INFLUENCES OF MATERNAL AGE AND WORK STATUS ON ADJUSTMENT TO PARENTHOOD

By

Esther Dienstag

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ABSTRACT

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This study examined the relationship between women's ages and work status and adjustment to motherhood at the transition to parenthood. One hundred and twenty five middle class primiparous mothers completed questionnaires about their experiences with and attitudes toward parenting. All of the women had been employed prior to the birth of the child but only 40% were employed at the time of the study.

Scales were computed with confirmatory factor analysis and scale alpha reliability coefficients ranged from .61 to .90 (mean=.75). Variables used to predict adjustment to parenthood were maternal education, active coping including social support, infant health and regularity, and responsiveness of maternal attitudes toward the infant. Adjustment to parenthood was defined as satisfaction with parenthood and enjoyment of early infancy. Conflict between mothering and work roles was defined as perceived loss of valued role activities.

Path analyses were performed on working and nonworking mother subsamples and different relationships emerged for the two groups. For working mothers, high role conflict was associated with greater

responsive attitudes toward the infant and less advanced education. High role conflict in nonworking mothers was associated with less responsive attitudes and more advanced education. Both maternal role conflict and infant illness or irregularity had greater impact on nonworking than on working mothers. The strongest predictor of adjustment in the working subsample was availability of social support.

Role competition and role enhancement in working and nonworking mothers are discussed.

THIS DISSERTATION IS DEDICATED

TO THE MEMORY OF

EDITH DIENSTAG

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INTRODUCTION

The last few decades has seen a huge growth in knowledge about the early stages of the life cycle. Examination of the infant in relationship to the caretaking environment is the subject of intensive study, but analysis of the determinants of the quality of this relationship from the mother's perspective has only recently gained attention.

The early literature on motherhood tended to be written from a psychoanalytic perspective (Benedek, 1959; Bibring, 1961). Later, a host of books appeared relating to the experience of mothering from a feminist perspective. These books speculated about the nature of motherhood in the age of women's liberation and its place in a rapidly changing society (eg. Lazarre, 1977; Chodorow, 1978; Peck and Snederowitz, 1974). Finally, the last decade has seen the advent of scientific examination of the process of becoming a parent including precursors of competent parenting and consequences to the parent of preconceptual, prenatal and perinatal occurences.

Early empirical studies of the transition to motherhood mostly focused on questions about the negative aspects of parenting such as the extent of crisis experienced at the point of transition (LeMasters. 1963; Dyer, 1963; Hobbs, 1968, 1976), postpartum depression (Gordon, Kaposins, and Gordon, 1965; Yalom, Lunde, Moos, and Hamburg, 1968), and the negative impact of parenthood on the marital relationship (e.g.

Feldman, 1971, 1974). The instruments used for the most part have been designed to measure crisis and have been less sensitive to the more positive aspects of motherhood.

Recent investigations have attempted to explore the nature of the stressors associated with parenting and factors affecting the outcome of this important transition such as prebirth personality characteristics (Leifer, 1977; Heinicke, Diskin, Ramsey-Klee, and Given, 1983), the role of social support (Wandersman, 1978, 1980; Crnic, Greenberg, Ragozin, Robinson, and Basham, 1983), sex role stereotypes and child care preferences (Entwisle and Doering, 1981; McHale and Huston, 1983), motivations for parenthood and adaptation to pregnancy (Leifer, 1977) and female work status (Hoffman, 1978). The purpose of the current study is to determine the relationship between mother's age and work status on her adjustment to motherhood and satisfaction with the role as well as to examine the specific coping skills that women of various ages use to adapt to the stresses of the transition to parenthood.

Research on the adult life cycle suggests that there are unique developmental tasks which are typically completed in the early part of the adult life course (Erikson, 1959). Although much of this research has been conducted with males (Vaillant, 1977 Levinson, Darrow, Klein, Levinson, and McKee, 1978), there has been limited replication with female samples (e.g. Bardwick, 1980; Gilligan, 1979). It is believed that the adaptation to motherhood and successful coping with stresses of parenthood will be influenced by accomplishment of these developmental tasks which is roughly reflected in the age of the

mother.

The first section of the introduction includes a discussion of the literature on transition to parenthood including studies that focus on the crisis of transition and studies that view the transition as a normal developmental phase requiring restructuring of roles and relationships and world view assumptions.

As the first section addresses issues regarding adjustment to parenthood typical of all new mothers, the latter sections concentrate on the variables which may discriminate women in the early phases of young adulthood (ages 20-29) from later stages of early adulthood (30-40). This includes a discussion of the adult life course and the normative developmental crises and tasks by which it is defined.

The section that follows reviews the various roles which women assume including and in relation to the role of mothering. It is believed that role orientations may differ between older and younger mothers and that they may influence adaptation to mothering (cf. Rindfuss and Bumpass, 1978; Hoffman, 1978; Wilkie, 1981; Daniels and Weingarten, 1982).

There have been few studies which have directly addressed the question of adult maternal age and its effects on mothers or their infants. These are reviewed and followed by a brief summary and statement of the purposes and hypotheses of the current study.

LITERATURE REVIEW

Transition to Parenthood

Transitions have been defined as relatively short periods of disequilibrium in which old patterns and old assumptions are deemed inadequate and new ones must be adapted on short notice. It is a time that provides an opportunity for either psychological growth or deterioration (Parkes, 1971; Moos and Tsu, 1976). The point of actual transition may be characterized by denying defenses while the demands of the novel situation are met. The negative aspects of the change are partially denied, allowing the individual time to mobilize coping resources necessary for adaptation. As these demands become less pressing and more familiar, more active coping strategies can be employed. Gradually the individual adapts and a new homeostasis is achieved over time (White, 1976).

During transition to parenthood the parent must make major changes in lifestyle and in relationships. While pregnancy may be viewed as a preparatory period, the actual process of becoming a parent is sudden, and requires immediate adaptation while the needs of the infant are being met. The new parent must incorporate the task of protecting and nurturing the young and must assimilate the new role of parent vis a vis the world and the self. Others will view the new parent with a new set of assumptions and the parent will gradually gain a novel view of him or herself as a result of the parenting process. Bibring (1961) observed 15 primigravidas during the course of their pregnancies and observed their psychological growth. On the basis of her findings, she described pregnancy as a normal crisis which leads to

specific maturational gains, the outcome of which will have profound effects on the early mother-infant interaction. She found maturation to be gradual in those subjects in which it occurred. Evidence is reviewed below which defines the transition to parenthood in terms of a psychosocial transition yielding maturational gain. Consideration of this topic will begin with a view of parenthood as crisis as well as an examination of the potential maturational gains of parenthood.

Clearly the beginning of parenthood is marked by major reorganization of belief systems, roles and lifestyles including changes in time commitments and schedules, household arrangements, relationships with spouses, parents, and friends. Work roles may change and the new role of mother must be assumed. Rossi (1968) points out that unlike other transitions in early adulthood such as shifts in marital status and occupational status, parenthood is an abrupt change for which there is little preparation in our society. Whereas marriage in the United States is usually preceded by courtship and engagement, there is nothing similar to parenthood in our culture which prepares women for the experience of total responsibility for a child. The tasks of pregnancy are discontinuous with those of motherhood and the prevalence of small, nuclear families in this country precludes routine experience with child care prior to parenthood. Moreover, it is largely an irrevocable process. Rossi also points out that the difficulty of parenting is compounded by the lack of guidelines to successful parenting in our society. Even though there are many child care resource books in our society, the conflicting advice leads to confusion rather than resolution. Based on their observations, some researchers have considered early parenthood to be a normal

developmental transitional period. Others have looked on this period as a crisis which functions to facilitate the necessary role changes.

Parenthood as Crisis

LeMasters (1963) interviewed 46 couples whose eldest child was 5 years of age or less and evaluated them on the extent of crisis experienced immediately following their first birth. Scores ranged from no crisis to severe crisis. LeMasters found that 83% of the couples in his sample experienced extensive to severe crisis despite the fact that most of these couples had planned the pregnancy. There was no relationship between marital stability and experience of crisis. Most couples indeed reported that they had very little effective preparation for the parental role. Mothers attributed the crisis to problems such as loss of sleep, chronic fatigue, social isolation, added household chores, guilt at ineffective mothering, appearance changes and loss of outside employment. Fathers also were dissatisfied with decline of sexual responsiveness in wives and increased financial hardships. These findings were replicated by Dyer (1963) who reported that 53% of his sample experienced extensive to severe crisis after the birth of their first child.

In contrast to LeMasters' and Dyer's findings, Hobbs (1965) found that parenthood was not very stressful for his sample. Unlike LeMasters and Dyer, he did not interview his subjects but rather used a 23 item objectively scored checklist based on the problems presented by LeMasters' sample. This was administered to parents between 3 and 18 weeks after the birth of the first child. Subjects indicated the degree to which they were bothered by each item. None of the couples in this sample scored in the severe or extensive crisis categories.

Differences in methodological designs may have contributed to the discrepant results. LeMasters' and Dyer's samples consisted of 46 and 32 middle class couples respectively who were describing their experiences retrospectively up to 5 years after the birth. Hobbs on the other hand obtained a probability sample from the public birth records including 53 lower to upper middle class couples and tested the subjects shortly after the time of transition. Middle class samples have been shown to differ on variables which relate to ease of transition such as wife's career aspirations, identity derived by wives from extrafamilial activities, and previous experience with child care (Jacoby, 1969). Middle class mothers who were foresaking career identities for motherhood may have experienced the transition to parenthood as more stressful than lower income women.

The time frame may also partially explain the discrepancy. Mothers who are two to five years past the time of childbirth may be more willing to acknowledge negative feelings about the child (Hobbs, 1965) or they may have distorted perceptions of the event (See Yarrow, Campbell and Burton, 1970). Alternatively, Hobbs may have contacted his subjects too early after the birth. Hobbs' subjects were on the average of 9 weeks postpartum. This may have found them still ensconced in what has been termed the "baby honeymoon" phase usually found to occur up to 6-8 weeks following birth (Hobbs, 1965). This is the period in which mothers form attachments to the new babies and are buffered from possible negative reactions to the exigencies of early mothering, perhaps by the denial mechanism considered to shield those in the throes of transition. For instance, Miller and Sollie (1980) found that new mothers in their sample had higher personal stress

scores at 8 months postpartum than they did prenatally but that their stress scores were not elevated above prenatal levels at one month postpartum. Thus Hobbs' sample may not have been far enough into the child's first year to be experiencing the full extent of the crisis.

An equally likely cause of the discrepancy is in the instruments used. The Hobbs checklist asks questions about the extent to which the new parent is bothered by the life changes whereas LeMasters and Dyer drew their conclusions based on the presence or absence of life changes reported during subject interviews. People have different levels of dissatisfaction to behavioral disruptions. Studies which address dissatisfaction along with gratification report lesser estimates of crisis (Russell, 1974). Although different research procedures were used in the various studies, it is doubtful that the closed response structure of the Hobbs research tool itself was a major cause of the discrepant findings. In a replication study by Hobbs (1968) 27 couples were administered the Hobbs checklist and submitted to a relatively unstructured interview as well. The two instruments yielded similar results with moderate but significant correlations between them and both replicated findings from the original study.

In summary, whereas all agree that early parenthood is a broad-ranging stressful transition, the extent to which it is seen as a crisis period varies. Studies based on retrospective accounts of middle class subjects which focus on specific behavior change associated with the transition tend to present the transition as a major crisis. Alternatively, studies based on more representative samples which include gratifications of parenting along with difficulties and which ask the subject to assess the degree of

perturbance with behavior change tend to portray the transitional period as only characterized by slight to moderate crisis.

Longitudinal studies of the transition to parenthood

All studies of transition to parenthood reviewed have found greater or lesser amounts of stress associated with this transitional phase (Shereshevsky and Yarrow, 1974; Eichler, Winickoff, Grossman, Anzolone, Gofseyeff and 1977; Entwisle and Doering, 1980). Several have attempted to examine specific variables that facilitate or impede the process of transition and to do this have followed a sample of women from some time before the birth of the first child to some point after the birth to identify predictors of successful parenting. Studies which have followed this course have achieved varying levels of success in predicting adaptation.

In one year-long longitudinal study, women were followed from the first trimester of pregnancy through 6 months postpartum. Intensive interviews and psychometric testing were conducted to assess the predictive powers of prenatal variables (Shereshevsky and Yarrow, 1974). Results based on data from 60 primiparas indicated that women with high amounts of interest in and experience with children prenatally, and with successful adaptation to pregnancy adapted better to the mothering role. Successful adaptation to motherhood was defined by predominant mood, sense of adequacy in coping with infant needs and level of satisfying relationship with spouse. Adaptation to pregnancy, which predicted adaptation to mothering, included predominant positive prenatal mood, positive attitude towards pregnancy with low anxiety levels and high flexibility. These results seem to indicte that those women who have adequate coping strategies during pregnancy, such as

maintaining a good frame of mind and being flexible, also cope well with the stresses of early parenting. Postnatal factors that predicted good adjustment were marital adjustment, nurturnace level and ego strength.

Leifer (1977) followed 19 women from pregnancy through the postpartum period. She found that several prenatal variables were important predictors of good adjustment to motherhood. These included growth motivation for motherhood versus security or negative motivations, prenatal confidence in maternal abilities, stability of first trimester personality integration, anxiety focused on the fetus rather than the self, and satisfaction with body image during pregnancy. These conclusions, however, are based on qualitative data analysis from a small sample of mothers. After the total sample of 19 subjects was divided into high, moderate and low adjustment groups, conclusions were based on subgroups of 6-7 subjects each. Therefore, it is difficult to judge the extent to which the data fit the model presented. Still, Leifer's findings are provocative and suggest that adaptation to motherhood may be associated with a constellation of prenatal and probably pre-conceptional personality and attitudinal variables. The same factors which lead to adaptive coping with pregnancy also predict to mature ego functioning after the birth of the baby.

Heinicke and colleagues (1983) found prebirth maternal personality variables such as adaptive coping, capacity to form relationships, and active style of emotional expression more powerful in predicting successful mothering than either the mother's adaptation to the pregnancy or her socio-economic status. They found that mothers

who were able to meet their own needs, and who were able to form good peer relations and who had low anxiety levels, were more responsive to their infants and provided their infants with more cognitive stimulation (Heinicke, Diskin, Ramsey-Klee and Given, 1983).

Prebirth maternal anxiety was found to be associated with poorer postpartum maternal adjustment and infant adjustment in yet another prospective study (Grossman, Eichler and Winickoff, 1980). In this sample, both prebirth anxiety and depression were predictive of poorer mothering. High motivation for motherhood has consistently been associated with indices of successful parenting (Grossman et al, 1980; Crawford, 1983) as has previous experience with children, acceptance of the nurturant role or ability to envision oneself as a mother (Moss, 1967; Heinicke et al, 1983; Crawford, 1983).

Crawford (1983) did not find prenatal variables to predict maternal adaptation to parenting, which is a measure of the mother's adjustment to her new role and responsibilities. Rather she found that they predicted greater "attachment" to infants and greater acceptance of infants, which are indicators of the mother's feelings toward the baby. The timing of the last parental contact may account for the discrepancy between these and other findings. Postnatal interviews with both parents took place when infants were six weeks old. Thus the early phase of adjusting to the physical and emotional demands of the transition may have obscured the relationship between intrinsic coping abilities as measured during pregnancy and the use of those coping skills postpartum. Indeed, the author did find evidence for a "baby honeymoon". Attachment to the baby was less salient for these couples in the first 6 weeks after birth than their own ability to successfully

cope with the demands of parenting. Parents who had difficulties in attachment did not adjust more poorly than others, but parents who had difficulty in adjustment experienced negative changes in their attitudes of attachment and acceptance of the baby. Thus it seems that stresses of early parenthood are so overwhelming for primiparas that changes in attitudes towards the baby are held in abeyance unless the parents experience a failure to cope. Multiparas are less insulated from external pressures and are more vulnerable to outside stresses than are first time mothers (Grossman et al, 1980).

The studies by both Shereshevsky and Yarrow and by Leifer examined parents at 6-7 months postpartum. Both of these studies found prenatal variables predictive of postnatal adjustment. On the other hand, Crawford found that prenatal variables did not predict adjustment at 6 weeks postpartum. Indeed in a 6-8 week interview of Leifer's subjects, prenatal variables were not associated with confidence in the maternal role for those subjects who showed moderate to high levels of confidence. By the 7 month contact the relationship between prenatal and postnatal adjustment emerged. Those women who had been highly confident about their mothering abilities prenatally perceived motherhood as a positive experience at 7 months postpartum. As in any sudden transition, high levels of stress obscure the relationship between good coping and adaptation. By the second half of the first postpartum year, coping strategies have been implemented with varying degrees of success and evidence of the continuity between prenatal and postnatal adjustment patterns emerges.

Crawford did find a constellation of perinatal and postnatal events which predicted successful adaptation in the first 6 weeks postpartum. Positive perinatal attitude towards the baby, uneventful labor and delivery, rooming-in with the baby at the hospital and opportunity to hold the infant shortly after delivery as well as infant variables of health and temperament were all predictive of mothers perceiving their infants as less demanding at 6 weeks postpartum. In short, maternal and infant health postnatally, positive maternal attitudes towards the baby, and early contact perinatally predicted adjustment to parenthood during early infancy.

Summing across studies, prenatal variables that have been found to be predictive of successful adaptation to motherhood are maternal adjustment to pregnancy, flexibility during pregnancy, positive mood, low incidence of depression and low anxiety or anxiety focused on the fetus rather than the self (Shereshefsky and Yarrow, 1974; Leifer, 1977; Grossman, Eichler and Winickoff, 1980; Heinicke, Diskin, Ramsey-Klee and Given, 1983). Predictive prenatal maternal attitudes are motivation for parenthood, confidence in maternal abilities, acceptance of the nurturant role, and experience with and high amounts of interest in or positive view of children (Moss, 1967; Shereshevsky and Yarrow, 1974; Leifer, 1977; Crawford, 1983). Personality integration, including the ability to relate to others empathically, and ego integrity and flexibility have also been found to lead to successful adaptation to motherhood (Shereshevsky and Yarrow, 1974; Leifer, 1977, Heinicke, et al. 1983; Crawford, 1983).

Perinatal and postnatal predictive factors are parental marital adjustment (Shereshefsky and Yarrow, 1974; Grossman et al, 1980), positive perinatal attitudes towards baby, uneventful labor and delivery, early and extended perinatal contact with baby (Crawford, 1983) and infant health and temperament (Gibaud-Wallston and Wandersman, 1978; Crawford, 1983).

One can conclude from the preceding section that although transition to motherhood is characterized by upheaval and stress, certain maternal personality characteristics, infant characteristics, life events and coping strategies can predispose the mother to successful adaptation to her new role. Following the initial period in which most negative affect is suppressed, gradual shifts occur of both positive and negative valence.

Like other developmental transitions, the transition to parenthood requires personality reorganization and major accomodation and often results in psychological growth. Evidence exists for the emergence of personal growth as a result of the transition. Leifer found that 2/3 of her sample felt increases in self-esteem, growth and expansion of self by 7 months postpartum and Shereshefsky and Yarrow found clinical evidence, as assessed by interview and psychological testing, for personal growth in 1/3 of their sample. Elsewhere, mothers have reported significant increases in feelings of self-confidence, competence, and energy and decreases in anxiety (Wandersman, 1978) and in selfishness, egocentricity and volatileness (Feldman, 1971) over the course of the first year.

Among the coping patterns that have been cited as effective in easing the transition to parenthood are general positive mood, ego integrity and marital adjustment. But examinations of the early parenting period reveal losses in such areas as marital satisfaction and mental health for women with infants and preschool children. Because of the importance of these two facilitators to effective adaptation, their vulnerablity during the transitional stage will be described below.

Marital Satisfaction

There is a growing body of evidence pointing to a change in the marital relationship after the birth of the first child. Some researchers have found a decline in marital happiness following the birth of the first child (Feldman, 1971, 1974; Wandersman, 1978; Belsky, Spanier and Rovine, 1983) and a strain on the couple relationship (Cowan, Cowan, Coie and Coie, 1978) while others have not found evidence for negative marital impact or have found evidence for positive impact (Hobbs, 1965; Russel, 1974; Miller and Sollie, 1980). Still others have found mixed results finding no change in general level of marital satisfaction but finding specific differences between women with young preschoolers and those without. Examples of such specific differences include amount of "lovesickness" or the feeling by wives that they are not getting enough attention from their husbands (Ryder, 1973), feeling there are some problems in the marriage or that there is less time for couple activities such as chatting with spouses, or being physically affectionate with spouses (Mikus, 1980). As in the transitional crisis literature, attention must be paid to the format of the question asked. Crnic and colleagues (Crnic, Greenberg, Ragozin et

al, 1983) found that amount of support a woman received from her husband did not affect her satisfaction with parenting. Her satisfaction with her husband's support was predictive of satisfaction with parenthood. Again presence or absence of an event or relationship is less meaningful than the subject's perception thereof.

Grossman et al (1980) found mixed results in outcome of the marital relationship following the transition to parenthood. Satisfaction with the marriage decreased with the birth of the first child as mothers felt temporarily disenchanted. However, mothers in the sample also reported enrichment of the marital relationship as a result of the new baby. While birth of the first child is consistently reported to have both positive and negative effects on the marriage, it may be related to the heightened intensity of emotions during this period and the increased salience of the marital relationship. Children are commonly seen as a source of common joy and of shared work which enables parents to regroup around a common goal and mutual concerns. On the other hand, having children usually results in less time for couple activities and can be a source of disagreement when there is a lack of consensus in childrearing (Hoffman and Manis, 1978).

Belsky speculates that the marital relationship may be the main social support for parents thus increasing its salience (Belsky, 1984). Mothers of young children tend to experience decreases in friendship support, perhaps due to their limited mobility and flexibility of schedules (Mikus, 1980). This probably results in increased reliance on the marital relationship. Ironically, the increased postpartum need for marital support may coincide with a reduction in husband's conciliatory behavior. The heightened

attentiveness husbands often show towards their wives during pregnancy generally declines after the baby arives and returns to prepregnancy levels. Speculation is that this decline in attentiveness may be due to the long term nature of the need for support during parenthood. Pregnancy, being more time-limited, may be a safer elicitor of extra attention (Power and Parke, 1984).

Variation in the marital satisfaction of parents may be related to the couple's own parenting history. Wives who retrospectively report their parents to be more accepting of them have been found to experience less negative changes in marital satisfaction across the transition to parenthood. The greatest decline in marital adjustment has been found in couples where at least one spouse reports having experienced cold, rejecting parenting and marital discord in the family of origin (Belsky and Isabella, 1985).

