middle-class women. In this study researchers noted the same quality, and felt that responses to interview questions were dictated by honest perceptions of feelings and attitudes, rather than socially desirable responses.
An interview format allows an interviewer to rephrase a question until the subject gains a clear understanding of its meaning, which cannot be done through a forced choice, paper and pencil questionnaire format. The same basic items were used for the Home Interview as were included in the MSAS, with two scales added to the Interview for this study. Internal consistency of interview scales was found to be high, with correlations from $A = .61$ to $.96$. Interrater reliability was also high, ranging from $r = .89$ to $.99$.

Since the same questions were included in both methods, (the wordings and syntax on interview items were simplified for this study), there seems to be reason to infer that differences in method are the major factors in the discrepant findings, in interaction with subjects' SES and selected demographic variables. There is an as yet undetermined reason why responses to the MSAS are affected by these variables, while the Interview is less affected. A personality variable which is broader than these factors and encompasses some of them could be hypothesized as a possible source of variance for the Interview and/or the MSAS (Rezmovic & Rezmovic, 1981; Phares, 1976).

Regression analyses indicate that the amount of variance accounted for by a model including SES, IQ, education, work orientation, maternal role investment and income is .42 using the MSAS and .30 using the Interview (see Tables 16 and 17, pp. 119,121). Of the variables contributing to this variance, only work orientation contributes significantly to the variance of both measures. Therefore, it may be that a general personality factor in addition to specific attitudes or feelings toward work and career, may be responsible for some of the unexplained variance.
It is clear that further analysis of method-state variance is necessary to begin to answer some of the questions posed here. But Rezmovic and Rezmovic (1981) note that "A chronic problem in empirical attempts to validate constructs has been the confounding relationship between traits and their measurement methods..." (p. 59) and, along with others, they suggest that confirmatory factor analysis is a valid approach to the problem (Belsky, 1981; Joreskog, 1979; Anastasi, 1983).

The final section of this chapter will discuss the relationship of maternal separation anxiety to work orientation, maternal role investment, child care perceptions, and trait anxiety as measured by both self-report methods.

**Section III: Relationship of SES and maternal separation anxiety to work orientation, maternal role investment, perceptions of child care quality and trait anxiety**

In order to better understand the nature of maternal separation anxiety, investigations were conducted on specific maternal characteristics. Findings reveal that levels of work orientation were significantly correlated with maternal separation anxiety when measured by both the MSAS and the Interview. On both measures, mothers who perceived employment as a satisfying or a necessary experience, also reported lower anxiety over mother-child separations, fewer worries about leaving their infants in nonmaternal care and greater belief that separations were important to a child's development of independence and sociability, even though the experience might be upsetting to the child. Mothers high on work orientation also expressed greater confidence in their competence to handle the concurrent responsibilities of motherhood and employment. Mothers who did not perceive work
as satisfying or necessary were more likely to have a lower socio-economic status. In other words, lower SES women may be working only because they must do so for financial reasons. Incongruence between role expectations dictated by cultural and individual influences and role status, may add to the separation anxiety of a mother with lower SES, since she is working but not by choice and may feel that her primary role of mother is diminished by her dual responsibilities.

For employed mothers of lower SES, employment may only be seen as an added stress in their lives, which already includes more than they feel they can handle. Stuckey (1982) notes that among employed mothers, there is frequent expression of strong distress over having "to do everything." Piotrowski (Note 3) suggests that since attitudes toward work may influence a child's development, we need to know more about the attitudes of working class parents toward their jobs, and also the specific experiences of parents with their employment. She further suggests that special attention needs to be put on employed working class mothers of infants and toddlers and their needs.

Ambivalence toward work may increase situation-specific anxiety, arising from higher levels of general anxiety. This suggestion is reinforced by the finding that trait anxiety is moderately correlated with maternal separation anxiety (r = .37) as measured with the TMAS in the maternity ward. Working class mothers expressed higher levels of trait anxiety than middle class mothers, and according to Spielberger (1972), the individual who shows a disposition to higher levels of trait anxiety would also be expected to perceive more situations as threatening, thus generating more frequent A-State anxiety (e.g., maternal separation anxiety).
Curiously, when mother's work preferences were investigated, no relationships were found with mothers' SES. Half of the working class and half the middle class mothers would choose to stay home full time with their infants, if given the choice. This finding is in contrast to Gnezda's study (Note 4), which found that employed mothers with less education and lower SES more often preferred to remain at home full time with their infants. It is interesting to note that in the present study, 65 per cent of employed mothers, regardless of SES or education, believe that if a mother has no choice about working and was forced into outside employment because of financial need, she would feel significantly higher levels of anxiety over separating from her child. This belief is underscored by the findings of this study, and may be partly tied to women's attitudes about the importance of the maternal role and to an understanding of the psychological consequences of being in an incongruent situation.