Mental Health of Mother

In general levels of psychological well being, childless married people have been demonstrated to be happier than married people with children and the lowest level of happiness has been found for parents of preschoolers. Parents of preschoolers also report more symptoms of immobilization such as inability to get up in the morning, and having sweaty palms (Antonucci, Tamir and Dubnoff, 1980). Childless married women have been found to have greater feelings of efficacy and higher levels of self esteen and less tendency to feel like they are at the end of their ropes than matched samples of married women with preschoolers (Mikus, 1980). The overwhelming responsibilities which accompany the care of the young child may account for the symptoms of immobilization and the reduced feelings of efficacy may be

reality-based. Inability to carry out projected plans or to have control over one's own life is a realistic consequence of having infants and young children under care. Mothers of preschoolers are most likely of all mothers to be disenchanted with their housewife roles and mothers who are disenchanted with the role are most likely of all mothers to experience subclinical depresssion and malaise (Pearlin, 1975). As the age of the mother increases, the experience of disaffection decreases. While mothers of young children are susceptible to disenchantment caused by the extreme demands of the role, older mothers of young children are less susceptible to depression than younger mothers of young children (Pearlin, 1975).

How Mothers Cope

It seems clear that the period from transition to parenthood through the preschool years places great strains on the parenting system as evidenced by decreases in happiness, well-being and marital satisfaction and increases in subclinical depression. The following section will examine factors that ameliorate the effects of early stress.

A single stress will not necessarily be experienced similarly by everyone. This is partly because individuals have varying degrees of efficient coiping strategies to meet the stress, and coping affects the outcome. Coping strategies can include internal and external strategies. Internal strategies may be direct action, action inhibition, information search, or intrapsychic action. They can be designed to solve problems or to ameliorate the emotional response to the stress (Roskies and Lazarus, 1980).

One internal strategy that has been shown to influence the outcome of the birthing experience is information search. Prenatal preparation for childbirth and for early parenting has been demonstrated to be associated with less medication during labor and delivery, more positive feelings towards the baby, higher probability of mothers rooming-in with their babies and higher likelihood of breastfeeding (Entwisle and Doering, 1980). Information seeking may lead to mental rehearsal of an impending stressor which serves as a preparation for a stressful event. Other internal mechanisms include flexibility, learning patience, becoming more organized, and learning new ways to integrate prior important activities into the parental lifestyle (Miller and Sollie, 1980).

Social Support

One external mode of coping is support from a cooperative environment. Mothers who perceive reception of emotional support from their husbands and friends have been found to feel more energy, fullness of life, and relaxation than those with limited marital support. They also experience better attitudes towards parenting, greater sense of competence in the maternal role, better adaptation to motherhood and better general life satisfaction following birth (Abernathy, 1973; Wandersman and Wandersman, 1980, Crnic et al, 1983). Moreover, Crnic et al found that it is the interaction between intimate support and life stress, rather than the stress alone, which predicts life satisfaction. Mothers with high stress who also report high levels of support report greater life satisfaction than mothers who experience high stress and low support indicating that support exerts a moderating effect on perceived stress.

Stresssed mothers are less positive towards their infants and less likely to respond to infant cues. Their infants then proceed to give obscure cues to their mothers making maternal response difficult (Crnic et al, 1983). This relationship is somewhat alleviated by social support. Social support has been shown to impact positively on maternal stimulation provided to the infant (Pascoe, Loda, Jeffries and Earp, 1981) and on maternal affective response to infant which in turn affects infant's affective response to mother (Crnic et al 1983; Belsky, 1983).

Mothers with social network support are more likely to play with their preschool children in goal-oriented tasks. Their children, in turn, are not only superior in performance of these tasks but also in general academic performance (Cochran and Brassard, 1979). Mothers of children born at risk due to prematurity provide more appropriate play materials, more opportunity for variety in daily stimulation and organize the child's environment more optimally if they experience adequate support (Pascoe, Loda et al, 1981). Mothers with greater social support also tend to be less restrictive and punitive with their children (Coletta, 1979).

Of all the forms of support reported, the least available to new mothers seems to be friendship support. This can best be understood in light of the limited contact mothers of preschoolers have with friends. In one study of mothers of preschoolers, 50% reported having either few or no friends (Mikus, 1980) and although parents of preschoolers use high levels of informal social support, they make less use of friends than at any other stage of the family life cycle (Antonucci et al, 1980). Although relatives form an important support

contingency, they are most useful when living in close proximity to the young family. Neighborhood associations and day to day contact appear to have stronger association to parenting outcome than more distal and infrequent contacts (Abernathy, 1973; Crittendon, 1985).

The mechanism through which social support affects new parents' sense of competence and mastery, comfort in the parental role, or behavior towards their children is not directly understood. However, social support is postulated to provide specific benefits to parents. These range from informational and idealogical support about child-rearing practices to concrete and material services such as financial assistance and babysitting. Social contacts may provide emotional assistance to buffer the stresses of the young parent and can also serve as models of positive parenting behavior and sanctions against negative behaviors such as authoritarianism or abuse (Cochran and Brassard, 1979; Power and Parke, 1984).

Transition to parenthood has been discussed in the preceding sections in terms of its negative consequences, its toll on mother's mental health, marital relationships and life satisfaction. Personality characteristics, ego functioning, situational variables, and coping responses that positively impact on the outcome of the transition have been reviewed. In the following sections, the impact of the adult mother's age on the successful outcome of the transition is discussed.

Adult Development

While there is common consensus among life-span developmental psychologists and sociologists that psychological change and growth continues through the adult years, the impetus for this developmental

growth is subject to debate. Rossi (1980) has identified two distinct theories regarding change during the life course. One, held by developmental stage theorists and exemplified by Erikson (1959), Vaillant (1977) and Levinson et al (1978) postulates time-linked stages of adult development precipitated by normative life crises. The adult is expected to face chronologically determined peaks of evaluation about himself and his belief systems necessitating decisions about life choices. Normative life events are superimposed upon this chronologicl time line of development. In the present study, it was hypothesized that adjustment to a particular transitional life event such as beginning parenthood would be influenced by adult personality development and the extent to which stage specific adult tasks have been accomplished.

Alternatively, the "timing of events" model does not predict a stage related sequence of crisis confrontation and resolution. Rather, the adult life course follows a gradual anticipated time sequence for major life events. Stress, then, is not the inevitable result of universal age-related crises but rather occurs when there is a violation of anticipated timing of major life events.

Neugarten (1979) suggests that chronological age is not as significant a marker in adulthood as it is in childhood. She suggests that there is currently less uniformity in our society than in previous eras. As we move towards an 'age-irrelevant society', the ages at which life events occur vary widely. Therefore individuals judge themselves in relation to social and biological processes such as parenting, work roles, and physiological functioning and not in relation to chronological age as social roles become more important

than chronological markers. The increasing trend towards simultaneous role assumption in our society may trigger increased stress. For instance women who are trying to balance competing demands such as those of motherhood and work roles may experience more stress than those who make the traditional sequential commitments to these major roles. What's more, women may experience increased tension when involvement in one set of role functions causes other role transitons to be out of line with temporal expectations (Neugarten, 1979).

But as Rossi (1980) points out:

> precisely because of the great variance of social and psychological attributes in relation to chronological age there is an excellent opportunity for research to establish the relative contributions of the timing and sequencing of both social and biological events and processes, but to date there have been no such studies directed to these questions" (p.13).

The Adult Life Course

Erikson is considered by many to be the father of the psychology of adult personality development. Unlike Freud and Piaget whose stages of personality and cognitive development end with the culmination of childhood, Erikson's theory spans the life cycle, and the last three stages of personality development take place during adulthood. In the case of men, the resolution of the crisis of identity during adolescence triggers the pursuit of intimacy, (Erikson, 1959) probably with their wives as their "intimacy mentors" (Rossi, 1980). Following this stage is the stage of generativity vs. stagnation or the challenge of establishing and guiding the next generation. Finally, late adulthood is marked by integrity or despair; either one accepts one's life's work and accomplishments or despairs at the dissatisfaction with one's life.

Erikson's stages have been further differentiated in several different schemes of adult development. Levinson et al (1979) posit that the life cycle is a series of structure-building and transitional, sructure-changing periods. These stable and unstable years respectively are well circumscribed in terms of chronological age. Levinson's schema is based on a comprehensive study of 40 men aged 35-45 who provided both current and retrospective accounts of their lives. In this scheme, preadulthood extends from birth to age 22. Early adulthood lasts from age 17 to 45 with the overlap years of ages 17 to 22 serving as the early adult transitional period in which the structures of childhood are terminated and the structures of young adulthood are built. The midlife transition lasts from ages 40 to 45 and middle adulthood from 40 to 65. The years 60 to 65 constitute the late adult transition with late adulthood beginning at age 60. Each structure changing period and structure building period has its own agendas and tasks to be completed and the tasks are unique to the life stage. An event such as birth of a child, which Levinson and his collegues call a marker event, will be experienced and handled differently at different life stages because the adult evolves and changes psychologically with each life structure. As Levinson et al (1979) point out:

> We need to regard marker events from the viewpoint of development. They can occur at various ages and do not in themselves cause the start or end of a period. However, the age at which an event occurs is important. The significance of a marker event for an individual depends partly upon its place in the sequence of developmental period." (p.55).

The job for the transitional period is to tear down the old structures and create possibilities for new ones. These are periods of reappraisal and of making choices for the next phase. These are the most painful periods. They are unstable and uncertain. According to Levinson, the outcome of a marker event will depend on the individual's current developmental task. For example, the boy who marries at age 18 or 19 is in the middle of the early adult transition. The task for this period is to break away from parents, and the marriage may occur before confidence in autonomy is fully established. The young man may therefore be drawn to a protective, dominating figure onto whom he can shift his dependency. The struggle for independence which ensues may impede his adult development. A marker event, such as beginning parenting, at the beginning of a period will be bound up with the struggles of entering that period. A marker event which takes place at the end of a period may reflect the culmination of growth-producing introspection and experience (Levinson et al, 1979).

Support for this viewpoint comes from a study of the timing of parenthood by Daniels and Weingarten (1982). While these authors found that issues of intimacy and individuality permeated the period of transition to parenthood regardless of when it occurred in their subjects, the nature of the struggle was different for those who embarked upon parenthood in their early twenties (their early timing parents) and those who became parents in their early thirties (their late timing parents). For the early timers, parenthood often came at a time when the couple had not yet established firm identities or life goals. Their one agenda was self discovery. Some of the women described the feeling of never having had an individual identity; they

spoke of moving rapidly from being someone's daughter to being someone's mother with no time in between to find out who they were. The experience was overwhelming and led to feelings of inadequacy. Early timing parents in this study were more likely to live close to their parents and depend on them for emotional support, financial support and childcare assistance. In contrast, the late timers rarely depended on their families of origin for assistance as they had spent the decade of the twenties differentiating from their parents. They had also spent that time establishing identities in terms of work and love relationships. These parents faced problems of integrating the new role of parenthood into a preexisting life structure, discovering how much of the old structure they could maintain without sacrificing the new and how much they would have to alter. The major tasks were with integrating the demands of new role of mother with the old ones of worker and wife. The authors sum up by concluding that for those who begin in the early twenties, parenthood is often a vehicle for establishing autonomy from parents and a marker for the threshhold to an adult identity. For those who postponed parenthood until the early thirties, parenthood often marked the end of a period of exploration at a time when most had a "reflective and emotionally unthreatening distance from or identification with (one's) own parents, and a sanguine stance toward (one's) own childhood, all of which add up to a readiness to risk taking responsibility for the childhood of one's own children." (p.65).

According to Levinson and his asociates, the 20's and 40's period of early adulthood is one in which career choices are made and individuals begin to establish their places in society. He advances

along the ladder from novice adult to full adult both in the world of work and of family. This is a paradox. Although the young man is inexperienced and must use the early years to explore and experience so as not to foreclose on options, he must also commit himself to a greater or lesser extent in order to form stable ties which will carry him through adulthood. These involve making career commitments, so the young man can apprentice, find a mentor, and start to move up the "corporate ladder". He also makes family commitments including finding a wife with whom to establish intimacy, and starting a family. Without these commitments, the young man is rootless and does not form the necessary structures. Yet he must make these lifelong choices before he has experienced enough of life to know how to make them wisely.

Between 22 and 28, the young man is mastering his trade and most of his creative energies go into that endeavor in pursuit of success. There is little energy wasted in considering whether commitmentss are appropriate or not. By the end of the 20's, the bluffed competencies of the early 20's have turned into real competencies, independence from parents has been established and competence proven (Levinson, 1980; Gould, 1980).

Kenniston (1971) argues that young people in our culture engage in a period of extended youth through the decade of their twenties which is unique to this period in history and is culturally determined. He postulates that the extended mass education, widespread affluence, extensive exposure to different cultures and threat of holocaust in this century has led to a new stage of youth in which moral judgement has been individualized and truth become more relative. Tradition is no longer accepted uncritically and this has

led to an extended period of restless questioning and individual exploration. Whereas in the past this behavior was restricted to a privileged few, the nonconformist thinkers and innovators, currently it is typical of a whole class of educated, affluent young people. This viewpoint is more radical than that of the previously cited authors in which youth is viewed as a time of structured exploration through commitments rather than unstructured exploration. The discrepancy between the theories of Levinson, Vaillant and Keniston may be reflective of a cohort difference in samples of individual observed. Subjects in Levinson's and Vaillant's studies all were in their twenties and beginning their careers in the post World War II conservative era. Keniston's observations were based on individuals reaching their twenties in the more liberal era of the 1960's. Replication of the findings of the two major longitudinal studies of Levinson and Vaillant is necessary with both men and women of other cohorts in order to determine the generalizability of their time line to other generations.

In all of the samples described, however, a transition of sorts occurred at approximately age 30 (28-33 in Levinson's sample). At this time, the young man begins to question the life structure that he has built. It is his chance to make corrections. Exploration is no longer felt to be appropriate and firm decisions are made. This transition leads to new commitments as the young man settles down in the next period, ages 30 to 40. It is at this time that he works towards realization of his dreams (Levinson, 1980). It is not until the 40's transition that work goals are again reevaluated in relation to the occupational dream and men begin turning away from the world of work,

which does not hold the promise of total fulfillment it once did, and begin turning towards the family for greater fulfillment. Men's interest in and capacity for intimacy typically increase at this point.

Interestingly, when Levinson speaks of the three major tasks of young adulthood, he includes occupation, relating to women, and separation from parents. Family formation is not mentioned, despite the fact that many of the men in his study became parents during this period. In contrast, establishing a parental identity is one of the major tasks for women in this period.

To sum up, the adult life course for men proceeds from separation from parents to establishment of identity either through commitment and structured work and love relationships (Gould, 1972; Vaillant, 1977; Levinson et al, 1978) or unstructured and unfettered exploration (Keniston, 1971). With identity firmly established, men move on to learn about intimacy through love, marital and family relationships (Erikson, 1959). But during this time, family is peripheral and work is central. These priorities begin to shift as the man nears 40 and the mid-life transition.

This progresssion differs for women. Identity and the establishment of intimate relationships are often linked for women (Gilligan, 1979). For many, there are no work relationships to aid in the acquisition of confidence and feelings of efficacy. For some, work is halted or deferred until after family formation. Women differ from men in that intensive commitments to family usually usher in adulthood and a shift to work priorities often occurs only at the midlife transition after family responsibilities have diminished (Daniels and Weingarten, 1982).

Until data from a longitudinal study of adult development in women is available, discrepancies between male and female models of development can only be surmised from cross-sectional data. Judith Bardwick postulates a parallel line of female development to that of male development (Bardwick, 1980). There is some evidence that the harbinger of adulthood, identity formation, develops along different lines for women than for men. Male identity formation is typically expressed in terms of the self. Young men's identities center around career choice, individual talents, goals and accomplishments. On the other hand, female identity is more often expressed in connected, relational terms than in self-oriented instrumental terms. Even among today's young women for whom work force participation will comprise a major portion of adulthood, individual dreams and life goals are often expressed in terms of heterosexual, marital and parental relationships. Where work and family will be combined, compromises to the famiy will most often continue to fall within the woman's domain and commitment to identity within the work role will usually still come second to commitment to familial roles. Individual needs and goals are still perceived as secondary to the egocentric needs of young children and often to the preeminent needs of the career-building husband.

Indeed, for those women whose preparental and possibly premarital years have been devoted to the building of the self structure, subordination of individual needs to those of the family can be stressful. The clash between traditional upbringing and liberated lifestyles can create conflict for the present cohort of young adult women. The age 30 transition in which goals and life courses are reevaluated is a particularly poignant time for women today. Some

women will have delayed childbearing for career or educational purposes. For them, the age 30 transition may usher in the decision to have or forego children. In others, employment may have been delayed to allow for the care of young children. With 50% of all mothers of preschool age children currently employed (Waldman, 1983), many women will be reentering the work force in their late 20's and early 30's. Thus for women confronting the age 30 transition, decisions may have to be made regarding the path, either work or parenting, which has remained untraveled. The age 30 transition is one in which options are realistically evaluated. Some will be maintained, some will be altered, others abandoned.

At age 40, the same independence that reinforces the adult identification for men may produce anxiety and conflict in women raised with traditional interdependent values, particularly if career involvement has precluded establishment of marital or parental relationships (Bardwick, 1980).

Another departure from the male course may occur during midlife. Women often experience increased independence and autonomous outward looking perspective at just about the same time as men begin turning towards the family and discovering the more nurturant parts of themselves (Guttman, 1975). Thus men in their 50's become more feminized while women of this age, with children growing up and leaving the home, become more masculinized in their self-orientation and participation in the extrafamilial world.

It is of interest to discover how women's personality development and personal adjustment differs for those who follow the male model of exploration and/or work commitment preceding intense

family commitment from those with a more traditional female model of family commitment preceding establishment of a work identity. To answer this question, research on women's roles and their relationship to occupational success, mental health, life satisfaction and transition to parenthood is reviewed.

Combining Work and Family

Whereas men are expected to combine marriage, family and work in the 20's, it is not until the mid 30's to early 40's that they begin the focus on the family (Levinson, 1979; Vaillant, 1978; Rossi, 1980). Only then do they truly explore the realm of intimacy and relationships which are the woman's domain. Women have more options in the timing of work and family involvement. A woman can choose between motherhood and work or she can choose to combine the two either sequentially or simultaneously (Daniels and Weingarten, 1982). The sequential pattern involves an interruption of work, or delaying of entering the work force until a later point in the family life cycle (for instance after the children are in elementary school or high school or after they have left home). A woman can choose to coordinate family and work simultaneoulsy, but both the sequential and simultaneous patterns have their prices.

In a sample of 41 female doctorate recipients who were born between 1893 and 1906, the choice between sequential and simultaneous patterns of marriage and education had long term occupational consequences. Those who engaged in a sequential pattern of education preceeding marriage received their Ph.D. degrees in the decade of their 20's. Those who engaged in marriage and completion of the Ph.D. simultaneously obtained their advanced degrees in their late 20's to

early 30's. Those who married first and then obtained doctorates completed their degrees latest, in the decade of the 30's and 40's. The timing of the receipt of the degree was highly significant in terms of ultimate career accomplishments. More women who received doctorates at an early age became professors. Of the 20 women with children, all were employed at lower ranking institutions at age 60. All of the women in this sample had careers that did not match up to the male professional model (Perun and Del Vento Bielby, 1980).

In considering career status using the criteria of full versus part time status, actual numbers of hours worked, career interruptions of one or more years, and career goals, most women's jobs would not be defined as careers but rather as "occupation-oriented professional involvements" (Poloma and Garland, 1971). Career orientations were judged in a study of 53 married professional women of whom all were either attorneys, physicians or university professors. Although 35 of the 53 worked full time, only 17 of these worked more than 40 hours per week and only 4 worked more than 50 hours per week whereas most of their husbands worked over 40 hours per week. Whereas the husbands with limited work weeks were involved in community or professional activities, only 2 of the wives were. Of the 53 women, almost half had no career goals and only 17 had relatively uninterrupted professional careers. Eight of these 17 had no children or had not yet begun their families (Poloma and Garland, 1971). For the women who were unable to make full commitments to their occupations during earlier stages of the family life cycle, career involvement increased when the children were old enough to be in school. A ten year follow-up contact revealed that many of the women considered their child-rearing years as their job

stage (as defined above). After family demands decreased and the children were launched, they embarked upon the career stage (Poloma, Pendleton and Garland, 1981).

In a study of husband and wife psychologist couples, husbands were found to be more likely than their wives to hold academic positions. The geographical moves necessitated by their husbands' careers resulted in a shorter mean duration of employment in the wife's position.

Husbands, on average, were more productive in publications, received higher salaries and worked longer hours. Wives more often than husbands were discriminated against by anti-nepotism laws and by offers of less rewarding positions. Professional wives reported lower levels of career satisfaction than both their professional husbands and than female psychologists not married to other psychologists (Bryson, Bryson, Licht, and Licht, 1976).

Daniels and Weingarten (1982) found that of the 76 women they interviewed all had "pulled back" from their outside work when they became mothers. Although 52 of the mothers were sequential timing workers, 20 of the mothers worked right through the period of early mothering. The simultaneous workers either worked part time or just had less extra energy to devote to work than they normally would have had. The full commitment to work was held in abeyance until the children had achieved a degree of independence. Of these 20 women who chose the simultaneous pattern of work and family, 16 were late timing parents. These were predominantly college educated women who had postponed childhood in order to pursue goals such as finishing education, establishing a career, or experimenting with work and love

relationships before making firm commitments.

For those women who choose simultaneous patterns of role involvements, there is potential for role strain. Working mothers may find it difficult to fulfill the competing obligations of work and parenting and may find the conflicting demands on their time, energy and other resources excessive resulting in role overload (Goode, 1960). According to the scarcity theory of human energy allocation, total fulfillment of all the demands of both roles may be impossible because an individual's energy resources are finite. An excess of role obligations can lead to an energy drain and force compromise in one or more positions. The multiple role holder's position becomes more complicated when socially prescribed norms for prioritizing role obligations are ambiguous. For example, missed work due to a child's illness is often unacceptable to employers but necessary from the family perspective. This lack of concensus can produce role conflict (Coser and Rokoff, 1971).

A competing theory of role accumulation, the expansion theory, postulates that individuals accrue benefits with added roles. If the rewards exceed the burdens, multiple roles yield a net gain. Certain positions are associated with privileges, security, power, personal enrichment and gratifications which compensate for demands. Higher status roles also carry with them additional freedoms and independence and the right to delegate undesirable responsibilities. What's more, successes in one sphere can compensate for failure or tedium in another and may act as a buffer or actually create energy for use elsewhere (Sieber, 1974; Marks, 1977).

When role commitments begin to encraoch upon one another, the response is to reduce activities, reduce the time allocated to them, or delegate them. Where the work place is intolerant of diminished role performance, compromises are sometimes made in family responsibilities since status from homemaking activities is minimal and socially valued privileges are few (Marks, 1977). Family activities in this culture are not equally expendable for women and for men. When women do distribute or curtail household activities, they find some chores more readily dispensed with than others. In middle class households with dual incomes, housework is often delegated to reduce role strain but child care responsibilities are not usually seen as amenable to compromise (Rapoport and Rapoport, 1969; Weingarten, 1978). Moreover, household chores may be shared among the parental pair as a means of reducing the wife's role overload. On the other hand, women do not usually share child care equally with their spouses regardless of employment status (Weingarten, 1978; Pleck, 1982; Barnett and Baruch, 1984).

Interestingly, the greater the husband's involvement in child care tasks, the greater the wife's satisfaction regardless of her work status but the more critical the husband is of his wife's mothering (Barnett and Baruch, 1984). A mother's satisfaction with her husband's child care involvement is highly predictive of her adjustment and satisfaction, regardless of the objective number of hours he contributes (Pleck, 1982).

Along mental health dimensions, working women have been characterized as higher on dimensions of internal locus of control and mastery. They see their lives as having followed their own decisions.

Those with little or no work experience see their lives as having evolved outside of their own control when polled late in life (Willensen, 1980; Barnett, 1984). They have lower anxiety levels and report higher energy levels than non-working women (Walker, 1980; Revilock, 1982). Among the working classes, employed mothers report greater satisfaction with their lives and interest in what they do than nonemployed women (Ferree, 1976). Working women at middle life have higher self-esteem and less psychological anxiety than non-working women and report themselves as being in better physical health (Coleman and Antonucci, 1983).

Work is experienced differently by those who consider themselves as career-minded from those who do not. Work has been associated with positive feelings about the self and greater life satisfaction to a larger extent among women who consider themselves as career-oriented. Non-career oriented working women have been found to experience greater role strain than professional women. Career women obtain more support from their spouses, and this appears to be a crucial determinant of perceived role conflict (Holahan, 1979; Markus, 1980).

Limited study has been undertaken of working mothers' perceptions of the consequences of their employment decisions on childrearing. Hock (1978) found that working mothers of 3-4 month old infants, all of whom happened to be career-minded, were less apt to see their infants as experiencing separation anxiety when they left their infants than were non-working mothers. They were also less likely to experience anxiety when leaving their babies in the care of others and less likely to see infant discontent as a personal affront. Career-minded non-working mothers were the most likely to perceive

infant distress at maternal separation even though separation anxiety would not be expected in such young infants. Either their beliefs regarding infant distress discouraged their participation in the labor force or the cognitive dissonance they experienced from their homemaker roles prompted such a belief system. These mothers may believe that if they are staying at home, it must be because the child needs them. By eight months, maternal attitudes were reflected in infant behavior. Infants of non-working mothers who believed in the importance of providing exclusive mothering to their children more frequently and intensely attempted to maintain proximity to their mothers than those whose mothers did not stress exclusive mothering. Infants of working mothers who believed in the necessity of exclusive mothering produced fewer proximity seeking behaviors towards their mothers. It may be that when working mothers experience role conflict, anxiety interferes with the mother-child relationship (Hock, 1980).

Women who postpone childrearing until they have established themselves in careers may be more likely to have followed the male model of career development up until the time of family formation and therefore to follow Levinson's sequence of identity formation at least in part through the pursuit of the occupational dream in the decade of the 20's. If this is the case one would anticipate higher levels of competence and confidence in self for those mothers who begin parenthood in their late 20's rather than their early 20's. For those who postpone until their early 30's, one would anticipate a reevaluation of roles and relationships to coincide or immediately precede the beginning of the parental life cycle. These mothers would be in the midst of self-examination and evaluation of life goals and

should be expected to be in various stages of role conflict and role resolution. Some older mothers would be expected to experience less of a need to explore and experience different aspects of life and should be more prepared than younger mothers to settle down and to find stability either in the world of work, or family or some combination of the two. Other older mothers may experience heightened role conflict because beginning parenthood coincides with the period of reevaluation or impinges upon an established career.

The Timing of Parenthood

Daniels and Weingarten (1982) have looked at the impact of timing of the first birth on identity formation in parents, quality of marriage, and mothers' work patterns. Although they provide interesting anecdotal data of early and late timing couples, the methodology employed makes the conclusions difficult to evaluate. These authors interviewed 72 couples regarding the transition to parenthood and the effect of the timing of parenthood on later life events. The sample consisted of groups of 24 couples in the fourth, fifth and sixth decades of life. Twelve of the couples in each of the three groups had made the transition to parenthood in their early 20's (the early timers) and 12 in their early 30's (the late timers). No middle 20's group was included. For some of the subjects (e.g. the 30 year-old late-timing parents) the data are prospective. For others they are retrospective (eg. the 30 year-old early-timers). Thus group comparisons are very tenuous due to the discrepancy in timing of interview relative to stage of family formation. Moreover, the sample was not random and was accumulated through word of mouth rendering the representativeness in question. Lastly, none of the interview data was

coded or measured, rather the authors offered vingettes which they considered reflective of the interviewees. For these reasons, generalizability of findings is difficult.

Daniels and Weingarten found that more late timing parents than early timing parents were satisfied with their timing decisions (67% vs. 42%) and only 24% of the late timing parents said they would start their families earlier if they had it to do over again. Of the early timers, 56% said they would have waited longer if they had it to do over again. Reasons that late timers gave for purposefully postponing parenthood were awaiting psychological readiness, setting aside time to explore and grow and accumulate life experience (a response which was mostly offered by college educated couples), discovering career options, and establishing the marital relationship. Nonpurposive late timers primarilly cited infertility as a reason for postponement.

The late timers were more planful of the timing than were early timers. Although all couples said that the nine months of pregnancy provided sufficient opportunity to come to terms with the family timing outcome, some experienced feelings of frustration and disappointment at being out of control of the situation. In Neugarten's terms, they were "off-time" on this major life event.

In terms of the marital adjustment, early timers had their first child an average of 14.5 months after the marriage whereas late timers' first borns arrived an average of 4 years after the marriage. The late timers were described as having more time to create a balance between work and family and between self and other before facing the demands of parenthood.

Early timing women did much of the caretaking on their own as husbands devoted their energies to the early stages of work. They received little emotional support from their husbands but provided a good deal for their husbands who were more wrapped up in work and self-exploration. In contrast, late timers described more reciprocal relationships in which both husband and wife nurtured one another and although even late timers did not split the child care evenly, they had much more egalitarian households. Early timers had more traditional household arrangements with less conflict over division of responsibilities. The late timers, having established organizational skills at work and a sense of competence, fell more easily into a work rhythm than did the early timers. Late timers were more decisive in their new roles, but experienced more role conflict and required more adjustment going from co-provider to houseperson.

In summarizing their observations, the authors noted that early timing couples were less defined as individuals at the point of transition, they were less separated from their parents, less nurturant of one another and less likely to develop egalitarian household arrangements. Late timers were more likely to experience conflict in adjusting to the wife's new role and occupation and more likely to experience conflict arriving at division of household responsibilities.

These findings support the hypothesis that maternal age at first birth will differentially impact upon mother's adjustment. However the methodological drawbacks of this study argue for caution. Age of subject, timing of parenthood and cohort effects are all confounded. All of the early timing accounts are retrospective and most but not all of the late timing accounts are retrospective. Little of the data is

systematically compared.

Other differences found between older and younger mothers are as follows. Older mothers have children with slightly higher IQ's than younger mothers. There is a small but significant linear relationship between maternal age from ages 20 to 40 and children's performance on the Wechsler Intelligence Scale for Children-Revised (WISC-R). Children's IQ scores have been found to be an average of 2.84-3.17 IQ points higher when their mothers were 40 years of age at the time of birth than when their mothers were 20 years of age. However, these authors do not distinguish first-born from later-born children's scores so mother's age and birth order may be confounded (Belmont, Cohen, Dryfoos, Stein and Zayas, 1981). Older mothers have been found to be more flexible and warmer and to use less physical punishment and to encourage more verbalization and discourage dependence (Sears, Maccoby and Levin, 1957). Older couples are more likely to be settled in jobs, to own homes, to have savings and be more secure financially than younger parents. Work demands are usually less extreme for older parents who may then be more capable of handling competing demands of work and home (Wilkie, 1981). In a study by Ragozin and his colleagues, older mothers were found to have greater satisfaction with parenting, to have greater time commitments to maternal role and to be more responsive to their babies. It is suggested that greater emotional maturity and lesser egocentrism underlie the differential attitudes and behavior of older mothers (Ragozin, Basham, Crnic, Greenberg, and Robinson, 1982). Mothers in the study ranged in age from 16 to 38, but no specific information was given regarding the age breakdown other than to indicate that the ages were normally distributed. This

suggests that the older mothers were underrepresented in this sample. Since analyses were limited to linear regression and no group comparisons were made, it is impossible to know if the bulk of the predictive power of the age variable comes from the differences between teenage mothers and adult mothers or whether there were also group differences between mothers in their early and late 20's or between mothers in their 20's and 30's. The results do suggest that age continues to discriminate between maternal behaviors and attitudes through the 30's in a unidirectional linear fashion suggesting a continued age influence through early adulthood.

In summarizing the sparse information concerning adult maternal age and transition to parenthood, it appears that older mothers are inclined to be more involved in extrafamilial activities than are younger mothers (Rindfuss and Bumpass, 1976), to follow different career patterns, to have more egalitarian households, to have more spousal support and less family support and to have more role conflict betwween work and family (Daniels and Weingarten, 1982). They experience less depression (Pearlin, 1975), and derive more satisfaction from the parenting role (Ragozin et al, 1982). They are more responsive to their infants, more competent at eliciting responses and use more positive affect (Ragozin et al, 1982). They are warmer and more flexible and foster more autonomy (Sears et al, 1957) and they have children with slightly higher IQ's (Belmont et al, 1981).

Summary

The transition to parenthood for primiparous mothers is recognized as a stressful period in which a major reorganization of roles and lifestyles is required. It is responsible for reductions in

marital satisfaction and maternal mental health and may constitute a crisis in the adult life. Certain factors can predispose a woman to a successful transition to parenthood. These include available social support, adaptive personality characteristics and a high desire for the motherhood. Work outside the home may operate in one of two ways. The competing demands it produces may cause role overload and poor adaptation. Alternatively, the valued contributions that employment provides may enhance the mother's sense of self-worth and accomplishment and improve adaptation by serving as a buffer against the stresses of parenthood.

Finally, the adult mother's age at first birth may impact on her adjustment. Increased age may provide the added maturity a mother requires to accomodate to her infant's needs or it may increase the difficulty of transition. Older mothers may experience extra conflict between work and parenting because they are used to reaping the benefits of gainful employment and involvement in the extrafamilial world unhindered by the demands of a young child.

The present study examined the impact of an adult mother's age and work status on her transition to parenthood. There has been a limited amount of research on the impact of an adult mother's age at first birth on her responsivity to her infant and her satisfaction with the role. The available research has been problematic. In one account, mothers above the age of 30 were underrepresented and the nature of the data analysis did not allow for group comparisons between various age groups of adult women. What's more, positive results in favor of older mothers appeared to have been heavily influenced by the inclusion of teenage parents in the analysis.

The combination of work and mothering roles has been found to have felicitous effects on the mental health of the mother and, under certain circumstances, to increase satisfaction and skill in parenting. However, the combination of these two demanding roles at the point of transition to parenthood has received only limited attention to date. The one published study which addressed this question contained methodological drawbacks. Age of subject, timing of parenthood and cohort effects were all confounded. Moreover, little of the data were compared systematically and findings were presented primarily as anecdotal accounts. A uniformly prospective examination of the transition to motherhood in which subjects are contacted close to the point of transition is necessary to examine this experience. The present study contacted mothers within the first six months of life and surveyed their experiences during the early months of motherhood to determine the impact of age and work status on the experience of mothering. Only adult mothers were included in the sample so as to avoid comparison with teenage parents whose experiences have been found to differ from those of older mothers.

Statement of Hypotheses

The purpose of this study was to systematically compare primiparous women in their 20's and 30's on levels of adjustment to parenthood, role conflict and satisfaction, responsiveness to infants and adaptive coping. In light of the group differences which have been found in previous studies between older and younger mothers of infants and young children, the following hypotheses were proposed.

1. It was predicted that older women would adapt to parenthood more successfully than younger women, would be more satisfied with the parental role, and would be more responsive to their infants. This was an attempt to replicate the findings of Ragozin et al, 1982.

2. It was predicted that older women would have more effective coping mechanisms than younger women due to increased opportunities for adult maturation.

3. It was predicted that women with more adaptive coping responses would score higher on measures of successful adaptation and satisfaction with motherhood. This was based on previous reports of a relationship between social support and successful mothering (Crnic et al, 1983).

4. It was predicted that older mothers would experience higher levels of role conflict than younger mothers. This was an attempt to replicate the findings of Daniels and Weingarten (1982).

5. It was predicted that older mothers who experienced lower levels of satisfaction with parenthood would report higher levels of role competition.

6. It was predicted that adaptation to parenthood could be understood in terms of its relationship to the variables maternal age, role conflict, active coping, and responsive attitudes toward infants.

Predictor variables were: age of mother, level of role competition, and level of adaptive coping responses such as social support. Outcome variables were satisfaction with maternal role, and responsivity to infant needs.

METHODS

Sample

Subjects in this study were recruited from the greater Baltimore - Washington area. They were identified and contacted through published birth announcements (n=30), prenatal childbirth education classes (n=25), a non-hospital based midwife serviced birthing center (n=22), postnatal classes for new mothers (n=16), pediatricians' offices (n=7) and prenatal exercise classes (n=5). A number of subjects responded to advertisements of the study in parenting newsletters (n=10) and others were identified through a networking process in which subjects recommended their friends to the examiner (n=10). Any woman who was about to become a mother for the first time or whose first child was under six months of age was eligible to participate. The upper infant age limit of six months was selected to avoid the comparison of ambulatory and preambulatory infants. Of the 148 women who agreed to participate and who were mailed questionnaires, 125 responded yielding an 84% response rate.

Maternal Characteristics

Mothers' ages ranged from 19 to 40 (mean=28). All but 4 of the mothers were married. Mothers' education ranged from high school graduate level to postgraduate level. The mean education level was college attendance and the mode was postgraduate. Mean income was between $20,000-$30,000 and the modal income was $30,000 or over. One hundred and twenty-one of the mothers were white. Eighty-five percent of the pregnancies had been planned (n=106) and all but two of the subjects had attended prenatal childbirth education classes. Forty-six

mothers (36%) attended postnatal meetings at a parents' organization. Forty of the mothers were working, 74 were not working outside the home and 11 were on maternity leave at the time of the study. Of the mothers who were working or on leave, 25 were full time workers, 24 were part time workers and the work status of 2 is unknown. Of the 74 mothers who did not work, all had reported having worked at sometime in the past and all but eight believed they would return to work sometime in the future. Sixty-seven of the mothers were breast-feeding their infants, 32 were bottle feeding and 26 engaged in some combination of breast and bottle feeding (see Table 1, Appendix A, for a summary of maternal characteristics).

When asked about the timing of the pregnancy, approximately half the sample (n=66) reported having postponed their first child. Modal postponement was from 1-5 years but the range was from less than one year to greater than 10 years. The most common reasons given for postponement (in order of frequency of occurrence) were: establishment of a strong marital relationship; financial reasons; mother's emotional preparedness to parent; mother's establishment in a job or completion of an education; father's emotional preparedness, establishment in a job or completion of an education; and inability to conceive.

Infant Characteristics

Babies ranged in age from three weeks to nine months (mean=3 months, mode=2 months). They were evenly distributed by sex (62 female, 63 male). Mean infant birth weight was 3283 grams and only 4 of the infants weighed less than 2500 grams at birth. Fourteen of the mothers reported their babies to have been ill some time since birth but reports of infant colic, rashes, sleeping and feeding disturbances

ranged from 13 incidences of feeding problems to 24 incidences of rashes (see Table 2, Appendix A, for summary of infant characteristics).

Procedure

Separate procedures were used for subjects contacted prenatally and those contacted postnatally. Both will be described below.

The study was described to those mothers who were contacted during pregnancy. They were then asked to provide a mailing address and infant due date. Six weeks after the estimated birth date, these mothers were mailed a questionnaire regarding their attitudes towards childrearing and towards work, satisfaction with parenthood, available social support and outside activities and decisions regarding the timing of childbearing. Questions about infant and family characteristics were also included in the mailing (see Appendix B). The six week lower infant age limit was chosen to allow for the earliest adjustment to parenthood to have been initiated and for coping resources to have been mobilized. Some infants younger than six weeks are included because of an under approximation of infant age from the estimated due date.

For mothers identified after the birth of the baby, information regarding infant birth date was acquired and questionnaires were mailed immediately to mothers of infants aged six weeks and over. For mothers of younger infants, questionnaires were mailed after the infant reached six weeks of age. Although the upper infant age limit for the study is six months, some older infants were included due to a delay in completion of the questionnaire.

Mothers were provided with stamped, self-addressed envelopes for return of the questionnaire. In addition, they were asked to complete and return an informed consent form. All returned questionnaires were assigned code numbers and mothers' names were separated from their responses to insure anonymity.

Construction of the Questionnaire

To test the hypothesis that older and younger mothers would vary on the dimension of responsive attitudes towards infants, a responsivity to infant scale was constructed. This was derived from the Maternal Attitude Scale (Cohler, Weiss, and Grunebaum, unpublished manual) and consists of a subset of items from the scale labeled encouragement of positive interaction with the child and from the subscales involving mother-infant reciprocity. Items were selected based on applicability to infants in the age range of the study which addressed attitudes towards reciprocal responding to infant cues. Items geared toward mothers of older infants were not included.

The questions concerning adjustment to parenthood and satisfaction with the mothering role were constructed from scales used in four previous studies. These include Leifer's study of first pregnancy and the transition to motherhood (Leifer, 1977), items from an opinion scale in a study of first birth by Entwisle and Doering (Entwisle and Doering, 1980); the maternal irritability scale of the Parental Attitude Research Instrument (PARI; Schaffer and Manheimer, 1960) and a pilot study by the author which will be described below. Scale reliability and validity data are available for the PARI which has been used in numerous studies of parenting. However, it does not contain a satisfaction with parenthood scale. Therefore, items were selected

from this instrument which have been found to predict successful adjustment to parenthood. It was supplemented with items constructed and used in previous studies for which no cross-study reliability data is available. It was the author's intent to include questions from a number of different studies in order to construct a satisfaction with parenthood scale which would be homogeneous and internally consistent based on the current sample.

No reliable, homogeneous scale was found which measured role competition between work and mothering roles in mothers of infants. Therefore the questions measuring competition between work and mothering roles were based on items from the Entwisle and Doering opinion scales and an interview protocol used in a study of sex roles by Pearlin (Pearlin, 1975).

The Coping Scale was constructed from the author's pilot study. It was designed to discriminate between the following coping strategies. Questions regarding the information search strategy were developed based on a study described by Entwisle and Doering. These authors found that women who sought information and preparation for the childbirth experience through classes or through reading held more positive attitudes towards childbirth and had more positive reactions to the newborn child immediately after birth. The information search component in this study included questions about reading child care books and contacting other mothers or the infant's maternal grandmother with childrearing questions (Doering and Entwisle, 1975). A second component of the coping scale was use of social support from family, friends and pediatrician which has been found to influence successful adjustment to parenthood. The third addressed activities which can

serve to lessen the negative emotional reactions to stress. Examples of these are physical exercise and the engagement in other activities outside the home. The last component of the coping scale was passive acceptance of problems with no attempt to cope.

Timing of parenthood questions were constructed from the author's pilot study. No published scales were found which addressed the mechanism by which mothers decide when to begin having children or the consequences of this timing decision. Exploring this phenomenon for the purpose of question construction, women in the author's pilot study were asked open-ended questions regarding their decisions to have children. The method by which their responses were formed into closed questions will be described below.

The pilot study also included open-ended questions regarding satisfaction with parenthood and coping with the difficulties of parenthood in order to supplement items derived from the studies described above.

Combining questions from a number of previous parenting studies and from the pilot study enabled the examiner to accumulate a large pool of items from which to select the final scales. Only those items which formed internally consistent, homogeneous scales based on an a priori cluster analysis were included in the final analysis.

Pilot Test

For the purpose of the pilot study, respondents were recruited from family practice medical clinics and from published birth announcements in the mid-Michigan area. Fifty-five out of 103 potential respondents between the ages of 18 and 40 who had given birth within one year of the period of study were administered open-ended

questionnaires of the author's design regarding their experiences with parenthood. They received questionnaires through the mail with self-addressed stamped return envelopes. Participants were married a mean of 5 years (range=1-15 years) with education evenly divided between high school, college and postgraduate education. Twenty of the women were primiparous and 35 were multiparous. Subjects were predominantly caucasian and mean income fell between $16,000-$20,000. Mean infant age was 4 months (range=1-22 months). Half of the sample reported having postponed the pregnancy and the length of postponement averaged 7 years (range=1-12 years; mode=1-2 years).

Mothers were asked open-ended questions regarding their satisfaction with the parental role, perceived difficulties in parenting and solutions which facilitated coping, factors affecting the timing of childbearing and the consequences of the timing decision.

For each question, subject responses were grouped into discreet, mutually exclusive categories by two independent readers until all responses were accounted for. Discrepancies between the two readers were then discussed until a single categorization was agreeable to both. Likert-type questions were constructed by the examiner based on the final category scheme and were added to items measuring satisfaction with parenthood coping and timing of parenthood decisions. Items constructed from the pilot study were included to supplement the published scales when equivalent items were not available.

The resulting questionnaire contained 105 five point response items which were anchored strongly agree, agree, undecided, disagree and strongly disagree. Strongly agree was assigned a score of 1 and

strongly disagree was assigned a score of 5. Subjects were instructed to leave questions blank when they were not applicable.

Socio-demographic data regarding mother's and father's age, income, education and work status and infant's sex, birth weight and health characteristics and the method by which mother fed the infant were requested on a separate form.

RESULTS

This chapter contains a description of the data reduction and analysis which was conducted in four stages. Scale construction was accomplished with an a priori factor analytic technique. The relationships between these scales were then tested using a structural equation path analysis. Relationships which emerged from the path models were then explored using multivariate analysis of variance and significant results were further tested with more conservative a postiori multiple comparison of means tests. Each of these four stages of data reduction and analysis will be described separately.