Maternal role investment was assessed when infants were 11-17 months old, using a scale of the Home Interview. Mothers with greater investment in the maternal role expressed more worries about their ability to balance employment and motherhood as measured by the MSAS. When measured against the interview, mothers high in maternal role investment also expressed higher levels of general maternal separation anxiety. Spielberger (1976) suggests that when a situation is cognitively evaluated as a threat to self-esteem, anxiety states are triggered. For an employed mother who is highly invested in the
maternal role and less so in her work, leaving her infant in non-
maternal care may be assessed as a strong threat to her perception of herself as a "good" mother, thus increasing state anxiety.

A moderately significant negative relationship was found between work orientation and maternal role investment, though no significant relationship was found between maternal role investment and SES. It might be expected that mothers who are highly committed to work are correspondingly less committed to their role as mother, but this and previous research refutes that assumption. Gnezda (Note 4) found that career investment and maternal role investment are not antithetical concepts for employed women; both are important. Hoffman (Note 10) suggests that although employed women are less likely to refer to motherhood as a major aspect of their identity, they are not less enthusiastic toward motherhood nor less likely to view their children as important sources for love and affection. Research results from other studies (Paloma, 1972; Kagan et al., 1978; Birnbaum, 1975, Hock, 1980) reinforce this finding. It is important to recognize that maternal role investment as it is measured in this study, showed a narrow range of ratings, with 77 per cent of the mothers rated as very high on investment in the maternal role. The proportion of high ratings may reflect the true picture of employed mothers' feelings about themselves as mothers or, alternatively, it may indicate a scale which does not adequately differentiate between responses.

The same statement might be made in regard to the interview scale used to measure mothers' perceptions of the quality of her
child's care. Since 87 per cent of the respondents indicated satisfaction with the quality of their child's present care, results must be cautiously interpreted. The results may indicate that mothers are using denial of problems as an effective coping strategy to reduce the levels of anxiety over leaving their infants, or the scale may include an unrecognized social desirability factor (i.e., few women may be willing to say that they leave their child with a woman who provides inadequate emotional care or unsafe conditions).

This chapter has discussed the findings of this study of employed mothers of different cultural backgrounds, and has specifically investigated their responses to routine, short-term separation from their infants. The remaining section presents conclusions and implications for further research.

Conclusions and Implications

In a multimethod, multivariate study such as this one, it may be helpful to include a brief statement of major findings, in order to provide a clearer picture of the study outcomes. These findings are presented in five major categories.

First, employed mothers of infants who have lower socioeconomic status, lower education levels, lower IQs, lower incomes and who are younger, score significantly higher on the following characteristics: anxiety over leaving their infants in nonmaternal care; doubts and worries over their competence to both work outside the home and continue to be a "good" mother; perceptions of child's distress at time of separation; and generalized trait anxiety.
Second, this group of employed mothers rated lower on the following factors: work orientation, and the belief that mother-child separations are a necessary and valuable experience which promotes independence and sociability in the child.

Third, responses to a self-administered questionnaire given in the maternity ward and at infants' age of 12 months; were consistent across time for middle class mothers but not for working class; in the maternity ward showed that all women were at least moderately concerned about future separations from their infants, but women with lower SES, education, income and IQ expressed significantly higher levels of expected separation anxiety; employed mothers of lower SES, education, income, IQ and age expressed increasing levels of anxiety over separations during the first year, and showed no significant relationship between father's income and mother's separation anxiety.

Fourth, the relationship of work orientation and maternal role investment to separation anxiety showed: 75 per cent of all mothers rated very high on investment in the maternal role; no significant relationship between SES and maternal role investment; employed mothers with higher work/career orientation ranked lower in maternal role investment, and 87 per cent of all mothers expressed strong satisfaction with their present child care arrangements.

Finally, when methods of assessing the construct of maternal separation anxiety were compared, it was found: that there was a significant correlation between the two methods (questionnaire and interview), lending support to construct validity; the relationship between SES (and selected variables) and the Interview ratings was
nonsignificant; mother's work orientation accounted for 14-16 per cent of the variance in a predictor model of maternal separation anxiety for both methods, and mother's SES accounted for 16 per cent of the significant variance of responses to the questionnaire (MSAS).

This study investigated maternal separation anxiety among employed mothers. A brief overview of the major findings shows that maternal separation anxiety is higher among those mothers with lower SES, education, income, IQ and age. Employed mothers who have less interest in working and who see employment as a less satisfying or necessary part of their lives, also express greater anxiety over leaving their infants. These findings have implications for the rapidly growing numbers of mothers with infants who are entering the labor force for reasons of career commitment, financial need, or both.

Since previous research indicates that maternal feelings and attitudes may influence the child's responses to separations and to new situations, it is important to understand the nature and level of maternal separation anxiety among employed mothers. Knowledge of the psychological and sociocultural variables which determine the intensity of anxiety related to mother-child separations may provide guidance to those looking for ways to reduce such anxiety and its resulting effect on the mother and her family. This is particularly important in relationship to women with less education and lower socioeconomic status, who may have fewer internal resources and external support networks to deal effectively with stresses associated with employment and motherhood. Such women may have fewer coping strategies or defense mechanisms to help them accommodate effectively
to the many demands of being a wife, mother and employee. Further study is needed to determine specific cognitive-affective processes which may be part of a broader personality variable determining the levels of anxiety in mother's responses to separations from her infant.

Further research is also needed in order to more clearly understand the attitudes of working class mothers toward employment, especially as those attitudes have an impact on their concerns over leaving their infants. Working class mothers express higher levels of concern over effectively balancing employment and motherhood. These findings hold implications for those persons involved in forming social policy regarding mothers in the work force. Information from mothers of lower SES on their feelings about employment and motherhood may support restructuring of employment policies to include options which are generally lacking, such as flexible hours, maternity leave, employer-sponsored child care, and greater opportunities for part-time or at-home employment.

In conclusion, this investigation of maternal separation anxiety suggests that it is an important psychological construct, and one which is a salient concern to almost all first time mothers. Maternal separation anxiety relates to other maternal attitudes, beliefs and personality characteristics, and differs in level between mothers of different socioeconomic status, education, age, income and IQ. This research strongly suggests that the inclusion of maternal separation anxiety as a variable in basic and applied research which examines issues related to maternal employment, especially as experienced by
working class women, is necessary in order to fully understand the social and familial implications of employment-related mother-child separations.
REFERENCE NOTES


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APPENDICES
APPENDIX A

THE MATERNAL SEPARATION ANXIETY SCALE

PARENT QUESTIONNAIRE

The following statements represent matters of interest and concern to parents. Not all people feel the same way about them. Answer the statements as you are feeling now or think you will feel as your child grows older. Read each statement carefully and circle the number at the right which most closely reflects YOUR degree of agreement or disagreement. Try to answer all statements without skipping items or looking back. Answer all the items without discussing any of them with anyone.

1. I miss holding or cuddling my child when I am away from him/her. 1 2 3 4 5

2. My child is happier with me than with babysitters or teachers. 1 2 3 4 5

3. Children will be afraid in a new place without their mother. 1 2 3 4 5

4. My life wouldn't be complete without a career. 1 2 3 4 5

5. If a child is independent and outgoing, he/she will make friends easily without his/her mother's help. 1 2 3 4 5

6. When away from my child, I often wonder if his/her physical needs (dry diapers, enough to eat, etc.) are being met. 1 2 3 4 5

7. Holding and cuddling my child makes me feel so good that I really miss the physical closeness when I'm away. 1 2 3 4 5

8. I am more concerned with my child's physical safety than a babysitter or teacher. 1 2 3 4 5

9. It will be difficult for my child to adjust to someone else taking care of him/her.  
   1 2 3 4 5

10. I would resent my job if it meant I had to be away from my child.  
    1 2 3 4 5

11. My child will benefit from group experiences (i.e., nursery school, day care, kindergarten) since they will provide him/her social experiences that he/she could not get at home.  
    1 2 3 4 5