Scale Construction

Because the questionnaire consisted of items derived from five different instruments, it was not known which items would load together. Therefore, the entire data set was first submitted to a principal factors factor analysis with iteration and with varimax rotation to determine an initial factor structure. Clusters were then formed by placing all items which loaded highest on the first factor in one cluster. This procedure was repeated with each factor with Eigenvalues of 1.00 or more. As a result, each item was placed in a single cluster. Where items loaded equally highly on more than one factor, the decision for inclusion in a cluster was based on content. All items in a cluster whose valence was in a direction opposite from the majority of items in that cluster were reflected. Thus for all clusters, 1 always signifies strong agreement and 5 always denotes strong disagreement with attitudes expressed in the cluster.

To test for reliability and homogeneity of scales, these clusters were then submitted to a confirmatory factor analysis using an oblique multiple groups factor analysis with communalities (Nunnaly, 1978) which was run with the computer program PACKAGE (Hunter, Gerbing, Cohen and Nicol, 1980). Clusters were tested for unidimentionality in the manner recommended by Hunter and Gerbing (1982) which includes determination of: 1. homogeneity of content, 2. internal consistency via testing of intra-cluster, inter-item correlations for a Spearman rank one pattern and 3. external consistency or parallelism by examining similarity of correlations of items within a cluster with other cluster scores. Those items which met the above three criteria were retained in their clusters. Others were assigned to different clusters based on content, high item-cluster correlations with the outside cluster and parallel correlations to other clusters. Items which did not fit in any existing cluster but which correlated highly with each other and less highly with other clusters and which correlated with external clusters in a parallel fashion were grouped together into new clusters. Items which did not fit with their own clusters, did not fit in any other clusters and did not form a cluster of their own were placed in a residual cluster and eventually discarded. The resulting clusters were judged to be homogeneous in content, internally consistent and parallel to the other clusters to within sampling error (see Table 3, Appendix A).

To further test for internal consistency, an item-correlation matrix was computed with ones on the diagonal and with cluster scores partialed out. The resulting matrix appeared flat to within sampling error (see Table 4, Appendix A). To test for external consistency,

item-scale total correlations were compared for each item with its own cluster to the item-cluster scores of the other 6 clusters. The criterion for higher correlation with scale of inclusion than with external scales is met as is the criterion for a similar pattern of correlations with external clusters to within sampling error (see Table 3, Appendix A).

The final clusters consist of 59 items in eight scales which were labeled Responsiveness to Infant Cues, Dissatisfaction with Parenthood, Maternal Role Definition, Dislike of Early Infancy, Missing Work, Work Problems, Active Coping, and Regret (see Table 5, Appendix A). Standard score coefficient alpha ranges from .61 to .90 (see Table 6, Appendix A).

The first scale, responsivity to infant cues, is derived exclusively from the pool of items drawn from the Cohler Maternal Attitude Scale and has a coefficient alpha estimate of scale reliability of .76. It taps attitudes of attentiveness to infant cues and responsiveness to infant communication. An example is item 11. The six month old baby can tell you exactly what he wants if you watch and listen.

The second scale is labeled dissatisfaction with parenthood and is the largest scale with a standard score coefficient alpha of .90. It is typified by items such as " Taking care of a baby is much more work than pleasure" and "I've been nervous and jumpy since having this baby" and "most men have more interesting work to do than their wives have".

The third scale is titled Maternal Role Definition and consists of items from the maternal attitude scale and the PARI. This is a three item scale with coefficient alpha of .79 which taps attitudes of strong

identification with the mothering role and is believed to reflect traditional female role values such as "A woman does not find her true self until she is a mother".

The fourth is a two-item scale derived from the Maternal Attitude Scale and is titled Dislike of Early Infancy. It reflects a perception of the early infancy period as difficult with anticipation of conditions improving as the infant gets older and it has a coefficient alpha of .71. The scale items are "Babies are more difficult to take care of when they are young than when they are older" and "Taking care of babies is hard but I know it will get easier when the baby gets older".

Both the fifth and sixth scales are subsets of the predicted mothering-work role conflict scale. These two scales did not form one homogeneous scale and did not correlate to other scales in a parallel fashion. Consequently, they were divided into two scales. The fifth scale contains attitudes of women who are not working and miss employment. It is labeled the Miss Work Scale, has a coefficient alpha of .61 and consists of items like "I sometimes miss the stimulation and challenge of work while I am at home with the baby". The sixth scale is a three item scale labeled Work Problems and taps the anxiety of women who are concerned about their infants while they are at work; coefficient alpha is .78. A sample item is "I sometimes worry that my child will not be adequately cared for while I am at work".

The seventh scale was derived from the pilot study questions and is labeled Active Coping. It taps availability of social support and of activities outside the house; coefficient alpha is .73. Items designed to measure passive coping attitudes such as the belief that no

intervention would be useful did not form a consistent cluster and did not correlate with the active coping cluster and were dropped. The information search coping cluster which was predicted on the basis of the Entwisle and Doering study did not form a cohesive cluster and was dropped. This was designed to identify women who sought advice from others or information in books as a means of coping. Items relating to advice from others did correlate with social support items and were included in the active coping scale. Sample items from the active coping scale are "I get all the emotional support I need from my family" and "I still am involved in at least one activity outside the house."

The eighth scale is labeled regret and has a coefficient alpha of .64. Although items were designed from the pilot study to measure attitudes towards the timing of parenthood, their negative valences resulted in a cluster which expresses remorse as a result of some aspect of the timing of parenthood as in "I feel too old to be the mother of an infant" or "I wish I had done more things before becoming a parent". Items with positive valence did not fit in this cluster and did not form an internally consistent cluster of their own.

Thus all of the predicted scales were formed with the exception of the timing of parenthood scale. The scope of the coping scale was more limited than was intended. The final scale measures only active forms of coping such as seeking social support and involvement in activities outside the home. Satisfaction with parenthood and adjustment to parenthood were very highly correlated and were merged into one scale. Conflict between work and mothering roles did not correlate with other scales in a parallel fashion and was divided into two scales. The

first applies to homemakers who miss the work role and is labeled Miss Work and the second to working women who feel torn between their work and mothering responsibilities and is labeled Work Problems. Three new scales were added based on an examination of the data. These are the Role Definition scale, the Dislike of Early Infancy scale and the Regret scale. The clusters were then submitted to a causal analysis in order to test a model of interrelationships.

Causal Analysis

An exploratory path analysis was undertaken to study the causal relations between the variables measured by the scales. A structural equation or path model was used which is a statistic based on multiple regression. The observed correlations between the clusters were used for input into the path analysis. These were obtained from the PACKAGE cluster analysis program. Since these were computed with communalities on the diagonal, the correlations in the path analysis are corrected for attenuation. This eliminates measurement error due to random sampling error by using estimates of item true scores rather than observed scores for input into the correlation equation. The statistical computer program PACKAGE (Hunter, Gerbing, Cohen, and Nicol, 1980) was used to test the path model. The model that most closely fit the total data set is shown in Figure 1. It includes five of the scales that were derived from the final cluster analysis. Scales relating to work-mothering role conflicts were eliminated from the total sample path model because each was applicable to only a segment of the sample. The Work Problem scale regarding infant-related anxiety while the mother is at work is not applicable to nonworking women while the Miss Work scale was not applicable to working women.

The Maternal Role Definition scale was eliminated from the path model because of low correlations with the other scales. It was used in the inferential analyses as a means of explicating the path models.

The path analysis was conducted with an ordinary least squares solution. Table 7 (Appendix A) shows the observed correlations, correlations predicted by the model and the residual of the observed minus the predicted correlations which constitutes the error component. The sum of the squared deviations of observed minus predicted correlations is .11 and does not significantly differ from zero (Chi square = 5.278, ns). Two socio-demographic variables, maternal age and maternal education and one infant variable labeled infant problems were included as predictors in this path model. Infant problems is a summed scale of infant illness, colic, rashes, feeding and sleeping disturbances. A low score denotes high infant problems while a high score denotes low infant problems.

TOTAL SAMPLE PATH MODEL

As can be seen in Figure 1, two exogenous variables are included in this model. Exogenous variables exert a causal influence on but are not caused by other variables in the model. The first of these is the infant variable labeled Infant Illness/Irregularity and the second is the maternal variable Mother's Education. The Infant Illness/Irregularity variable was found to be predictive of Dislike of Early Infancy (β=.44) which in this model is predictive of Dissatisfaction with Parenthood (β=.36). Dissatisfaction with Parenthood is predictive of Regret (β.58).

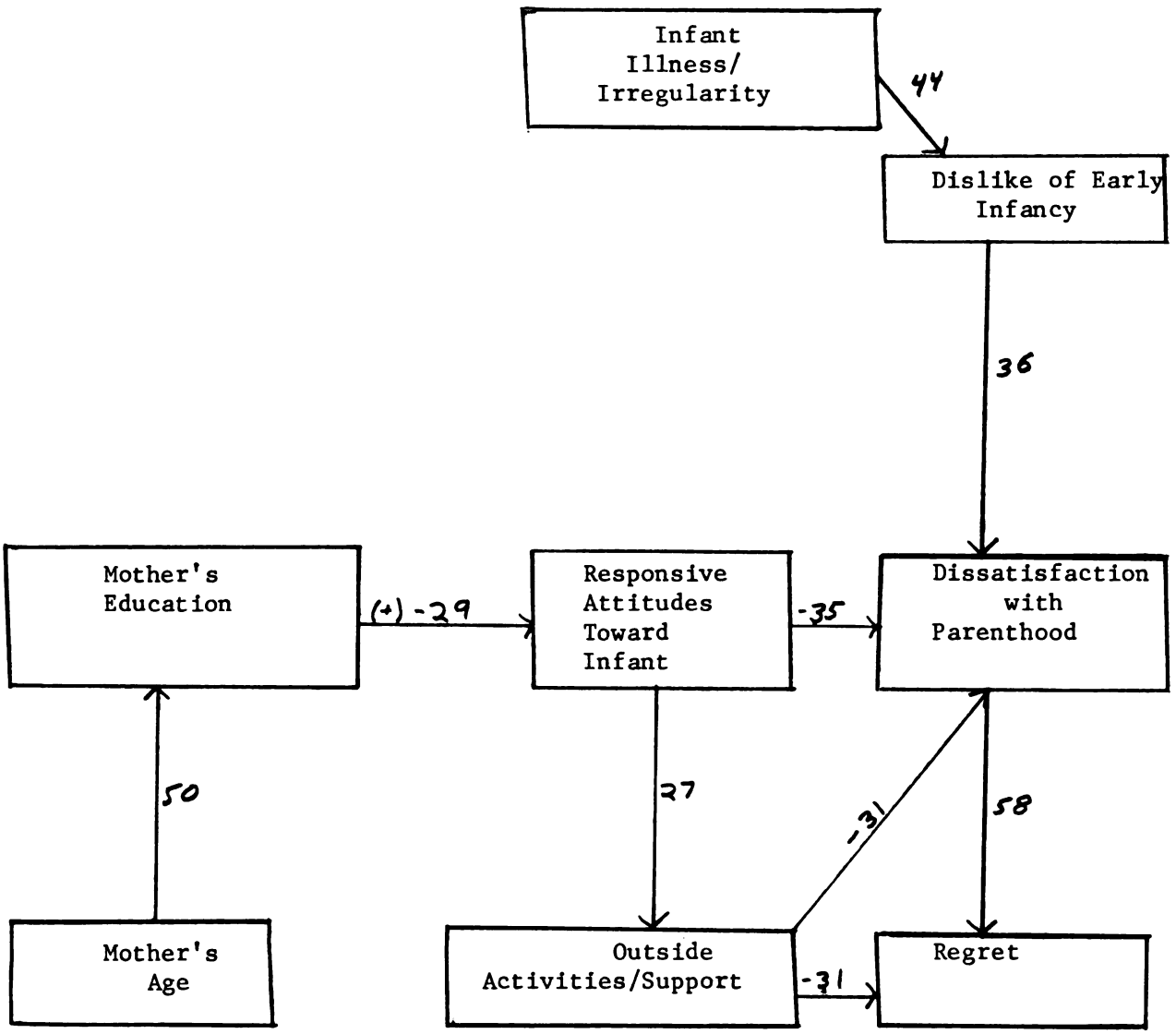

Figure 1. Path model for total sample. N=125

Sum of squared deviations of the observed minus predicted correlation = .11. Chi Square = 5.278, ns.

Maternal Education is predictive of Responsive Attitudes Toward the Infant (β=-.29). It also mediates the influence of Maternal Age on Responsive Attitudes. The relationship between Mother's Age and Mother's Education (β=.50) accounts for the corrected zero order correlation of -.17 between Maternal Age and Responsive Attitudes. Mothers with more advanced education tend to be older and to hold more responsive attitudes towards parenting an infant. Responsive Attitudes is negatively predictive of Dissatisfaction with Parenthood (β-.35) and positively predictive of Active Coping (β=.27). Active Coping has both a direct negative impact on Regret (β=-.31) and an indirect impact through Dissatisfaction as follows. Active Coping is related to Dissatisfaction (β =.31) and Dissatisfaction is related to Regret (β =.58).

Thus the predictors of Dissatisfaction with Parenthood and Regret, expressed as remorse concerning the timing of parenthood decision, are mother's responsive attitudes, availability of social support and activities outside the home (Active Coping) and perception of early infancy as difficult. Maternal age has an indirect effect on responsiveness through maternal education which in turn predicts responsive attitudes. Infant characteristics such as illness and irregularity have an indirect effect on Dissatisfaction through the perception of the early infancy period as difficult.

Next, the sample was broken down to two subsamples: working women (n=51 including those on maternity leave) and nonworking women (n=74). This was done for the dual purposes of assessing the impact of mothering-work role conflict on Dissatisfaction with Parenthood and of replicating the path model on the two subsamples. The results of the

total path model were cross-validated by applying the model to the worker and nonworker subsamples separately. This latter goal was accomplished to within sampling error. Sampling error increased due to the decreased sample sizes. Each model will be presented separately.

Path Model for Working Mothers

In order to assess the internal consistency of the 6 scales (excluding Maternal Role Definition and Miss Work), for the working subsample, an a priori cluster analysis was computed. Standard score coefficient alphas were still considered acceptable (see Table 8, Appendix A) and all but one scale was left intact. An exception was made in the case of the Active Coping scale in which items 3 and 5 no longer appeared parallel in pattern of correlation to the other scales. These two items were omitted from the working sample Active Coping scale. The decline in scale alphas for all but the Work Problems scale is predicted by the reduced sample size. The Work Problems scale increased in scale alpha from .78 to .82. This is predicted on the basis of the greater applicability of this scale to the working subsample. Corrected observed interscale correlations (see Table 8a, Appendix A) were used in a path analysis which was based on the total sample path model. Two variables were added. The first is the Work Problems scale that focuses on mother's anxiety over the infant while at work. It was predicted that this scale would impact on Dislike of Early Infancy since it contains items that focus on the difficulties of being the working mother of an infant. It was also predicted that the Work Problems variable, which was believed to be a measure of role conflict, would contribute to Dissatisfaction with Parenthood. The second new variable is Method of Infant Feeding.

Mothers who had indicated that their infants were breast-fed were assigned a score of '1', those who used a combination of breast and bottle feeding were assigned a score of '2' and those who bottle fed their infants were assigned a score of '3'. The Method of Infant Feeding variable was added after it was observed to correlate highly with Dislike of Early Infancy and Dissatisfaction with Parenthood in the working subsample.

The path model is presented in figure 2 and the actual, predicted, and observed minus predicted correlations appear in Table 9 (Appendix A). Although the general path model fits the data to within sampling error (error=.25, Chi square=4.712) some relationships emerged differently for the workers. Responsive Attitudes continued to predict Active Coping (β =.39) and Active Coping continued to negatively predict Dissatisfaction with Parenthood (β=-.72) and Regret β-.72). However, these latter two relationships were more than twice as strong for the working mothers as for the total sample. On the other hand, in this group, Responsive Attitudes did not predict Dissatisfaction with Parenthood above a zero level (β=.02) as opposed to a moderate prediction in the total sample (β=-.35). Moreover, the relationship between Dislike of Early Infancy and Dissatisfaction with Parenthood which emerged in the total sample path model was entirely explained by the Infant Feeding variable. Thus the direct relationship between Dislike of Early Infancy and Dissatisfaction with Parenthood in the total sample appears to be a spurious one and actually is the result of shared correlations with the exogenous variable Infant Feeding.

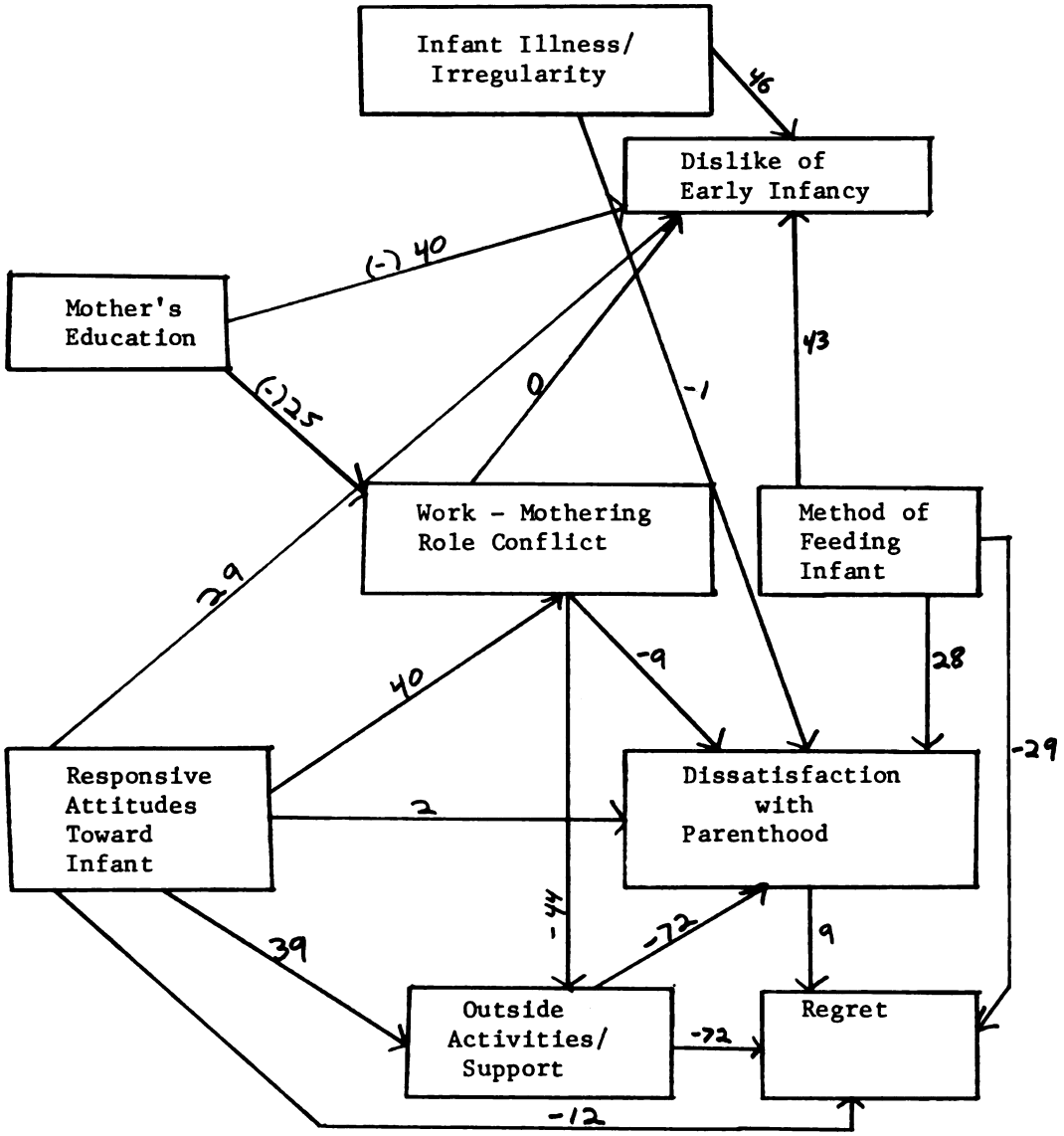

Figure 2. Path model for working mother sample. N=51.

Sum of squared deviations of the observed minus predicted correlations = .25. Chi square = 4.712, ns.

There continued to be a strong relationship between Infant Illness/Regularity and Dislike of Early Infancy. Working mothers whose infants have been sick, or are irregular experience early infancy as difficult (β=.46) though they are not more dissatisfied with parenthood (β=-.01). A variable which does predict to Dissatisfaction with Parenthood is feeding methods. Working mothers who breast-feed their babies are more likely to experience early infancy as difficult (β=.43) and to be dissatisfied with parenthood (β=.28). However, they are also less likely to express regret relative to the timing of parenthood (β =-.29). A low score on the feeding variable indicates breast-feeding.A low score on the Dislike of Infancy, Dissatisfaction with Parenthood and Regret scales indicate strong agreement with these scales.

The Mothering-Work role conflict variable did not operate as expected. Contrary to what had been predicted, women who worry about their infants while they are at work (score high on the Work Problems scale) are not more dissatisfied with parenthood (β=-.09) and they are not more likely to experience early infancy as difficult (β=0). The strong relationship between Responsive Attitudes and Work Problems in this sample (β=.40) may help explain this result. It is hypothesized that the working women who experience work problems may blame work for the feelings of anxiety generated by separation from the infant. They therefore do not experience dissatisfaction with the mothering role. Their feelings regarding the work role is unknown.

Mother's Education continues to be central in this model. Despite a zero order correlation of -.69, there is no causal predictor from Mother's Education to Responsive Attitudes (β=-.07). Rather, both responsiveness and maternal education independently are predictors of

the two variables Dislike of Early Infancy Period and Work Problems. However, they operate in reverse direction. A high education level predicts the perception of early infancy as not difficult (β=.40) whereas high responsive attitudes predict the perception of infancy as difficult (β=.29). In addition, mother's high education level predicts low work-mothering conflict (β=.25) whereas responsive attitudes predict high conflict level (β=.40).

The relationship between Responsive Attitudes and mothering work role conflict is understood in terms of the greater anxiety responsive mothers have in separation from infants while at work. The relationship between responsivity and perception of infancy as difficult is understood in terms of the greater effort required of mothers who take their caretaking cues from the infant.

The negative relationship between Mothers' Education and Work Problems may be indicative of highly educated women's commitment to their work roles. These women may experience less ambivalence in separation from the infant. The negative relationship between education and perception of infancy as difficult is unclear, but may be mediated by a variable not included in the equation.