12. When I am away from my child, I feel lonely and miss him/her a great deal.  
    1 2 3 4 5

13. Only a mother just naturally knows how to comfort her distressed child.  
    1 2 3 4 5

14. A child is likely to get upset when he/she is left with a babysitter.  
    1 2 3 4 5

15. I have a systematic plan for how I'm going to build my career in the world of work.  
    1 2 3 4 5

16. It is good for my child to spend time away from me so that he/she can learn to deal independently with unfamiliar people and new situations.  
    1 2 3 4 5

17. I like to have my child close to me most of the time.  
    1 2 3 4 5

18. I am naturally better at keeping my child safe than any other person.  
    1 2 3 4 5

19. I believe that my child misses me when I have to let someone else take care of him/her for awhile.  
    1 2 3 4 5

20. A career or job brings me a lot of personal satisfaction.  
    1 2 3 4 5

21. Even though my child fusses a bit when I leave, I know he/she will be OK in a few minutes—after I'm out of sight.  
    1 2 3 4 5

22. I don't like to leave my child.  
    1 2 3 4 5

23. My child prefers to be with me more than with anyone else.  
    1 2 3 4 5
<table>
<thead>
<tr>
<th></th>
<th>1 Strongly disagree</th>
<th>2 Disagree</th>
<th>3 Somewhat agree</th>
<th>4 Agree</th>
<th>5 Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>My child is afraid and sad when he/she is not with me.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>I would not regret postponing my career in order to stay home with my child.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>My child needs to spend time away from me in order to develop a sense of being an individual in his/her own right.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>When I am separated from my child, I wonder whether he/she is crying and missing me.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>I don't enjoy myself when I'm away from my child.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>I worry that my child is never completely comfortable in an unfamiliar setting if I am not with him/her.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>30.</td>
<td>Children are very demanding and I often wish I had more time for a career.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Exposure to many different people is good for my child.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>I worry when someone else cares for my child.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>If I could choose between working full-time or staying home with my child, I would want to stay home.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>There are times in the lives of young children when they need to be with people other than their mothers.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>When away from my child, I worry about whether or not the babysitter is able to soothe and comfort my child if he/she is lonely or upset.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Hock, Gnezda, McBride, 1982)
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These consist of pages:

162-164, TAYLOR MANIFEST ANXIETY SCALE

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APPENDIX C
MATERNAL HOME INTERVIEW

Mother's Name ______________________________________________

Mother's current occupation __________________________________

Mother's current gross income _________________________________

Father's current occupation __________________________________

Father's current gross income _________________________________

Baby's name & sex ____________________________________________

Baby's birthdate _____________________________________________

Mother's birthdate ___________________________________________

Baby's age in weeks at time mother returned to work full time ______

Type of child care for majority of time ___________________________

Number of child care arrangements needed since baby's birth ______

Has received and returned 12 month mailing? YES NO

Length of interview __________________________________________
Directions for setting environment:

After greeting M and entering the home, spend a few minutes becoming acquainted and setting a comfortable tone for the interview. Chat about the weather, the baby, etc. Find a comfortable place for the interview, usually the kitchen table, where M is most relaxed. Ask her for permission to tape the interview, and stress the anonymity of the procedure.

Introduction

I've been talking to lots of women, trying to learn more about what it's like for each of them to be a mother who works outside the home. I'm especially interested in how mothers feel about going back to work. One of the things I'm finding is that not everyone has the same attitudes and feelings, and in order to fit all the pieces of the puzzle together, I'm interviewing women with many different kinds of jobs and professions. That's why I appreciate the time you've been willing to give. It's a big help.

I have some fairly specific questions I'd like to ask, and please remember that there are no right or wrong answers. I'm only interested in your opinions. But first I want to present a generalized situation for you to think about. Here it is.

ACKNOWLEDGMENT AND AWARENESS OF SEPARATION ANXIETY

There is a young mother with a baby. The mother is beginning a new job tomorrow, and she'll be leaving the baby with someone else for the whole day. It's the first time she's done this, and she's thinking about all of it---walking up to the babysitter's door with the baby, leaving the baby with the person who's going to take care of it. What do you think she's feeling about this situation? What might her emotions be?

(Probe, if necessary: If M responds with practical or abstract phrases, help her focus on feelings first. Then accept the above responses. Allow plenty of time for thought and reflection, without interruption from interviewer.)

Do you think her feelings and emotions would be different depending on whether she had a choice about working? If so, how?

Let's see if I've heard you correctly. (Summarize her responses.) Is that about right? (Continue discussing until consensus is reached.)

RATING: 1 2 3 4 5 6 7 8 9
ACKNOWLEDGMENT AND AWARENESS OF SEPARATION ANXIETY: RATING GUIDE

M uses no terms expressly referring to anxiety, worry or nervousness at leaving baby. M expresses relief at having time away from child, excitement over new job and chance to be with adults. Reports little interest in topic of working mother's feelings about returning to work. Presents a stoical attitude about working ("You do what you have to do.")

M expresses possibility of anxiety, worry, guilt at leaving baby with caregiver, but also feels these emotions will fade as baby adjusts and mother settles into new routines. M may choose to work. M reports moderate interest in maternal separation anxiety as an important issue.

M expresses overriding guilt and sadness ("I can't believe I'm doing this!"); fear for child's physical well-being and worry over child's response to child care situation. M uses terms such as nervous, tense, anxious, guilty, worried. Sees issue of mother's anxiety over leaving baby as very important. If given a choice, would choose to stay home and not work.

Now the rest of the questions will be about your own situation and how you feel about it. Some of the questions may seem just like the ones you've answered before, but it often helps to ask the same kind of question in different ways. You may think of something else that's important to add. So please try to be patient if the questions seem to repeat themselves.

SEPARATION STRESS

1. Describe how things went the first day you went back to work. What was it like when you left your baby? How was it being back at work? When you picked up the baby?

2. When you are at work now, how do you feel about being away from _________ (baby's name)?
   a. How often do you think about him/her when you're at work? (Probe)
   b. When you do think about him/her, what things are you thinking about? (Probe)
   c. Can you be totally involved in your work when you are away from your baby? (Probe)
3. Do you worry about your baby? If so, what kinds of things do you worry about? (Probe)

4. In general, how do you feel about leaving your child with someone else in order for you to be able to go to work? Why?
   a. Do you miss your child? If so, what is it that you miss?
   b. Do you feel guilty? Why? (Probe)
   c. Does leaving your child with someone else make you nervous? Why? (Probe)

RATING 1 2 3 4 5 6 7 8 9

SEPARATION STRESS: RATING GUIDE

M expresses no anxiety at leaving child. She expresses no regret at having to be away from her child. She does not report missing her child, nor does she worry while she is at work.

M may experience some discomfort when away from her child and at work. She is concerned about child's well-being in her absence but is able to enjoy her life away from the child. She is not absorbed in worry. M may regret having to be away from child often, but does not express strong guilt feelings. She may miss her child.

M dreads being away from her child in order to work. She usually worries constantly while away and is eager to return. Separation is highly stressful. She may express strong guilt feelings.
EMPLOYMENT-RELATED SEPARATION CONCERNS

1. Some people say that having a baby and a job all at the same time takes a lot of effort. How do you feel about that?

2. How do you feel about being back at work?
   a. What don't you like about being at work? (Probe)
   b. Has having a baby changed your feelings about work? If so, how? (Probe)

3. How does your husband feel about your being back at work? (Probe)
   a. Is he the kind of husband who helps around the house and with caring for the baby?
   b. How do you think he feels about sharing those responsibilities, now that you're working?

4. Does working change your ability to meet your responsibilities as a mother?
   a. Does your company have special work policies that make it easier to be a working mother? What are they? (flexitime, day care, sick leave, supportive boss). Would you use day care if it were provided at or near your work?
   b. What things would you change about your job that would make it easier to be a working mother?

RATING 1 2 3 4 5 6 7 8 9

EMPLOYMENT-RELATED SEPARATION CONCERNS: RATING GUIDE

1 M expresses minimal conflict associated with integrating motherhood and work. She expresses competence in balancing work and motherhood responsibilities.

5 M expresses some conflict associated with integrating motherhood and work roles. She is interested in being a mother and in work, and she reports some difficulty in satisfactorily balancing her dual responsibilities.