To summarize the path model for working women, Responsive Attitudes Towards Infants is predictive of high Active Coping (β=.39). It has a direct negative impact on Regret (β=-.12) and an indirect impact through Active Coping (β=-.72). In this model, Responsive Attitudes is not negatively predictive of Dissatisfaction with Parenthood (β=.02) and is not related directly to Maternal Education (β=-.07). However, Responsive Attitudes Towards Infant is predictive of mothering-work role conflict (β=.40) and of perception of early infancy

as difficult (β=.29). Mother's high level education predicts low level Work Problems (β=.25) and low level perception of infancy as hard (β =.40). Although infant health and regularity problems predicts perception of infancy as difficult (β=.46), it does not predict dissatisfaction with parenthood (β=-.01). The variable that predicts both dissatisfaction with parenthood and dislike of early infancy is Method of Infant Feeding. In working women, breast feeding is related to high levels of parenting dissatisfaction (β=.28) and to perception of infancy as hard (β=.43). Regret with the timing of parenthood decision is most highly predicted by the absence of Active Coping both directly (β=-.72) and indirectly through Dissatisfaction with Parenthood (β=.09). It is believed that the large Beta weight between Active Coping and Dissatisfaction (β=-.72) is inflated by sampling error and that the actual relationship is somewhat weaker. If this is the case, the small Beta weight between Dissatisfaction and Regret (β =.09) is probably an underestimate. This is posited based on the relatively large zero order correlation between the two variables Dissatisfaction with Parenthood and Regret (r=.53) and the large path coefficient in the total sample model (β=.58).

The path model for the subsample of nonworking women is presented in the next section.

Non-Working Mothers Path Model

An a priori cluster analysis of the six clusters used in this model (excluding Work Problems and Maternal Role Definition) was performed. Scale alphas did not significantly deviate from those of the total sample (see Table 10, Appendix A).

As in the previous case, the path model for the subsample of nonworking mothers (n=74) is based on the model for the total sample. Infant feeding method was not a predictor in this sample and was not included as an exogenous variable. The scale labeled Miss Work which taps mother's attitudes of missing some aspect of the work experience while she is at home with the infant is included as a measure of mothering-work role conflict. The path model appears in figure 3 and the observed, predicted, and observed minus predicted correlations appear in table 11 (Appendix A). The sum of squared deviations is .20 (Chi square=5.079, ns)

As in the total sample model, Responsive Attitudes Towards the Infant negatively predicts Dissatisfaction with Parenthood both directly (β=-.20) and indirectly through Active Coping. In this model, it also exerts an indirect influence through Miss Work. Responsive infant attitudes predict Active Coping (β=.35) which in turn predicts dissatisfaction with parenthood (β=-.31). As in the total sample model, Dissatisfaction with Parenthood strongly predicts regret of the timing of parenthood decision (β=.79).

As in the working mother model, both mother's high education level (β=-.28) and responsivity to infant (β=-.25) predict mothering-work role conflict. Mothers who score highly on the education variable miss the work experience <u>more</u> than mothers who score lower. However, mothers who are highly responsive miss the work experience <u>less</u> than mothers who score lower on responsivity. This is believed to be an expression of the infant-oriented attitudes of women who are responsive to their infants' cues. The Miss Work variable is highly predictive of Dissatisfaction with Parenthood (β=.61).

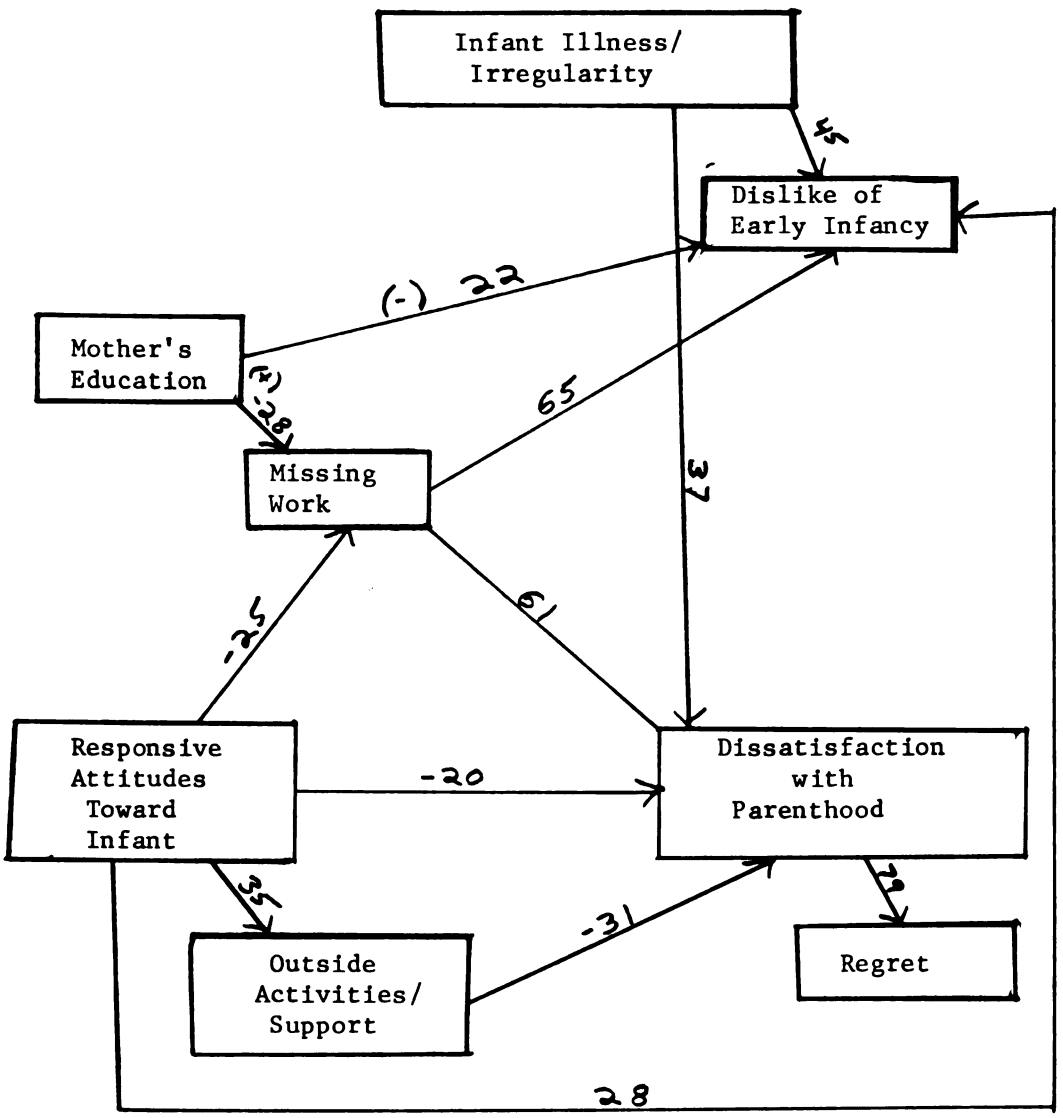

Figure 3. Path model for nonworking sample. N=74.

Sum of squared deviations of the observed minus predicted correlations = .20. Chi square = 5.079, ns.

In summary, mothering-work role conflict appears to act as a mediating variable between education and responsive attitudes towards infant in the total sample model. In the case of the nonwworking mothers, mothers with high education and thus strong preparation for the work role, miss work more when they are home (β=-.28). On the other hand, mothers with responsive, infant-oriented attitudes miss work less when they are home (β=-.25). But high levels of responsive infant-oriented attitudes are associated with high levels of conflict while at work (β=.40).

The infant illness/regularity variable is more central in the nonworking mothers model than in the working mother model. As is true in the working mother model, nonworking mothers whose infant are problematic view early infancy as hard (β=.45). But, whereas infant problems in the working mothers model did not predict dissatisfaction with motherhood (β=-.01), they do in the nonworking mother model (β =.37). Miss Work is also predictive of perception of infancy as hard (β =.65).

The relationships between the independent variables mothering-work role conflict, infant illness and method of feeding the infant and the dependent variables Dislike of Early Infancy and Dissatisfaction with Parenthood in the working and nonworking mother subsamples is clarified in the path models presented below.

A Comparison of Working and Nonworking Mother Models

Because of the complexity of Figures 2 and 3, important relationships which differ for working and nonworking mothers are presented separately in order to highlight significant discrepancies.

In the nonworking mother model, infant illness and mothering-work role conflict predict both dependent variables Dissatisfaction with Parenthood and Dislike of Early Infancy. Infant Feeding is not a predictor variable but rather a consequence of some variable related to Dissatisfaction with Parenthood (see Figure 4) (See Table 12, Appendix A). In the working mother model, work-mothering conflict mildly predicts Dissatisfaction with Parenthood but not Dislike of Early Infancy. Infant Illness/Irregularity predicts Dislike of Early Infancy but not Dissatisfaction. The variable that most strongly predicts both dependent variables is Method of Infant Feeding (See Figure 5) (See Table 13, Appendix A). As can be seen in both path models, the relationship between Dissatisfaction with Parenthood and disenchantment with early infancy that emerges in the total sample model is spurious. In nonworking mothers, this relationship is best explained by infant problems and role conflict. In the working sample, it is best explained by method of feeding the infant.

In the next section, a priori predictions regarding relationships between variables will be explored. In addition, the results of the path analysis suggested several relationships which had not been predicted before data collection. These were also examined. Hypotheses that were predicted a priori are discussed first and those that were generated by the computed path models are discussed second.

A priori Predictions

Analyses of variance were performed to test the hypotheses that proposed maternal age as an independent variable and responsive attitudes, dissatisfaction with parenthood, active coping, and mothering-work role conflict as dependent variables. These will be

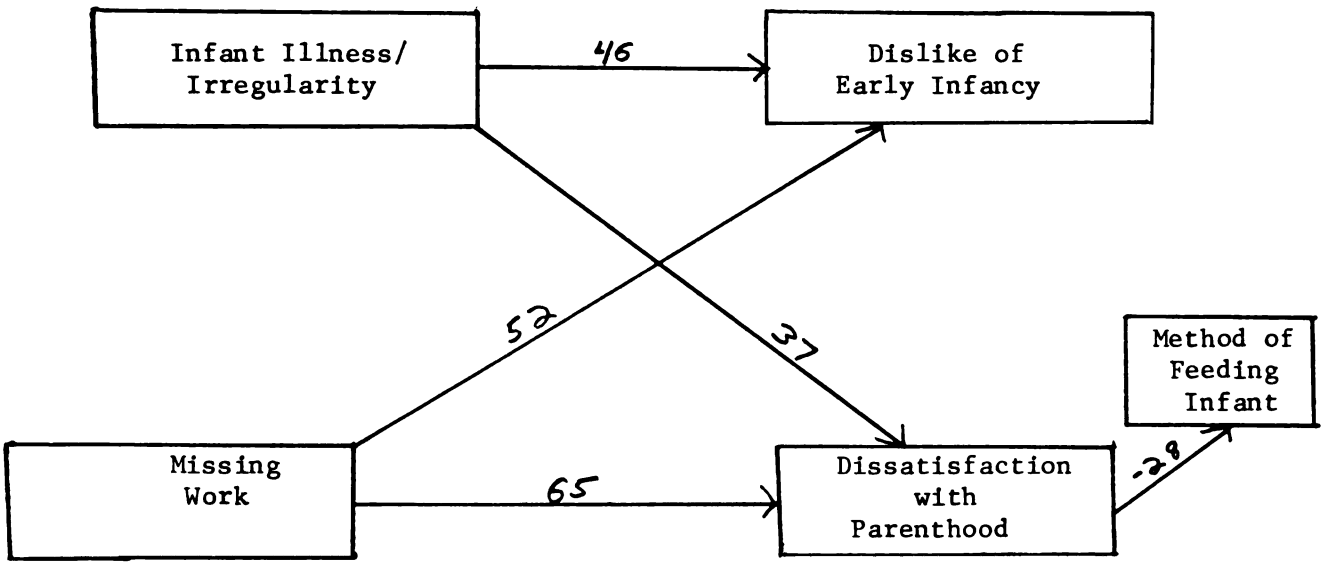

Figure 4. Path model for nonworking mothers. N=74.

Sum of squared deviations of the observed minus predicted correlations = .03. Chi square = .882, ns.

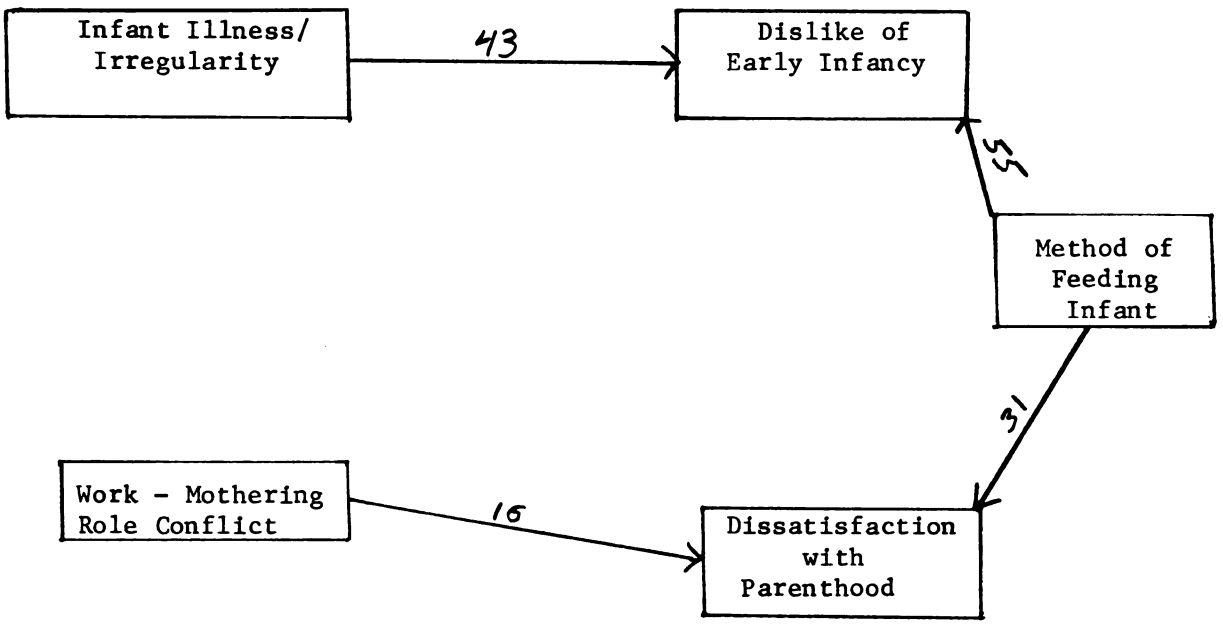

Figure 5. Path model for working mothers. N=51.

Sum of squared deviations of the observed minus predicted correlations = .01. Chi square = .046, ns.

discussed in the section that follows.

Maternal Variables

Although the sample was originally divided into four groups from ages 19 to 40, a comparison of group means of the dependent variables did not differ between groups of mothers aged 19-24 and those aged 25-29 and they were collapsed. The means for the groups aged 30-34 and 35-40 were also statistically the same and these too were collapsed. This was done in order to obtain larger cell sizes for all further comparisons. Therefore, all analyses with the maternal age variable were performed on two groups unless otherwise indicated. The first group is aged under 30 and the second is aged 30 and over.

Five hypotheses had been proposed with maternal age as the independent variable. To test these, one way analyses of variance with simple effects were performed using the statistical package BMDP4V. Results of these follow.

Hypothesis 1. Older women will be more responsive to their infants and will be more satisfied with the parental role.

There were no significant differences in responsiveness to infant when mother's age was divided at 30. However, Levinson postulates that a transition occurs in males at approximately age 28, and that this transition takes place over the course of a 5-year structure changing period from age 28-33. In order to see whether a similar shift occurs in women which is evidenced by increasing responsivity to others, an age split was performed dividing the sample into three groups aged 19-27, 28-32, and 33-40. The first group was presumed pre-transitional, the second transitional and the third post transitional. The F value was not significant ($F(2,122) = 2.553$, $p <$

.08), but a comparison of group means illustrates that a nonsignificant shift to higher responsive attitudes does occur after age 32 (See Table 14, Appendix A).

No age differences were found for dissatisfaction with parenthood ($F(2,122) = .73$ ns).

Hypothesis 2. It was predicted that older mothers would score higher on measures of active coping.

This hypothesis was not supported by the data. In fact, mothers under age 30 achieved higher active coping scores than those 30 or over ($F(1,119) = 9.68$; $p<.002$). (See Table 15, Appendix A). The Active Coping scale loaded heavily on availability of social support. Older mothers are more often geographically mobile and tend to live apart from families and childhood friends. Younger mothers tend to live closer to their families and long-standing acquaintances and are more reliant than older mothers on their families (Hoffman, 1978; Daniels and Weingarten, 1982). Older mothers may also have less access toother mothers at the same stage of the family life cycle since childbearing age is more staggered in their friends and colleagues than among those of younger mothers.

Hypothesis 3. It was predicted that mothers with more effective coping facilities would score lower on measures of dissatisfaction with parenthood.

To test this hypothesis, a median split was performed on the Active Coping scale which served as the independent variable. When a one way analysis of variance was performed with the dependent variable Dissatisfaction with Parenthood, significant differences were found ($F(1,123) = 14.384$; $p<.0002$). Mothers who scored lower on measures of

active coping scored higher on measures of dissatisfaction. (See Table 16, Appendix A).

Hypothesis 4. It was predicted that mothers who experience higher levels of mothering-work role conflict would report lower levels of satisfaction with parenthood.

To test this hypothesis, the sample was divided into working and nonworking subsamples and a median split was performed on the scales Miss Work and Work Problems. One way analyses of variance were performed for each subsample. The independent variable was mothering-work role conflict and the dependent variable was Dissatisfaction with Parenthood. For the non-working mothers, a significant relationship was found between level of mothering-work role conflict and dissatisfaction with parenthood. Mothers who scored higher on the Miss Work scale scored higher on the Dissatisfaction with Parenthood scale ($F(1,72) = 13.577$; $p<.004$). They also scored higher on the Dislike of Early Infancy scale ($F(1,72) = 5.084$; $p<.02$). (See Table 17, Appendix A). For the working sample, there was no significant relationship between Work Problems and Dissatisfactin with Parenthood ($F(1,48) = .255$, ns) or Dislike of Early Infancy ($F(1,48) = 1.712$, ns). (See Table 17, Appendix A).

Hypothesis 5. It was predicted that older mothers would experience higher levels of role conflict than younger mothers. No such relationship was found (Non-workers: $F(1,72)=.061$ ns). Workers: $F(3,36) = .43$; ns). (See Table 17a, Appendix A).

A postiori Predictions

An examination of the path models suggested further exploration of the relationships between the scales and maternal and infant

variables. Multivariate analysis of variance was performed with the statistical package BMDP4V. The following maternal variables were considered as independent variables: age, work status, feeding method, socio-economic status (defined as a composite score of husband's education and family income), mother's education, duration of marriage and duration of postponement of childbearing. Infant variables were age, illness/irregularity and sex. Scales which constituted the composite dependent variable were Responsive Attitudes, Dissatisfaction with Parenthood, Dislike of Early Infancy, Active Coping and Regret. Nonsignificant differences which are of interest will be discussed first.

Infant Variables

No differences were found for infant sex (Manova: $F(5,117) = .97$; ns) or age (Manova: $F(3,118) = .78$; ns). In addition, no differences were found between mothers of healthy/regular infants and mothers of sick/irregular infants although the relationship between Dislike of Early Infancy and infant illness/irregularity approached significance ($F(1,121) = 2.91$; $p < .09$). Mothers of ill/irregular infants disliked early infancy more. Contrary to expectations based on the working and nonworking path models, there was no interaction between infant illness/irregularity and mother's work status (Manova: $F(5,117) = 1.74$; ns). (See Tables 18 and 18a, Appendix A).

Maternal Variables

Maternal variables that may have been expected to have an impact on satisfaction with mothering and coping are planfullness of pregnancy and duration of marriage. However, no significant differences were found between planned and unplanned pregnancies (Manova: $F(5,107) =$

.44; ns) or between shorter and longer durations of marriage (Manova: F (3,113) = .59; ns). (See Table 19, Appendix A).

Multivariate analyses which did reach significance are discussed next.

Infant Variables

A two way multivariate analysis of variance was performed with the infant variable infant age and the maternal variable work status. The overall Manova approached significance (F (3,117) = 1.64; $p<.06$) and this appeared to be due to the large effect of responsiveness (F (3,117) = 6.08; $p<.0007$). Therefore, a Newman-Keuls post-hoc multiple comparison (Keppel, 1973)) was performed between the group means of the responsiveness variable. Infants were divided into two groups 1) birth to three months and 2) over three months of age. This age breakdown was chosen because of the biobehavioral shift towards greater infant organization which has been observed to occur between the second and third month of life (Emde and Robinson, 1976). Infants have been observed to establish relatively stable diurnal sleep-wake cycles, to initiate the social smile, to begin vocalizations and to establish a relatively stable temperament by the third month of life.

Results indicate that working mothers hold significantly more responsive attitudes toward older infants than they do toward younger infants and this remains significant by post hoc analysis with the Newman-Keuls test. However, non-working women do not differ in their attitudes toward older and younger infants. Thus the phenomenon of greater responsive attitudes to older infants than to younger infants holds only for working women and not for non-working women. (See Table 20, Appendix A). No other significant mean differences were found.

Maternal Variables

Maternal variables which differentiated between the five scales that were entered as dependent variables in the multivariate analysis of variance will be discussed below. The excluded scales are the two role conflict scales because of their lack of applicability to all mothers in the sample and the Role Definition scale which was not associated to the other scales in a meaningful way.

Maternal Work Status

Mother's work status, defined as 1) working and 2) nonworking, was a significant discriminating variable (Manova: $F(5,113) = 4.73$; $p < .0006$) largely because of the differences in dissatisfaction with parenthood for working and nonworking mothers ($F(1,123) = 6.514$; $p < .01$; Newman-Keuls: $p < .05$) (See Table 21, Appendix A). Nonworking mothers were significantly more dissatisfied with parenthood than working mothers.

Infant Feeding Method

The method by which mothers fed their babies was also a discriminating variable (Manova: $F(5,113) = 4.59$; $p < .008$) largely because of the contribution of the Responsive Attitudes and Dislike of Early Infancy scales. Mothers who breast fed their babies or engaged in some combination of breast and bottle feeding held significantly more responsive attitudes than bottle feeding mothers ($F(1,123) = 11.484$; $p < .009$; Newman-Keuls: $p < .05$) but also perceived the early infancy period as harder ($F(1,123) = 4.882$; $p < .02$). Newman-Keuls: $p < .05$). (See Table 22, Appendix A).