9 M expresses a high degree of conflict associated with integrating motherhood or work. Her primary orientation may be either toward motherhood or toward work. Regardless of her orientation M reports dissatisfaction, frustration, and upset in relation to meeting her primary orientation. She views her secondary orientation as interfering with her primary role.
WORK ORIENTATION

1. Why did you go back to work? How many years have you worked? How important is it for you to work? How complete would your life be if you weren't working? Are you satisfied with the length of time you stayed home after the baby was born? If not, would you rather have been home longer or shorter?

   a. Do you want to, or plan to, continue to work? Why?

   b. What do you think your work satisfaction is related to? (Probe—money, sense of achievement, relationships with adults, sense of responsibility.) What do you like about working?

2. Did your mother work outside the home while you were growing up? How did you feel about it?

RATING: 1 2 3 4 5 6 7 8 9

WORK ORIENTATION: RATING GUIDE

1 M displays essentially no work orientation. She would prefer not to work if that were feasible.

5 M is moderately work oriented but views other aspects of her life as important also. M wants to work, but it is not the most important aspect of her life.

9 M is highly work oriented and views work as a satisfying or necessary experience, and her major way of fulfillment in life. M cannot conceive of not working. Work is important to M for several reasons (i.e., financial, social, intellectual challenge, etc.).
ATTITUDE TOWARD NON-MATERNAL CARE

1. Do you think that babysitters, day care teachers, or other adults are as good as you are at knowing what your child needs and taking care of those needs?

2. Are there special things that you give your child when you take care of him/her that another person can't? If so, what are they?

3. Are there special things that another adult can give your child that you can't? What are they and why?

4. In general, how do you feel about having your child cared for on a regular basis, by someone else? (Probe)
   a. How do you think this will affect your child?
   b. How did you find your sitter/day care center?
   c. What qualities did you look for in that other person or setting.
   d. Do you think that you are more concerned with your child's safety and well-being than a babysitter would be? Why?

RATING: 1 2 3 4 5 6 7 8 9

ATTITUDE TOWARD NON-MATERNAL CARE: RATING GUIDE

1 M exhibits essentially no apprehension over someone else caring for her child.
   M expresses some fears and describes concerns over non-maternal care but is not preoccupied with these concerns. Generally, M feels that she can meet her child's needs more effectively than the alternative caregiver can.

5 M is preoccupied with apprehension over non-maternal care. She expresses fears and is concerned for a specific kind of child care. She believes that she is the only person who can truly meet her child's needs. She believes that non-maternal care will interfere with mother-child attachment. She may report feeling jealous of the alternative caregiver.

9 She believes fears and is concerned for a specific kind of child care. She believes that non-maternal care will interfere with mother-child attachment. She may report feeling jealous of the alternative caregiver.
PERCEPTIONS OF QUALITY OF CHILD CARE

Directions: If you were to rate your child care arrangements, how would you respond to the following statements? On a scale of 1 to 9, 9 is strongly agree and 1 is strongly disagree.

1. I expect the person taking care of my child to do a good job without needing to be checked on all the time.
   1 2 3 4 5 6 7 8 9

   1 2 3 4 5 6 7 8 9

3. The person caring for my child cares about his/her happiness, and provides the right kinds of toys and activities for his/her age.
   1 2 3 4 5 6 7 8 9

4. The person caring for my child takes a personal interest in him/her, and takes care of his/her physical needs to my satisfaction.
   1 2 3 4 5 6 7 8 9

5. The person caring for my child comforts him/her when he/she needs comforting.
   1 2 3 4 5 6 7 8 9

6. The person caring for my child uses methods of discipline that I approve of.
   1 2 3 4 5 6 7 8 9

Total divided by 6 = ____________
1. Lots of things are happening while _____ (baby's name) is at the babysitters/day care without you. How do you feel about that? How do you think it affects your baby?

2. Some people think that when children are taken care of by people other than their own parents, they develop differently than children whose mothers are with them full time. What do you think? How? Why?

3. I've heard some mothers say that even if their children cry or make a fuss, it's important that the children spend some time away from them. How do you feel about this?
   a. Is being away from you good for your child? (Probe)
   b. Is it harmful to your baby to be with other adults? If so, how?

RATING: 1 2 3 4 5 6 7 8 9

SEPARATION PROMOTES INDEPENDENCE: RATING GUIDE

M perceives mother-child separations as necessary in order for her child to develop as an independent individual regardless of any distress or difficulty the child experiences during separation.

M perceives stress-free mother-child separations as contributing to the child's ability to develop as an independent individual but does not see separations as essential.

M perceives mother-child separations as unnecessary for the development of autonomy. She expresses the belief that children benefit most from the security and familiarity of shared experiences between mother and child as they develop into independent individuals.
PERCEPTION OF CHILD'S DISTRESS AT SEPARATION

1. Describe your routine when you leave your baby with the babysitter. When do you and your husband get up in the morning? Who gets the baby ready, takes him to the sitter/center, etc.?

2. How many hours per week is the baby with the babysitter?

3. How do you think your baby feels about being away from you when you are working? What causes the baby to feel this way?
   a. Does he/she miss you, feel sad, upset, angry or insecure?
   b. Does he/she like being with the babysitter, enjoy new people and new environments? (Probe)

4. How does your baby act when you leave him/her? What do you think his/her behavior means?

5. How do you think your baby behaves at the babysitter's?
   a. Is he/she comfortable and playful with the babysitter?
   b. Does he/she act normally?
   c. Is he/she fussy, or does he/she have problems eating and/or sleeping? (Probe)

6. How does your baby act when you pick him/her up at the sitters/center? What do you suppose he/she is trying to tell you with this behavior?

7. Have you noticed any changes in your baby's behavior since you returned to work? What has caused these changes?
   a. Does he/she react differently to you?
   b. Does he/she seem any more lively, curious and excited?
   c. Have your baby's eating and sleeping patterns changed? Is he/she any fussier, or just as happy?

RATING: 1 2 3 4 5 6 7 8 9
PERCEPTIONS OF CHILD’S DISTRESS AT SEPARATION: RATING GUIDE

1  M perceives no child distress surrounding work-related experiences.

M recognizes child distress or discomfort as a result of work-related separation. She perceives that the cause of the distress is primarily situational (i.e. adjusting to new routine), but to some extent she believes that her child "misses" her or that his/her distress may in part be due to her absence.

M perceives that her child experiences a great deal of distress surrounding separation. She believes that this distress is a results of separation from her. She believes that the child cries, is lonely, behaves in an unusual manner before, during, and after mother-child separations. M perceives infant distress whether or not the child exhibits it.

(Scores of 2 through 4 reflect increasing decrees of perceived distress but are still related to situational factors. Scores of 6 through 8 reflect increasing degrees of perceived distress. M also describes her child's distress as caused by mother-child separation.)
MATERNAL ROLE INVESTMENT

1. Please rank the following 3 things in terms of how much satisfaction they give you, with 1 being the most satisfying aspect of your life.

   ___ being married  ___ being a mother  ___ working

2. How would you have felt if you found out you couldn't have had children? Why?
   a. Would you have adopted children? Why or why not? (Probe)
   b. Have you always wanted to have children? Why or why not?
   c. How important is it to you to be a mother? Why or why not?

3. What do you expect from motherhood?
   a. How has being a mother changed your life? (Probe)

4. How complete would your life be if you weren't a mother?

5. If you could choose between staying at home with your baby or going to work, which would you choose?

RATING:  1  2  3  4  5  6  7  8  9

MATERNAL ROLE INVESTMENT: RATING GUIDE

1. Being a mother is of relatively little importance to M; she expresses minimal investment in this role.

5. M expresses moderate investment; it is important to her to be a mother, but other aspects of her life are also important to her.

9. Being a mother is extremely important to M; she feels it is her major way of fulfillment in life and she cannot imagine not being a mother.
ORIGINS OF BELIEFS

1. It seems as if our ideas about mothers who work outside the home, and just generally those about being a mother, come from lots of different sources. If you can, tell me what has influenced your attitudes the most.

(Probe: If M is having trouble focusing, suggest possible sources such as religion, family, books or magazines, friends, observations of mother, etc.)

ACKNOWLEDGMENT AND AWARENESS OF SEPARATION ANXIETY

1. Are there other issues about this general topic that you think we should be concerned with, that I haven't mentioned? If so, what and why?

2. When you think of the whole issue of being a mother right now, how important is it to talk about a mother's feelings about leaving her baby to go to work? That is, when you put aside problems such as world peace and the economy, and think only about being a mother, how would you rank a mother's worries about working? On a scale of 1 to 9, with 1 being the least important and 9 being most important, where would you rank a mother's concerns about leaving her baby in order to work? Why? What other things are more (or less) important?

(Probe: If M responds with a general response such as "With so many women joining the work force now, we have to be interested in it," continue to probe for her own feelings about its importance to her, as an issue.)
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