Maternal Work Status by Feeding Method Interaction

Several interesting interactions were also found for the work status variable. The interaction between mother's work status and the method by which she feeds her baby proved significant (Manova: $F(5,113) = 5.16$; $p<.003$). For the purpose of the analysis, mothers who engaged in any percent of breastfeeding above zero were assigned to the breastfeeding group. This was done to increase overall cell size. The dependent variables that contributed most strongly to the overall F statistic were Dissatisfaction with Parenthood and Dislike of Early Infancy. For working mothers, women who breast fed their babies (including combination feeders) were more dissatisfied with parenthood than bottle feeding mothers ($F(1,49) = 5.637$; $p<.02$). Newman-Keuls: $p<.05$). Working breast and combination feeders also disliked early infancy more than working bottle feeders ($F(1,49) = 11.584$; $p<.001$; Newman-Keuls: $p<.05$). For nonworking women, there were differences between breast and bottle feeders ($F(1,72) = 3.806$; $p<.05$) but these were not significantly different using the more stringent criteria of Newman-Keuls post-hoc analysis. Interestingly, the direction of difference was reversed for the nonworking sample. Nonworking bottle feeding mothers were more dissatisfied with parenthood than were nonworking breast feeding mothers. There were no differences in perception of infancy as hard between nonworking breast and bottle feeding mothers ($F(1,72) = .104$; ns). (See Table 23, Appendix A).

Maternal Work Status by Feeding Method by Age Interaction

A significant 3-way interaction was also found between the variables mother's age, mother's work status and infant feeding method (Manova: $F(5,113) = 3.44$; $p<.006$) and the scales that made the

largest contributions were Responsive Attitudes and Dissatisfaction with Parenthood. For working women, there were no differences in responsive attitudes between older and younger women whether they breast or bottle fed their infants (breast feeders: $F(1,36) = 2.040$; ns. bottle feeders: $F(1,11) = .074$; ns). However, for nonworking women, differences were found. Women aged 30 and over who were not working and who were breast feeding mothers held significantly more responsive attitudes than women under the age of 30 who were not working and who breast fed their infants ($F(1,53) = 7.268$; $p < .009$. Newman-Keuls: $p < .05$). No such relationship was found for nonworking bottle feeders ($F(1,17) = 1.102$; ns). (See Table 24, Appendix A)

With regard to dissatisfaction with parenthood, no differences were found between older and younger breast feeding mothers regardless of whether they were working (working mothers: $F(1,36) = .936$; ns. Nonworking mothers: $F(1,53) = .601$; ns). However, significant differences were found between older and younger bottle feeding mothers for both homemakers and working women. Older working bottle feeding mothers were less dissatisfied (more satisfied) with parenthood than younger working bottle feeding mothers ($F(1,11) = 5.030$; $p < .04$. Newman-Keuls: $p < .05$). But older nonworking bottle feeding mothers were more dissatisfied with parenthood than younger nonworking bottle feeding mothers ($F(1,17) = 12.436$; $p < .002$; Newman-Keuls: $p < .05$). (See Table 25, Appendix A)

Maternal Education and Socioeconomic Status

Socio-demographic variables that discriminated between the combined scales were maternal education (Manova: $F(3,117) = 2.49$; $p < .003$) and socioeconomic status (Manova: $F(3,117) = 1.90$; $p < .04$). For

both of these independent variables, the scale that contributed greatest to the overall F statistic was Responsive Attitudes. Since there was a strong correlation between maternal education and socioeconomic status ($r=.5061$, $p < .001$), multiple comparison tests were performed only on the maternal education variable in the interest of reducing the number of post-hoc analyses so as to temper inflation of type 1 error.

The maternal education variable was originally divided into five levels including grade school, high school, some college, college graduate, and postgraduate degree. None of the subjects in this study stopped at the grade school level and the first category was eliminated. In order to approximate equal cell sizes between groups, it was necessary to collapse the high school graduate and the incompleted college categories. A comparison of Responsive Attitudes means for these two groups revealed no significant difference (high school mean=2.244, incomplete college mean=2.202).

A significant relationship emerged between mother's education and her responsive attitudes towards her infant ($F(2,122) = 7.272$; $p < .001$). An examination of group mean reveals no significant differences between high school graduates and college educated women. However, mothers with a postgraduate education held significantly more responsive attitudes than all other mothers (Newman-Keuls: $p < .05$). (See Table 26, Appendix A).

Postponement of Parenthood

Although no significant differences were found for the total sample between mothers who had postponed parenthood and those who had not (Manova: $F(3,120) = 1.44$; ns), some differences were found for the

subsample of working women. Postponement was divided into four levels: 1) those who did not postpone parenthood; 2) postponement of 1-2 years; 3) postponement of 3-5 years; 4) postponement of 6 years or more. Categories were chosen based on visual inspection of the data. The modal concentrations of subjects were in these four categories.

Although the multivariate analysis of variance was not significant ($F(6,33) = 1.11$; ns), a significant relationship existed between number of years parenthood was postponed and dissatisfaction with parenthood ($F(3,47) = 4.715$; $p < .005$). Women who postponed childbearing 3-5 years were less dissatisfied with parenthood than all other mothers (Newman-Keuls: $p < .05$) (See Table 27, Appendix A).

The differences between the other three groups of women were not significant. Moreover, there was a tendency for the 3-5 year postponing women to engage in more active coping ($F(3,47) = 2.335$; $p < .08$). Although these coping differences are not significant using the stricter criteria of the Newman-Keuls procedure, 3-5 year postponers do report availability of more active coping facilities than those who postpone 6 years of more when tested with the less conservative Least Significant Differences Test (Keppel, 1973). The differences between the 3-5 year postponers and the groups of who did not postpone and who postponed 1-2 years were not significant.

Percentage of Time Worked

For the working sample, mothers were asked whether they worked full time or part time. Analysis of variance revealed two significant differences between the two groups of workers. Full time workers scored higher on the work problems variable, a measure of mothering-work role conflict ($F(1,46) = 6.017$; $p < .01$; Newman-Keuls:

p <.05) and lower on the active coping scales F (1,47) = 5.469; p< .02; Newman-Keuls: p< .05). (See Table 28, Appendix A).

Characteristics of some independent variables which proved to discriminate between dependent variables will be examined below in order to understand the nature of their influence.

Maternal Age

Since maternal age did prove to interact with other maternal variables in a significant fashion, the sociodemographic status of older and younger mothers was explored. This was done to understand associations of maternal age in this sample with other factors which might have independently exerted an influence on adaptation to parenthood.

In this sample, older mothers tended to have been married longer, to have completed higher levels of education, to be of higher socioeconomic status and to have postponed childbearing longer. They were more likely to have planned the pregnancy and in this sample were more likely to have older infants. This latter finding is an artifact of the sampling procedure and was not predicted.

Older and younger mothers did not vary on the method by which they fed their infants, the frequency with which they reported infant illness/irregularity, or proportion working outside the home. (See Table 29, Appendix A)

Infant Feeding Method, Traditional Feminine Role Values and their Relationship to Dissatisfaction with Parenthood

The causes of differences in dissatisfaction with parenthood between older and younger bottle feeding mothers was not immediately clear. It was found that older bottle feeders were less dissatisfied

with parenthood if they worked outside the home, but more dissatisfied with parenthood if they did not work. It was speculated that in this sample of predominantly middle class, well-educated women, mothers who failed to make the choice for breast feeding their infants may have differed along the dimension of traditional female role values and therefore may have been more or less dissatisfied with parenthood depending on whether they also chose traditional homemaker roles or the less traditional dual roles of working and mothering.

To test this post-hoc hypothesis, the scale labeled Role Definition was examined as a dependent variable. Women who agree with this scale hold the attitude that a woman's primary role is that of mother and that mothers have more pride in themselves than childless women.

First, a one-way analysis of variance was performed with the independent variable infant feeding method and dependent variable maternal role definition. No differences were found overall between breast and bottle feeding mothers ($F(2,123) = 1.171$; ns). However, maternal age by work status did prove to be an important interaction in discriminating these values. When bottle feeding mothers under and over the age of 30 were compared on the maternal role definition variable, no significant differences were found ($F(1,30) = 2.650$; ns) until the work status variable was included. Younger working bottle feeding mothers did hold significantly more traditional female role values than older working bottle feeding mothers ($F(1,11) = 5.559$; $p < .03$). (See Table 30, Appendix A)

Because the F statistic for age by role definition for the total bottle feeding subsample approached significance, it was decided to

compare groups of mothers two years before and two years after the age 30 transition to see if significant role value differences emerged. No significant differences were found for older and younger bottle feeding mothers when a split was performed at age 33 ($F(1,30) = 1.451$; ns) although the younger group did hold nonsignificantly more traditional values. When a median split was performed at age 28, younger bottle feeding mothers did prove to hold significantly more traditional values than older bottle feeding mothers ($F(1,30) = 4.601$; $p < .04$; Newman-Keuls: $p < .05$). It is believed that the nonsignificant F value for the 33 year age split is due to the small cell size for the 33 year and older group. (See Table 30, Appendix A).

Therefore, the finding that younger working bottle feeders are more dissatisfied with parenthood and younger nonworking bottle feeders are less dissatisfied with parenthood than their older counterparts may be explained by the fact that these younger women hold more traditional role values than do the older women. This would suggest tht nonworking women with less traditional role values would be more dissatisfied with parenthood than those with stronger traditional identification with the maternal role. To test this directly, Dissatisfaction with Parenthood was compared in working and nonworking mothers who held greater and lesser degrees of traditional role values ($F(3,121) = 3.332$, $p < .02$). Nonworking women with less traditional role values were more dissatisfied than other women in this sample (Newman-Keuls: $p < .05$) (See Table 32). The association between traditional feminine role values and dissatisfaction with parenthood also seems to be expressed through responsive attitudes toward the infant. Homemakers with less responsive attitudes toward the infant are significantly more

dissatisfied with parenthood than either homemakers with more responsive attitudes or than all working women, regardless of the responsivity of their attitudes toward the infant ($F(7,117) = 2.855$, $p < .008$; Newman-Keuls .05) (See Table 31, Appendix A).

DISCUSSION

This study explored the relationship between a woman's age at first birth and her adjustment to the early months of motherhood. An inspection of the literature had revealed theoretical speculation of precursors to adequate transition to motherhood but until recently, little empirical exploration. Moreover, secondary to a recent trend towards postponement of parenthood it was noted that attention has been given to physical consequences to the older primigravida (Chico and Hartley, 1981; Rindfuss and Bumpass, 1976; Westoff and Ryder, 1977) but little empirical exploration of the psychosocial consequences to mothers. The current study investigated the association between the adult mother's age at first birth and her attitudes toward and adjustment to parenthood.

A sample of primiparas ranging in age from 19 to 40 was surveyed regarding factors that contributed to a satisfactory transition to parenthood and the consequences of the timing of the transition. Whereas maternal age was expected to be a significant predictor of satisfaction with parenthood and responsivity to infant, in fact results indicated that age by itself was a weak predictor. Rather, when the sample was considered as a whole, age exerted an indirect influence upon the dependent variables through maternal education. Unfortunately, it is difficult to tease apart the independent contributions to successful adaptation of education per se and of other variables associated with a woman's age at first birth. Of course, in a cross-sectional study of primiparous mothers, the greater the level of maternal education, the greater the mother's age is likely to

be. Conversely, in the current cohort of middle class women who have voluntarily postponed childbearing, it is likely that the preceding adult years have been spent either in furthering educational goals or establishing a career. Thus age and education will almost invariably be confounded in late timing primiparas. In this middle class sample, the mean education level was college attendance. As expected, older mothers were significantly better educated than younger mothers. Whether women who choose to postpone childbearing in pursuit of higher education are categorically different from those who choose early childbearing or whether actual increments in education affect differential attitudes towards infants and toward motherhood is indistinguishable in the present study. It is also possible that other factors associated with higher education may influence the experience of mothering. For instance, greater educational attainment is associated with more satisfying jobs which allow more self-direction, more complexity of tasks, greater challenge, and less routinization of work. These factors have been associated with greater job satisfaction and greater psychological well-being in both male and female samples (Kohn and Schooler, 1973; Miller, Schooler, Kohn, and Miller, 1979). It is possible that the influence of education on parenting attitudes is at least partially mediated through the psychological gains from paid employment.

A study by Birnbaum (1971) suggests some interesting parallels. In that study, professionally employed mothers were compared with mothers who had graduated from college with distinction but had not entered the work force. The women were all 15 to 20 years past college

graduation. The professional women scored higher on a variety of measures including morale, self-esteem and personal competence. Since the women were initially equated on level of college achievement, the author suggests that continued paid employment, and not basal education level accounted for differential responses to motherhood in midlife. While it seems likely that education level has an effect on maternal attitudes toward children in and of itself, in Birnbaum's sample continued work experience appeared to be the discriminating variable. Thus education alone may not totally explain differences in attitudes between the older and younger mothers in the current sample. Rather other factors associated with delayed parenting, such as achievement in the work place, may have been influential.

To determine what the impact of maternal employment status on adjustment at the transition to parenthood might be, work status was examined as an antecedent variable. Although all of the mothers in this sample were employed at some time before motherhood, roughly 40% of the sample were either employed at the time of the survey or planning to return after a brief maternity leave. Maternal employment after the birth of the child emerged as a pivotal variable.

Predicting successful adaptation to parenthood

In examining the path models designed to predict successful adaptation to parenthood, mother's work status exerted a moderating effect. The path models demonstrate that successful adaptation to parenthood can indeed be predicted on the basis of attitudes toward infants and coping resources. However, the individual models for working and non-working mothers deviated from the full sample path

model. Thus although a general model for transition to parenthood can be postulated, the experience is sufficiently different for working and non-working mothers to warrant separate consideration. The full sample model will be discussed first because it is based on the largest sample of mothers. Discrepancies among the working and non-working women will be included in this section.

The General Model

Responsiveness to infant

Mothers' satisfaction with parenthood in the combined sample of working and non-working mothers can be predicted by attitudes towards the baby and available social support network. Mothers whose attitudes toward the baby expressed recognition of the infant as a competent communicator and who endorsed contingent response to infant communication were more satisfied with mothering and more comfortable in the new role. Although direct observation of the mother-infant interaction was not included in this study, there is reason to believe that these responsive attitudes are related to actual behavior. In a study by Tulkin and Cohler (1973), mothers who endorsed items contained in the responsivity subscale of the Maternal Attitude Scale (Cohler, Weiss, and Grunbaum, unpublished manual) responded to infant vocalizations, imitated infant vocalizations, gave objects to the infant and responded to negative infant vocalization more than mothers who did not endorse scale items. Among the women in this sample, greater responsiveness was associated with better adjustment to parenthood.

Although the cross-sectional nature of the study does not allow us to determine causality, the strong association between maternal

education and responsive attitudes suggests these attitudes are not determined exclusively by the mother's experience with her infant. This would suggest that the causal direction is from responsive attitudes toward the infant to level of satisfaction with parenthood, and not the reverse. Maternal education has been shown to influence parenting behaviors. For example, Sears et al (1957), found that maternal education was related to affection and warmth towards the child, harshness of discipline, restrictiveness, and acceptance of the young child's expressions of dependency and aggression (Sears, Maccoby, and Levin, 1957). Thus it appears that more advanced education in the mother is associated with a constellation of permissive, child-oriented values which in the present study was associated with greater satisfaction with motherhood.

One explanation for the correlation between responsiveness and satisfaction is that mothers who devote the time and energy necessary to respond contingently to infant signals may be expressing a greater investment in motherhood. Possibly, these responsive attitudes are also the result of greater anticipated enjoyment of infants and hence willingness to invest energy for the expected rewards. These factors result in a greater enjoyment of and adjustment to the motherhood role. Moreover, the willingness of a mother to take her cues from her infant implies an ability to respond to the infant's needs before her own. Thus this index of mature ego functioning may relate to better overall adjustment in the maternal role. The presumed association between maternal ego maturity and investment in motherhood and parental adjustment agrees with previous findings of predictors of successful adaptation such as investment in the nurturant role and ego resiliency

and flexibility (Moss, 1967; Shereshevsky and Yarrow, 1974; Heinicke et al, 1983)

Social Support

Mothers who had access to adequate social support were also more satisfied with parenthood. This finding is a replication of those of several previous studies (eg. Crnic et al, 1983; Wandersman, Wandersman, and Kahn, 1980) and suggests that social isolation in itself is a contributor to poor adjustment to parenthood. Mothers who have an outlet, either through activities outside the home or social contacts with friends and relatives, are more likely to feel comfortable in the mothering role and less likely to experience the stresses associated with mothering an infant as detracting from role satisfaction. An interesting association emerged between the estimates of responsive attitudes and social support. Mothers who held more responsive attitudes towards their infants also had significantly greater available social support and outside activities. The explanation for this may be tied to pervasive interpersonal social skills. Heinicke et al (1983) found that the mothers in their sample who were found to relate well to peers during prenatal observations were more responsive when the infants were 12 months old. Studies of abusive mothers show that maltreating parents have deviant relationships with friends and other adults. They discourage formation of long-term relationships and tend to be socially isolated. Their relationships with their peers tend to be non-reciprocal and aimed at coercing friends into meeting their own needs (Crittenden, 1985).

Adolescent mothers who have been observed to be more responsive to their infants, as measured by the maternal emotional and verbal

responsivity scale of the HOME inventory (Caldwell, in press) have also been found to be more sophisticated in their friendship patterns. In fact, social skills and ability to engage in reciprocal relationships may prove to be a better predictor of mutuality in adolescent mother-infant interaction than maternal age per se (Howard and Hall, 1985).

Thus in the present sample of women, the association between responsive attitudes towards the infant and availability of social support may be mediated by a general maternal ability to engage in mature, reciprocally satisfying relationships. This leads to two sets of rewarding relationships, one with the infant and the other with peers, both of which independently contribute to satisfaction with parenthood.

Regret

Dissatisfaction with the parenting role as well as the lack of availability of social support result in regret and a belief that parenting might have been more rewarding had the timing of the transition been different. No differences were found in the regret variable when mothers who regretted early timing and those who regretted late timing were separated. Therefore, the scale appears to measure a general feeling that things may have turned out better under other circumstances rather than an actual statement vis a vis the timing of parenthood.

Infant Difficultness

The relationship between infant difficulties such as minor illness, colic, rashes, sleeping or eating disturbances and maternal role satisfaction is of interest. When data from the full sample was

analyzed, mothers with difficult infants showed lesser enjoyment of the early infancy period. This replicates findings by Crawford (1983) in which good infant health and easy temperament predicted mothers' perception of their infants as less demanding at 6 weeks postpartum. In the current study, it appeared at first glance as if perception of infant as demanding also predicted poorer adjustment to parenthood and hence regret for the timing of parenthood. The relationship between perception of infancy as a difficult period and adjustment to parenthood, however, is in fact more complex.

Non-working mothers of difficult infants find the early infancy period hard and in turn are more dissatisfied with parenthood. However, although working mothers with difficult infants find the early infancy period difficult, they are not more inclined to be dissatisfied with parenthood. It could be that the time working mothers spend away from their babies who are ill, collicy or otherwise difficult provides sufficient relief to allow them to continue enjoying motherhood. The non-working mothers on the other hand, have no respite and may be more on edge and less relaxed in the role. None of the infants in this study were seriously ill so the effect of a prolonged illness on a working mother's satisfaction with parenthood is unknown. Moreover, no measure of mother's work satisfaction was included. It is possible that working mothers with difficult or mildly ill infants have trouble leaving their children for work and would therefore express their displeasure with dissatisfaction with work rather than with motherhood. Surprisingly, there was no correlation between infant difficulties and mothers' perceived work problems, a variable which directly addressed mothers' concerns for the infant while at work.

Once again, the absence of serious infant illness may account for the lack of expressed conflict. However, among mothers of infants with only minor problems, those who work do not express less satisfaction with parenthood while full time homemakers do.

Work Status

The contribution of perceived work-family role conflict to adjustment to parenthood differs for the working and non-working mothers. Non-working mothers who missed the work experience perceived early infancy as more difficult and were more dissatisfied with parenthood. On the other hand, working mothers who experienced role conflict did not see early infancy as more difficult and were not significantly more dissatisfied with parenthood. Once again it would be of interest to note whether these mothers experienced more displeasure with work due to concerns over leaving their young infants or alternatively whether the repeated temporary separations caused by maternal employment actually enhanced the mothers' appreciation of parenthood.

Role conflict may contribute less to adjustment to parenthood in working than in non-working mothers during the early infancy period. With regard to the active coping variable, which includes availability of outside activities and social support, it is equally central in the total sample path model and in the non-working mother path model. Its significance increases more than two-fold in the working mother's path model. What's more, there is no relationship between role conflict and availability of social support and coping resources in the non-working mother group. However, there is a strong relationship between these two variables for working mothers. Thus mothers who are concerned

about their infant's welfare while they are at work report less outside activities and less availability of a supportive social network. The lack of availability of support is strongly predictive of dissatisfaction with parenthood and of regret concerning the timing of parenthood. It appears that mothers who feel pulled between parenting and work responsibilities may respond by devoting the majority of their energies to these two domains at the expense of personal sources of support and release of tension which could otherwise mediate the stresses of parenthood. Thus although role conflict per se does not directly contribute to poor adjustment, in working mothers it wields an indirect influence by curtailing time for useful coping resources. Based on the current data, it does not appear as if a different but equally effective coping mechanism exists for the working mothers as no separate coping variable emerged for this subsample.

Rapoport and Rapoport (1969) found that among dual career couples, social and recreational activities were the first to go when parents experienced role overload. They found that after a while, couples who coped well learned to "work" at leisure by deliberatly structuring in recreational activities. In fact, social network often proved to be more stressful than helpful when busy working mothers were unable to comply with social expectations of family and friends. In this sample, social support proved to be the single most important variable in predicting the working mothers' satisfaction with parenthood. While it was also an important variable in non-working mothers, its position was not quite as central.

Maternal Education and Role Conflict and Responsive Attitudes

Mothers' education exerted different influences on working and non-working mothers' experience of parenthood. Non-working mothers with greater education experienced more role conflict. Working mothers with more education experienced less role conflict. As might be predicted, mothers whose education prepared them for careers outside the home experienced the least role conflict when engaged in outside employment and the most role conflict when opportunities to utilize an education in the working world were not availiable. Moreover the positive relationship between mother's education and her responsiveness to her infant in the total sample appears to have flipped into a competing relationship when the sample is divided by work status.

Non-working mothers who held more responsive attitudes towards their infants were less conflicted about terminating employment for motherhood and hence more satisfied with parenthood. Yet non-working mothers with higher education were more conflicted about leaving employment and in turn less satisfied with parenthood.

Inversely, working mothers with higher education reported less role conflict whereas those with highly responsive attitudes towards the infant experience greater role conflict. However, in working mothers neither role conflict nor responsiveness towards infants were related to satisfaction with parenthood. The primary variable to significantly affect adjustment to parenthood in working mothers was availability of active coping resources including social support. Whereas the availability of social support and other active coping resources was only moderately related to Dissatisfaction with Parenthood in non-working mothers, it was highly related in working

mothers. For full time homemakers, responsive attitudes towards the infant and experienced role conflict were the best predictors of satisfaction with parenthood. Education worked in one of two ways. Education could increase the mother's commitment to the infant, as reflected in greater responsiveness, and enhance satisfaction. Alternatively, education could contribute to perceived role conflict and detract from satisfaction. For working mothers, neither responsiveness nor role conflict held great predictive power. It may be that for working women, gratifications at work can substitute for infant-centered rewards. For those women who are exclusively engaged in childrearing, other rewards may not be available. But there is no substitute for social support and other coping mechanisms for the women who work.

Infant Feeding

A strong correlate of responsive attitudes towards infants in the present study is method of infant feeding. Mothers who made the choice to breast-feed their infants, whether or not they continued to breast-feed at the time of the study, held more responsive attitudes towards infants. Thus it seems that the choice for breast-feeding is associated with an orientation towards the infant which recognizes the infant as a competent communicator and which recognizes the responsibility of the mother to respond contingently to infant cues. The author believes that breast-feeding is correlated to an infant-centered orientation whereas bottle feeding would not necessarily convey this orientation.

Maternal Age

It is interesting to note that when the impact of choice of feeding method, maternal work status and maternal age are examined, only one group appears to differ in degree of responsive attitudes from the rest. Among mothers who are not employed outside the home, older breast-feeding mothers expressed more responsive attitudes toward their infants than the other groups of mothers. No differences were found among working mothers. The reasons for this finding can only be speculative, but for women who have returned to work, or who know that they are planning to return to work shortly as in the case of maternity leave mothers, the choice of breast-feeding is a complicated one. Coordinating work schedules with breast-feeding requires a good deal of planning and motivation. Such a complicated procedure would probably be impelled by a strong commitment to the infant and infant-centered orientation. Therefore, differences in responsive attitudes between older and younger working mothers would be negligible. However, among non-working mothers, the choice of infant feeding, at least initially is based less on expedience than on preference. In this sample, the choice would not reflect lack of success in breast-feeding since mothers who had attempted any breast-feeding would be included in the breast-feeding group and not in the bottle-feeding group. It is among the non-working mothers that age differences in responsive attitudes emerged. Older mothers who breast-fed, held the most responsive attitudes of all the non-working mothers. They held significantly more responsive attitudes than the older and younger bottle feeding mothers.

Therefore, it can be concluded with some confidence that older non-working mothers who choose to breast-feed believe in

infant-centeredness more than bottle feeding mothers, and that they are also more infant-centered than their younger counterparts. The author believes that this attitudinal difference may reflect the greater maturity of the older non-working breast-feeders since the attitudes expressed in the responsiveness scale require the ability to subordinate the mother's needs when indicated, as when important for the optimal care of an infant.

Satisfaction with Parenthood

Satisfaction with parenthood is seen as a measure of adjustment to the role of motherhood in this study. Responses to this scale reflect enjoyment and comfort with the maternal role, positive mood and lack of irritability. It had been predicted that maternal age would impact on mother's adjustment to parenthood, but no straightforward association was found. Instead, age again interacted with work status and feeding method in discriminating between levels of the adjustment variable. Among breast-feeding mothers, there were no differences in adjustment to parenthood regardless of work status. Once again, breast-feeding is believed to reflect infant-centeredness and it appears that age does not discriminate between responsive mothers' adjustment to parenthood. Among those mothers who do not make the infant-centered choice of feeding, age does indeed correlate with adjustment. Among those mothers who chose to bottle feed the infant, older mothers were more satisfied with parenthood if they worked outside the home. Younger mothers were more satisfied if they were not employed outside the home.

On the whole, the least adjusted group of mothers was that subset of mothers who neither engaged in the outside role of worker nor

invested heavily in the maternal role by behaving in a way that maximizes concentration on the infant. These women appeared to have the least investment in either of the two roles studied. Further exploration of this relationship was undertaken. In order to ascertain that the bottle feeding choice in the non-working mothers in fact expressed less responsive attitudes towards the infant, the responsive attitudes variable was dichotomized with a median split and this artificial variable was substituted for the feeding variable in the three way interaction with work status and maternal age. Indeed, only one group of mothers was distinguishable from the rest. Older, less responsive non-working mothers were the least satisfied with parenthood of all groups of mothers. This relationship reached statistical significance with a conservative post-hoc means test.

The reason for younger mothers' greater satisfaction with parenthood when not employed was explored through the variable entitled maternal role definition. This variable conveys traditional female values emphasizing child-rearing as the fulfillment of the feminine role. Among working bottle feeding mothers, the younger women in this study endorsed this scale significantly more strongly than the older mothers. This difference did not appear in any other group of mothers. Thus it appears that of the younger, bottle feeding mothers, those who worked outside the home did not believe they were fully meeting the demands of motherhood and were therefore more unhappy in the role. The older women in this sample who chose to work but did not choose to breast feed were not traditionally oriented and were therefore satisfied with the dual primary roles of mother and worker. Their adjustment to the maternal role was not compromised. Indeed, of

the nontraditional mothers who were also not infant-centered, adjustment to parenthood may have been compromised by not working. This speculation is lent support by one additional comparison. When an interaction between role definition and work status relative to dissatisfaction with parenthood was studied, only one group was significantly more dissatisfied than the rest. Women who were not employed outside the home and who also did not hold traditional feminine values were the group least satisfied with parenthood. Interestingly, the group that was the most satisfied were those women who were both working and held strong traditional feminine identity values. The non-working, non-traditional group did not act on a strong commitment to either the work role or the maternal role. The working, traditional group acted on or expressed strong commitment to both roles and were the most satisfied women in the sample.

It would be valuable to have further information regarding the personality attributes of the subgroup of women who appear to have the least role commitment of the sample. It is unclear from the present data whether the lack of commitment reflects poor overall adjustment or whether these women have elected to remain at home because of a sense of guilt toward leaving the child. If this were the case, one might expect satisfaction with parenthood to increase if the additional stimulation of outside employment were added.

In an early study, Yarrow et al (1962) found that mothers who prefer to work but remain home out of a sense of duty to the family reported the most problems in childrearing in their sample. With older children, these mothers reported ongoing power struggles with the child. They also reported lower ratings of confidence in the maternal

role and objective observers scored their adequacy of mothering lower. The dissatisfied mothers reported a lack of emotional satisfaction in relationships. Farel (1980) found the preschool and school age children of unemployed homemakers achieved lower cognitive scores when their mothers preferred to work but remained at home than if their mothers preferred to be full time homemakers. The opposite was true for children of working mothers. The children achieved higher scores if their mothers were not conflicted about their employment status. In Yarrow et al's study, as well as in the present study, it is not possible to conclude whether the lack of participation in rewarding roles caused the differences in parenting behaviors and in satisfaction with mothering or whether some unmeasured personality correlates or poor emotional adjustment caused lack of commitment to motherhood and lack of employment. However, it does seem clear that those women who made a lesser commitment to mothering and who did not simultaneously hold another source of personal enrichment such as outside employment were the least satisfied of the mothers studied. On the other hand, those women whose sources of identity lay both in the world of gainful employment and in nurturing the young were the best adjusted group in the current sample.

An interesting parallel comes from a study of working couples by Holahan and Gilbert (1979), some of whom were parents and some of whom were childless. Among the non-parents, low career commitment and career aspiration levels was associated with high role conflict between self and career. These non-parental couples who were engaged in a career but reported working fewer hours expressed more self vs professional role conflict. The authors concluded that for nonparent

couples, high role conflict is reported by those who are engaged in a professional career but lack appropriate level of career commitment. The same relationship was not found for the parental couples. Rather, the relationship between number of hours worked and expressed role conflict was in the opposite direction with greater conflict expressed by those working a greater number of hours. Like the dissatisfied non-working mothers in the current study, a lack of high personal commitment to an exclusive task of either parenthood or employment results in lesser satisfaction with the task at hand.

Correlates of Responsive Maternal Attitudes

In addition to the maternal feeding variable, maternal education was a strong correlate of maternal responsiveness. Mothers who held postgraduate degrees had significantly more responsive attitudes than either those with college or high school educations. The latter two groups did not differ in degree of responsiveness. Shifts in availability of college education may account for the failure to discriminate between college and high school educated mothers in the present cohort.

In this sample maternal education alone had a stronger association to responsive attitudes than did socio-economic status. Sears et al (1957), found that education, independent of SES, was associated with such childrearing practices as use of reasoning as a training technique, use of less restrictive table rules and rules for orderliness and neatness, use of less sex-typed role expectations for children, and greater tolerance for children's dependency. Sociologists argue that better educated parents place higher value on their children and thus are more inclined to consider time devoted to

the raising of young children as an investment (DeTray, 1973; Leibowitz, 1974). This may account for the increased infant-centered responses of the more highly educated women in this sample.

Infant Age and Maternal Work Status

In the current sample, responsivity increased as a function of infant's age among the working mothers although it remained the same among the non-working mothers. Working mothers with infants over three months of age saw their children as more competent communicators and therefore saw the necessity of responding contingently to infant-initiated cues more often than working mothers of infants under three months of age. Since the older infants are indeed more effective communicators, the working mothers increased responsivity can be seen as reflecting real gains in infant skills. This would not explain the failure of non-working mothers to report increased responsivity scores. Perhaps the workers' attitudes reflect persistant attitudes toward increased competence in their children and are precursors of actual superior achievement in the children of working mothers. Although the data are mixed, maternal work status has been associated with several indicators of intellectual achievement in children, particularly daughters. Daughters of working women have been found to be more likely to plan for college and to have more ambitious career goals. They've also been found to have higher achievement motivation, though more reliably when their mothers are professionally employed (Hoffman, 1974).

The greater perception of communicative competence in working mothers of the older infants in the sample may reflect these mothers' focus on their children's abilities and the greater value they may

place in these attributes in their children. A longitudinal view of these mothers would be necessary to determine whether this focus translates to increased childhood cognitive abilities or achievement motivation. However, these data suggest that the mechanism may have its roots early in infancy.

Work Status and the Experience of Role Conflict

The working mothers in this study were not significantly more dissatisfied with parenthood if they experienced family concerns intruding upon work. It is interesting that despite the young ages of the infants, overall the working women in this study were more satisfied with parenthood than non-working mothers. This is contrary to what might be predicted based on the theory of role strain. In a study of college-educated mothers, Hall and Gordon (1973) found that working women experienced more role conflict than non-working women. Part time workers particularly reported carrying the greatest number of roles and experiencing the most home-related conflicts. Full time workers experienced the most time conflicts, that is of feeling time pressures. Yet despite these conflicts, Hall found the full time workers reported the greatest amount of satisfaction in his sample. The housewives in his group reported the fewest salient roles and little time or non-home pressure. These women were distinguished by the greatest amount of "self-pressure"; that is conflict related to the "self".

In the current study, non-working women who experienced conflict between mothering and former work roles reported poorer adjustment to parenthood. Although these women have the fewest sources of strain in terms of competing demands, time pressures, and availability of social

support, the absence of the work role to those who grieve the loss contributes to depreciation in their enjoyment of the predominant remaining role.

In accordance with the expansion theory of role accumulation (Sieber, 1974; Marks, 1977) increases in the number of roles assumed has been associated with decreased psychological distress and increased self-esteem whereas loss of identities has been associated with increased psychological distress (Thoits, 1983; Pietromonaco, Manis, and Frohardt-Lane, 1984). In fact, it may not be the work role which produces the most stress for working mothers. All mothers, whether employed or not employed, report high amounts of stress which are higher than childless women regardless of employment status. Barnett (1984) contends that it is the "mother" in "working mother" which accounts for the elevated stress levels and not the "working". She found that a rewarding experience at work can actually reduce the stresses experienced in the role of mother and that work may benefit mothers by setting limits around the demands imposed by children (Barnett, 1984). Work also contributes by providing the opportunity for social interaction, achievement, challenge, creativity and mental stimulation and structure which may not be available in the home (Beckman, 1978).

Sources of Dissatisfaction in Working Women

Infant Feeding

Although on the whole, the working mothers adjusted to the transition to parenthood better that their non-working peers, the effort to fulfill both major roles without compromise proved

stressful. Among non-working women, breast-feeders and bottle feeders did not differ in satisfaction with motherhood. Among working women, breast-feeders were more dissatisfied than bottle feeding mothers. Of all the mothers in this sample, the most satisfied with parenthood were the employed women who were bottle feeding their infants. A possible explanation is that these women had incorporated parenting into an existing work structure and had made compromises designed to decrease role strain. Hall (1972) describes three patterns of coping with role conflict. He calls the first of these role redefinition in which individual role activities are eliminated though the full role is maintained. This involves reducing specific activities within one or more of the prescribed roles. Mothers who recognize the difficulty of combining work outside the home with breast-feeding an infant may be adapting a strategy to maximize satisfaction within roles. Hall found that women who structurally changed role definition to accommodate multiple roles had significantly greater satisfaction than those who did not use these coping patterns. In this study, the mothers who coordinated breast-feeding and work schedules were less satisfied with parenthood than the other working mothers, though not less than the non-working mothers. These mothers seemed to engage in the coping pattern which Hall describes as reactive role behavior. These women do not attempt to diminish role responsibilities, but rather believe that they must meet all role expectations, either through better planning and organization or increased energy input. In Hall's study, women who engaged in this strategy had significantly lower satisfaction with the motherhood role than those who did not. In addition, there is some evidence in the current study that those who did not cut down on work

commitments during the labor-intensive mothering period also experienced greater role strain. Full time workers experienced greater mothering-work role conflict than part time workers.

Conclusions

It was hypothesized that maternal age would be an important predictor of maternal behavior and attitudes toward infants as well as satisfaction with parenthood. The greater maturity gained through work and self-exploration during the 20s was predicted to enhance older mothers' ability to meet the needs of a young infant while subordinating her own. It was predicted that older mothers would have developed more efficient coping mechanisms over the course of their adult years which would be brought to bear upon the strains of parenthood. In fact, the relationship between mothers' age at first birth and adaptation to motherhood was complex. While there was limited evidence that older mothers did hold more responsive attitudes towards the infant, the relationship was not strong and may have been mediated by mother's education.

Older mothers did not possess greater coping skills as measured by the Active Coping variable. This is probably due to the heavy emphasis on social support in this scale. Younger mothers have more access to support from family than older mothers (Daniels and Weingarten, 1982) and the younger mothers in this study achieved higher Active Coping scores. However, those mothers who did have greater availability of social support did cope better with the demands of parenthood.

The variable which proved pivotal in assessing the mother's adjustment to parenthood was her employment status. Employed mothers

were more satisfied than non-employed mothers, and the complex of predictors operated very differently for the two sets of mothers. For those at home, strong infant-centered attitudes, healthy and easy infants, and an unconflicted willingness to temporarily forsake employment were important in predicting the mothers' adjustment to motherhood. For the working mother, the availability of social support and the willingness to compromise in various aspects of both parenting and working predicted good adjustment. Both the compromises of choosing a more covenient method of feeding the baby and of reducing work commitments eased the burden for the working mothers.

The interaction between mothers' age, work status, and orientation towards the infants proved interesting. Among women who identified strongly with motherhood and who expressed their commitment through the demanding activity of breast-feeding, age was not a factor in successful adaptation. However, among those who may have had a more ambivalent commitment to motherhood as manifested through bottle feeding and less responsive attitudes, older mothers were most dissatisfied when they were not working. Perhaps older mothers suffered most from the loss of self-esteem, identity and gratification obtained through work. The most satisfied group in the sample were those women who were older, working and bottle feeding their infants. These women may have gained the most from the benefits of holding two satisfying roles while taking steps to reduce role overload. The least satisfied were those older mothers with incomplete commitments to both work and motherhood. For them, the experience of a work identity may have become essential to well-being.

Thus the importance of mother's age in determining adjustment to

parenthood is linked to her commitment to motherhood and to work. Those who successfully combine both roles do appear to have made personal gains during their 20s which contribute to better adaptation to motherhood. But those older mothers with incomplete commitment to both work and mothering roles appear to have more difficulty relinquishing the well established work identity for full time mothering. For mothers with strong infant-centered attitudes and behaviors, age was not a relevant factor in adjustment to the parenting role.

LIMITATIONS OF THE STUDY

A questionnaire was constructed for the purposes of this study because no valid instrument was available to measure the constructs in question. A conservative approach was taken in deriving the scales used in the analysis. Both empirical and confirmatory factor analyses were done and strict criteria for internal consistency of the resulting scales were employed. In addition, results were successfully cross-validated to within sampling error. However, the small sample size argues for caution. It is necessary to replicate the scales on a larger sample of mothers in order to establish the reliability of the new instrument. Moreover, although path analysis allows one to generate a predictive model, it is not possible to truely determine causality in a cross-sectional study. A longitudinal study of the transition to parenthood would be necessary to confirm the results of the path models.

Subjects for this study were not asked about their employment plans before joining the study. This resulted in unequal cell sizes

for the employed and nonemployed mothers. In addition, several of the working mothers were actually on brief maternity leave. It would have been preferable to have equal groups of working and nonworking women and to have been able to ensure that all employed women had completed their maternity leave before participating in the study. Unfortunately, this would have been difficult to accomplish because of the need to contact mothers as close to the time of transition as possible.

Subjects were also not asked about their choice of infant feeding method at the time of recruitment. Again, unequal cells resulted and more breast feeding mothers than bottle feeding mothers were included in the study. Moreover, because of the limits of sample size, at times the group of breast feeding mothers was combined with the group of combination breast and bottle feeding mothers. There may in fact have been group differences that were obscured by this strategy.

Working mothers were questioned about the effects of employment outside the home on satisfaction with parenthood. No questions were asked about the impact of multiple role involvement on satisfaction with work. Therefore, it was not possible to explore the hypothesis that work was a focus of dissatifaction in employed women with perceived role conlict who did not express dissatisfaction with parenthood.

A self-report measure of mother's responsive attitudes toward the infant was used. An observational measure would be optimal to verify that mothers' responsive attitudes indeed reflect responsive behaviors toward the infant. In addition, Method of Feeding the Infant

was used as a proxy variable to estimate infant-centered orientation in the mother, but a direct measure would have been more powerful. Fortunately, the strong relationship between the scale Responsive Attitude Toward the Infant and the infant feeding variable lends confidence to the choice of this proxy variable.

The Infant Illness/Irregularity variable appeared to operate as a temperament measure. A validated infant temperament questionnaire would have been preferable for studying the effect of the individual traits of the infant on the mother's adjustment.

FUTURE DIRECTIONS

The current study examined a group of mothers close to the transition to parenthood and found that coping styles impacted on perceived satisfaction with motherhood, particularly in working mothers. It would be interesting to follow a group of mothers through the first years of parenthood to determine whether coping patterns are altered to better accomodate the stresses of motherhood. The long range impacts of various coping patterns on life satisfaction and on child rearing practices would be studied.

More information is needed about the work role for multiple role enactors. Specifically, questions remain regarding the relative contributions of the mother's commitment to her job, her professional status, and her part or full time work schedule to role strain and satisfaction.

The social support variable was a central variable in the models predicting adjustment to parenthood, particularly among working mothers. It would be useful to discern the specific aspects of social

support that are most important to the two groups of mothers for the design of intervention efforts.

An interaction emerged in the current study between mother's age, work status and method of feeding the infant. Specifically, older mothers who were not employed outside the home and who bottle fed their infants were the least satisfied with parenthood. In addition, women who did not possess traditional attitudes toward women's roles and who were not employed outside the home were also dissatisfied with parenthood. From the available data, it is impossible to determine whether the inclusion of the work role would have added to the perceived satisfaction in the dissatisfied, older, nonworking women or whether some constellation of personality attributes served to depress general life satisfaction which in turn affected satisfaction with motherhood. These personality variables may also have limited involvement in rewarding roles. The inclusion of measures of personality, depression, anxiety and general life satisfaction would be necessary to discriminate emotional factors from significant role loss in the study of adjustment to motherhood.

Working mothers with infants above three months of age held more responsive attitudes than working mothers of younger infants. This relationship was not found among nonworking mothers. It was hypothesized that working mothers perceive greater communicative competence in their older infants. Further study is needed to determine if this supposition is correct, and if working mother's attitudes toward infants are early precursors of behavioral differences found in their older children.

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APPENDICES

APPENDIX A

TABLE 1

CHARACTERISTICS OF FAMILIES PARTICIPATING IN THIS STUDY

	Frequency	Mean	SD
Maternal Age		28	3.9
19-25	18		
25-29	63		
30-34	33		
35-40	11		
Paternal Age		30	4.9
Marital status			
married	121		
not married	4		
Duration of marriage		4 yrs	2.8 yrs
<1 yr-<3 yrs	49		
3 yrs-6 yrs	51		
>6 yrs-16 yrs	23		
Mother's Education			
High school	15		
Some college	30		
BA	39		
Postgraduate	41		
Father's Education			
Elementary school	1		
High School	17		
Some college	24		
BA	27		
Postgraduate	53		
Income		20,000-30,000	
<10,000	2		
10,000-16,000	7		
>16,000-20,000	12		
>20,000-30,000	33		
>30,000	69		
Race			
White	121		
Black	3		
Oriental	1		
Maternal Work Status			
Not working	74		
Brief maternity leave	11		
Working	40		
Full-time	25		
Part-time	24		
Unknown	2		

Table 1 (continued)

	Frequency	Mean	SD
Method of Feeding Infant			
Breast	67		
Bottle	32		
Combination Breast and Bottle	26		
Postponed Childbearing			
Yes	66		
No	59		
Years Postponed			
<2 yrs	30		
3-5 yrs	24		
>6 yrs	12		

TABLE 2

CHARACTERISTICS OF INFANTS

	Frequency	Mean	SD
Baby's Age in Weeks		12	8.0
<3 months	83		
>3 months	42		
Baby's Sex			
Male	63		
Female	62		
Birth Weight in Grams		3283	486
Infant Problems			
Illness	14		
Colic	22		
Rashes	24		
Feeding problems	13		
Sleeping problems	13		

TABLE 3

FACTOR INTERCORRELATIONS AND LOADING MATRIX:
COMMUNALITY IN THE DIAGONAL

Scale 1: Responsiveness to Infant	1	2	3	4	5	6	7	8
1	60	-33	10	8	-15	-4	22	-33
2	59	-22	12	0	-15	18	19	-12
3	56	-23	-1	-4	-1	0	15	-27
4	53	-14	-1	14	19	18	16	-11
5	52	-16	-7	-5	2	18	0	-1
6	50	-13	0	5	-21	9	4	-4
7	49	-10	-2	6	4	10	16	-23
8	43	-21	-14	1	21	-2	23	-25
9	38	-16	9	2	11	8	23	-16
10	37	-10	-7	3	4	23	8	-10
11	30	-31	15	5	-6	13	9	-14
12	29	-21	2	0	9	10	22	0
Scale 2: Dissatisfaction with Parenthood								
1	-30	67	-6	32	24	5	-34	43
2	-8	65	17	31	20	17	-33	66
3	-28	64	0	15	1	31	-37	40
4	-45	63	0	27	24	6	-31	54
5	-21	62	19	32	2	25	-41	41
6	-30	62	11	34	-7	14	-52	60
7	-43	61	3	13	2	15	-23	40
8	-21	59	14	16	8	27	-38	46
9	-12	59	9	42	18	13	-16	43
10	-41	58	-22	6	16	-13	-31	31
11	-30	58	4	24	2	8	-53	48
12	-24	53	1	8	14	-2	-25	25
13	-22	53	-1	34	25	5	-21	47
14	-31	50	-12	5	16	-6	-30	38
15	-13	49	4	19	14	21	-35	27
16	-17	48	-28	14	39	2	-4	27
17	-40	47	-28	-1	8	-10	-17	21
18	-34	47	-3	16	4	-5	-35	26
19	-21	45	-7	9	11	-11	-10	22
20	-9	43	28	26	-2	6	-16	44
21	1	35	-6	0	33	18	8	17
22	13	34	6	14	28	9	-6	32
23	10	31	1	18	15	32	-11	25
24	-17	31	-13	5	14	-1	-23	19

Table 3 (continued)

Scale 3: Maternal Role Definition	1	2	3	4	5	6	7	8
1	-6	2	83	4	-10	5	6	21
2	-1	1	77	7	-24	6	-4	15
3	13	-5	66	8	-31	13	-5	25
Scale 4: Dislike of Early Infancy								
1	4	26	3	75	12	1	-4	12
2	5	27	9	75	12	15	-2	17
Scale 5: Missing Work								
1	-7	23	-17	12	62	-22	-8	25
2	16	-8	-5	-8	50	0	23	18
3	-19	23	-5	4	47	-25	5	32
4	10	21	-9	11	43	-10	8	22
5	5	5	-34	21	41	-19	18	-1
Scale 6: Work Problems								
1	15	19	10	1	-21	91	-10	18
2	0	14	4	6	-20	78	-10	17
3	34	4	11	18	-29	57	-15	17
Scale 7: Active Coping								
1	5	-18	-3	4	2	-18	63	-40
2	25	-24	0	-7	4	1	56	-39
3	23	-18	0	-5	19	5	52	-15
4	-5	-27	4	-2	-10	-2	52	-29
5	10	-23	-4	-31	28	-16	52	-24
6	36	-12	-11	2	11	-15	44	-29
7	-3	-27	-2	5	5	-20	40	-34
8	20	-8	13	1	32	11	40	-14
9	5	-24	7	17	8	-7	36	-16
10	34	-50	-9	0	-9	-13	31	-53
Scale 8: Regret								
1	-10	23	18	1	25	5	-20	50
2	-15	34	36	26	22	6	-23	49
3	-29	39	9	27	32	-5	-13	49
4	1	27	-8	10	25	17	-30	47
5	-15	29	-3	6	15	15	-47	41
6	-27	37	25	-5	-10	7	-36	39
7	-17	39	18	2	2	18	-32	38
8	4	13	-3	-2	24	15	-13	30

TABLE 4

ITEM CORRELATION MATRIX COMPUTED WITH ONES ON THE DIAGONAL AND WITH CLUSTER SCORES PARTIALED OUT

Scale 1: Responsiveness to Infant

	1	2	3	4	5	6	7	8	9	10	11	12
1	100	-32	9	6	-16	-26	-10	22	-6	30	34	-2
2	-32	100	-10	29	11	-34	13	32	-1	26	-18	-7
3	9	-10	100	-28	7	29	17	8	-8	-12	-2	4
4	6	29	-28	100	7	28	-14	-17	-11	-14	21	22
5	-16	11	7	7	100	18	-14	-12	5	-4	2	8
6	-26	-34	29	28	18	100	-4	23	2	21	8	-10
7	-10	13	17	-14	-14	-4	100	2	6	9	-8	10
8	22	32	8	-17	-12	23	2	100	10	-29	-7	6
9	-6	-1	-8	-11	5	2	6	10	100	2	-10	11
10	30	26	-12	-14	-4	21	9	-29	2	100	11	-15
11	34	-18	-2	21	2	8	-8	-7	-10	11	100	-12
12	-2	-7	4	22	8	-10	10	6	11	-15	-12	100

Scale 2: Dissatisfaction with Parenthood

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	100	-5	-11	-4	5	14	-8	11	-6	15	14	-16	-13	14	8	-4	17	-10
2	-5	100	16	-18	27	-24	0	-20	15	11	27	39	7	-15	44	25	13	3
3	-11	16	100	6	9	18	3	-2	-2	7	12	-24	-4	34	0	-26	-4	-2
4	-4	-18	6	100	-19	13	11	8	4	28	1	-7	-2	-5	-15	-10	-8	5
5	5	27	9	-19	100	21	4	-1	13	-24	21	-4	-6	1	45	-17	-6	-12
6	14	-24	18	13	21	100	-24	-6	12	23	-5	23	5	-8	30	11	-4	7
7	-8	0	3	11	4	-24	100	-18	14	2	4	18	6	16	-6	8	-13	1
8	11	-20	-2	8	-1	-6	-18	100	-13	-6	-18	-21	17	-6	1	7	-9	-2
9	-6	15	-2	4	13	12	14	-13	100	-5	-3	28	10	-12	22	18	2	-9
10	15	11	7	28	-24	23	2	-6	-5	100	6	-3	-5	10	-21	-3	8	-12
11	14	27	12	1	21	-5	4	-18	-3	6	100	2	-11	-10	9	9	19	-4
12	-16	39	-24	-7	-4	23	18	-21	28	-3	2	100	20	-16	-21	4	-6	8
13	-13	7	-4	-2	-6	5	6	17	10	-5	-11	20	100	1	-2	14	2	-3
14	14	-15	34	-5	1	-8	16	-6	-12	10	-10	-16	1	100	-5	-8	10	13
15	8	44	0	-15	45	30	-6	1	22	-21	9	-21	-2	-5	100	-11	3	-19
16	-4	25	-26	-10	-17	11	8	7	18	-3	9	4	14	-8	-11	100	-4	-16
17	17	13	-4	-8	-6	-4	-13	-9	2	8	19	-6	2	10	3	-4	100	8
18	-10	3	-2	5	-12	7	1	-2	-9	-12	-4	8	-3	13	-19	-16	8	100

Table 4 (continued)

	19	20	21	22	23	24
1	-3	-3	-13	-4	-2	9
2	-12	-65	1	-38	14	-6
3	-3	14	-14	5	-2	-5
4	-5	2	11	15	1	1
5	-10	19	-17	-1	-16	-2
6	-9	-53	15	-2	-14	-7
7	7	-27	1	-5	0	11
8	-7	36	22	4	27	-4
9	8	-41	9	-20	-2	-19
10	-8	8	-5	1	-2	11
11	-13	30	-10	-5	-1	5
12	2	40	0	3	-14	-16
13	-13	14	2	-7	-1	-14
14	-7	4	-11	-7	-10	23
15	3	24	-18	1	-9	-12
16	9	13	-4	-7	33	-12
17	-14	-2	-5	18	-2	-2
18	17	29	-13	37	-6	-3
19	100	-1	16	9	22	14
20	-1	100	53	4	-3	17
21	16	53	100	-8	11	19
22	9	4	-8	100	2	12
23	22	-3	11	2	100	-10
24	14	17	19	12	-10	100

Scale 3: Dislike of Infancy

	1	2
1	100	-2
2	-2	100

Scale 4: Missing Work

	1	2	3	4
1	100	16	26	0
2	16	100	-3	16
3	26	-3	100	-9
4	0	16	-9	100

Scale 5: Work Problems

	1	2	3
1	100	-3	28
2	-3	100	15
3	28	15	100

Table 4 (continued)

Scale 6: Active Coping

	1	2	3	4	5	6	7	8	9
1	100	-35	2	4	-2	19	13	-10	14
2	-35	100	10	-2	18	3	-8	16	6
3	2	10	100	21	-19	-12	7	-3	-1
4	4	-2	21	100	-1	-9	-2	10	-2
5	-2	18	-19	-1	100	34	8	2	-11
6	19	3	-12	-9	34	100	-14	7	9
7	13	-8	7	-2	8	-14	100	10	-1
8	-10	16	-3	10	2	7	10	100	0
9	14	6	-1	-2	-11	9	-1	0	100

Scale 7: Regret

	1	2	3	4	5	6	7	8
1	100	16	23	-10	-6	-9	-1	-4
2	16	100	31	5	-10	-8	-12	-12
3	23	31	100	-4	-20	-2	10	-18
4	-10	5	-4	100	13	-8	-13	21
5	-6	-10	-20	13	100	17	6	15
6	-9	-8	-2	-8	17	100	22	10
7	-1	-12	10	-13	6	22	100	-3
8	-4	-12	-18	21	15	10	-3	100

TABLE 5

FINAL SCALES DERIVED FROM THE A PRIORI CLUSTER ANALYSIS

Scale 1: Responsiveness to Infant Alpha = .77

1. A three month old baby can't really tell you what he is thinking by a smile.
2. Parents should ignore their child's crying when it is just for attention.
3. Most of the time small babies don't even understand it when their mothers smile at them.
R4. Holding and caressing a baby when he cries is good for him.
R5. A seven month old infant should be picked up when he cries.
6. In deciding when a baby is really ready to give up the bottle, a mother's judgement should be more important than what the baby seems to want.
7. Babies need love and attention, but not nearly as much as most mothers give them.
8. Babies wish that their mothers would stop fussing over them too much.
9. Parents often overestimate the importance of encouraging children's curiosity about the world around them.
10. If a mother plays very much with her seven month old baby, he will want her to be around all the time.
R11. The six month old baby can tell you exactly what he wants if you watch and listen.
R12. A child should be fed when he is hungry.

Scale 2: Dissatisfaction with Parenthood Alpha = .90

1. Having a baby has not been as enjoyable as I expected it to be.
R2. Overall, how would you rate the degree of difficulty you've had in adjusting to this baby?
R3. I enjoy the responsibility of being a mother.
4. Taking care of a baby is much more work than pleasure.
5. Compared to most mothers I am having a much harder time.
6. I've been nervous and jumpy since having this baby.

Table 5 (continued)

Scale 2

7. Sometimes I wonder if all the bad times are worth it.
8. I find it hard to be patient with my child.
9. **Being a mother is much harder than I expected.**
R10. Being a mother is much more rewarding than I expected.
R11. On the whole, I'm satisfied with myself.
12. Sometimes I feel like I'm home alone too often.
13. Taking care of the baby leaves me on edge and tense.
14. If I had known what it was like, I doubt I would have had this baby.
R15. Compared to most mothers, I am having a much easier time of it.
16. Cleaning, diapering and caring for a baby can get a woman down.
R17. The experience of having a baby has made me a happier person.
R18. People say I have a good attitude.
19. The pain of childbirth is so great that a woman sometimes wonders if it's worthwhile.
20. People don't respect me enough for being a mother.
21. A baby's crying gets on your nerves after a while.
22. Most men have more interesting work to do than their wives have.
23. Sometimes it's hard to put the baby's need first.
R24. Being able to watch while she gives birth is one of the most thrilling experiences of a mother's life.

Scale 3: Maternal Role Definition Alpha = .79

1. **A woman's life is really not complete unless she has a child.**
2. **A woman does not find her true self until she is a mother.**
3. **A mother has more pride in herself than a childless woman.**

Table 5 (continued)

Scale 4: Dislike of Early Infancy — Alpha = .71

1. Taking care of babies is hard but I know it will get easier when the baby gets older.
2. Babies are more difficult to take care of when they are very young than when they are older.

Scale 5: Missing Work — Alpha = .61

1. I sometimes miss the stimulation and challenge of work while I am at home with the baby.
2. People who don't have time to experience work before starting a family miss out.
3. A woman's personality suffers when she is only involved in keeping house and raising children.
4. I sometimes miss contacts with people at work while I am at home with the baby.
5. Raising children and keeping house are more interesting than the kind of work most men do for a living.

Scale 6: Work Problems — Alpha = .79

1. I sometimes worry that my child will not be adequately cared for while I am at work.
2. I sometimes worry that the child may be sick or hurt while I am at work.
3. I sometimes think that I may be missing out on maternal pleasures by working.

Scale 7: Active Coping — Alpha = .74

1. Even though time is short, I still make time for some physical exercise.
2. When I have questions about taking care of my baby, I can talk to other mothers about it.
3. When things get rough, I try and talk about them with my husband.
4. I get all the emotional support I need from my family.
5. I see friends at least once a week.
6. I still am involved in at least one activity outside the house.

Table 5 (continued)

Scale 7

7. Even though I have little time to myself these days, I know how to take care of my needs.

8. When I feel myself getting down, I try to get out of the house.

9. When I'm not sure about something, I can always call my pediatrician.

R10. When things get this bad, nothing you can do will help.

Scale 8: Regret Alpha = .64

1. If a woman waits too long, she won't have enough energy to have a baby.

2. I'm glad I didn't wait any longer to have this baby or I'd be too set in my ways.

3. A woman has a hard time adjusting to motherhood when she's been free for too long.

4. If I'd have waited any longer to have this child, I'd have been too old.

5. I feel too old to be the mother of an infant.

6. If only I had waited longer to have this baby, my husband and I might agree more on things.

7. I wish I had done more things before becoming a parent.

8. Most mothers are not mature enough when their first child is born.

Note: These scales were used in the causal analyses and in all parametric tests. An exception was made in the computation of the "Active Coping" Scale in the path analysis of the working mother subsample in which items 3 and 5 were omitted due to lack of parallelism.

R represents reflected items.

TABLE 6

TOTAL SAMPLE
STANDARD SCORE COEFFICIENT ALPHAS

Scale	Alpha
Responsiveness to Infant	.77
Dissatisfaction with Parenthood	.90
Maternal Role Definition	.79
Dislike of Early Infancy	.71
Missing Work	.61
Work Problems	.79
Active Coping	.74
Regret	.64

TABLE 6A

TOTAL SAMPLE
CORRECTED INTERSCALE CORRELATIONS

	1	2	3	4	5	6	7	8
1	100	-41	3	6	2	22	32	-32
2	-41	100	-1	35	26	16	-49	71
3	3	-1	100	9	-29	11	-1	27
4	6	35	9	100	16	11	-4	19
5	2	26	-29	16	100	-31	19	39
6	22	16	11	11	-31	100	-16	23
7	32	-49	-1	-4	19	-16	100	-63
8	-32	71	27	19	39	23	-63	100

TABLE 7

PATH ANALYSIS: FULL SAMPLE
ORDINARY LEAST SQUARES SOLUTION

PATH COEFFICIENTS

	Infant Illness	Maternal Education	Dislike of Infancy	Maternal Age	Respon-siveness	Active coping	Dissatis-faction	Regret
Infant illness	0	0	0	0	0	0	0	0
Maternal education	0	0	0	0	0	0	0	0
Dislike of infancy	44	0	0	0	0	0	0	0
Maternal age	0	50	0	0	0	0	0	0
Responsiveness	0	-29	0	0	0	0	0	0
Active coping	0	0	0	0	27	0	0	0
Dissatisfaction	0	0	36	0	-35	-31	0	0
Regret	0	0	0	0	0	-31	58	0

REPRODUCED CORRELATIONS

Infant illness	100	11	44	5	-3	-1	17	10
Maternal education	11	100	5	50	-29	-8	14	11
Dislike of infancy	44	5	100	2	-1	0	36	21
Maternal age	5	50	2	100	-14	-4	7	5
Responsiveness	-3	-29	-1	-14	100	27	-44	-34
Active coping	-1	-8	0	-4	27	100	-41	-54
Dissatisfaction	17	14	36	7	-44	-41	100	71
Regret	10	11	21	5	-34	-54	71	100

OBSERVED MINUS PREDICTED CORRELATIONS

Infant illness	0	0	0	-3	1	-6	3	-8
Maternal education	0	0	14	0	0	-3	-11	-5
Dislike of infancy	0	14	0	3	8	-3	-2	-4
Maternal age	-3	0	3	0	-3	14	-7	-14
Responsiveness	1	0	8	-3	0	0	3	2
Active coping	-6	-3	-3	14	0	0	-1	-1
Dissatisfaction	3	-11	-2	-7	3	-1	0	0
Regret	-8	5	-4	-14	2	-1	0	0

SUM OF SQUARED DEVIATIONS = .11 Chi square = 5.278 ns

TABLE 10

STANDARD SCORE COEFFICIENT ALPHAS, NON-WORKING SUBSAMPLE

1.	**Responsiveness to infant**	**.78**
2.	**Dissatisfaction with parenthood**	**.92**
3.	Dislike of infancy	.76
4.	**Missing work**	**.56**
5.	**Active coping**	**.71**
6.	Regret	.66

TABLE 10A

CORRECTED INTERSCALE CORRELATIONS, NON-WORKING SUBSAMPLE

	1	2	3	4	5	6
1	100	-49	8	-24	35	-26
2	-49	100	36	61	-35	79
3	8	36	100	47	-1	18
4	-24	61	47	100	2	66
5	35	-35	-1	2	100	-28
6	-26	79	18	66	-28	100

TABLE 9

PATH ANALYSIS, ORDINARY LEAST SQUARES SOLUTION
WORKING SUBSAMPLE

PATH COEFFICIENTS

	Infant Illness	Maternal Education	Infant Feeding	Respon-siveness	Work Problems	Active Coping	Dissatis-faction	Dislike Infancy	Regret
Infant illness	0	0	0	0	0	0	0	0	0
Maternal education	0	0	0	0	0	0	0	0	0
Infant feeding	0	0	0	0	0	0	0	0	0
Responsiveness	0	0	0	0	0	0	0	0	0
Work problems	0	25	0	40	0	0	0	0	0
Active coping	0	0	0	39	-44	0	0	0	0
Dissatisfaction	-1	0	28	2	-9	-72	0	0	0
Dislike infancy	46	40	43	29	0	0	0	0	0
Regret	0	0	-29	-12	0	-72	9	0	0

REPRODUCED CORRELATIONS

Infant illness	100	-7	8	2	-1	1	2	47	-3
Maternal education	-7	100	21	-69	-3	-26	24	26	23
Infant feeding	8	21	100	12	10	0	27	58	-29
Responsiveness	2	-69	12	100	23	29	-18	7	-38
Work problems	-1	-3	10	23	100	-35	19	9	21
Active coping	1	-26	0	29	-35	100	-69	-1	-82
Dissatisfaction	2	24	27	-18	19	-69	100	17	53
Dislike infancy	47	26	58	7	9	-1	17	100	-15
Regret	-3	23	-29	-38	21	-82	53	-15	100

OBSERVED MINUS PREDICTED CORRELATIONS

Infant illness	0	0	0	0	25	-14	7	0	9
Maternal education	0	0	0	0	0	-9	-7	0	-3
Infant feeding	0	0	0	0	2	-8	6	0	7
Responsiveness	0	0	0	0	0	0	0	0	0
Work problems	25	0	2	0	0	0	1	9	3
Active coping	-14	-9	-8	0	0	0	-2	-10	2
Dissatisfaction	7	-7	6	0	1	-2	0	14	0
Dislike infancy	0	0	0	0	9	-10	14	0	29
Regret	9	-3	7	0	3	2	0	29	0

SUM OF SQUARED DEVIATIONS = .25 Chi square = 4.712 ns

TABLE 12

PATH COEFFICIENTS, ORDINARY LEAST SQUARES SOLUTION
NON-WORKING SUBSAMPLE

PATH COEFFICIENTS

	Infant Illness	Missing Work	Dislike Infancy	Dissatisfaction	Infant Feeding
Infant illness	0	0	0	0	0
Missing work	0	0	0	0	0
Dislike infancy	46	52	0	0	0
Dissatisfaction	37	65	0	0	0
Infant feeding	0	0	0	-28	0

REPRODUCED CORRELATIONS

Infant illness	100	-11	40	30	-8
Missing work	-11	100	47	61	-17
Dislike infancy	40	47	100	45	-13
Dissatisfaction	30	61	45	100	-28
Infant feeding	-8	-17	-13	-28	100

OBSERVED MINUS PREDICTED CORRELATIONS

Infant illness	0	0	0	0	-1
Missing work	0	0	0	0	13
Dislike infancy	0	0	0	-9	9
Dissatisfaction	0	0	-9	0	0
Infant feeding	-1	13	9	0	0

SUM OF SQUARED DEVIATIONS = .03 Chi square = .882 ns

TABLE 13

PATH ANALYSIS, ORDINARY LEAST SQUARES SOLUTION
WORKING SUBSAMPLE

PATH COEFFICIENTS

	Work Problems	Infant Illness	Infant Feeding	Dissatisfaction	Dislike Infancy
Work problems	0	0	0	0	0
Infant illness	0	0	0	0	0
Infant feeding	0	0	0	0	0
Dissatisfaction	16	0	31	0	0
Dislike infancy	0	43	55	0	0

REPRODUCED CORRELATIONS

Work problems	100	24	12	20	17
Infant illness	24	100	8	6	47
Infant feeding	12	8	100	33	58
Dissatisfaction	20	6	33	100	21
Dislike infancy	17	47	58	21	100

OBSERVED MINUS PREDICTED CORRELATIONS

Work problems	0	0	0	0	1
Infant illness	0	0	0	3	0
Infant feeding	0	0	0	0	0
Dissatisfaction	0	3	0	0	10
Dislike infancy	1	0	0	10	0

SUM OF SQUARED DEVIATIONS = .01 Chi square = .046 ns

Table 14

Mean Responsiveness to Infant for 3 Levels of Maternal Age

Maternal Age			Source	(SS)	(MS)	F(2,122)	P
19-27	28-32	33-40	Between	.9811	.4906	2.553	.08
2.1321	2.1598	1.8838	Within	23.4380	.1921		
			Total	24.4191			

Table 15

Mean Active Coping and Maternal Age

Mean	Mean	Source	(SS)	(MS)	F(1,119)	P
Age 19-29	Age 30-40	Between	1.9495	1.9495	9.68	.002
1.922	2.083	Within	23.9682	.2014		
		Total	25.9177			

Table 16

Available Coping Facilities and Mean Dissatisfaction with Parenthood

Mean	Mean	Source	(SS)	(MS)	F(1,123)	P
Greater Available Coping	Lesser Available Coping	Between	3.2186	3.2186	14.384	.0002
3.9263	3.5976	Within	27.5219	.2238		
		Total	30.7405			

Note: The Available Coping variable was derived by performing a median split on the Active Coping Scale. Greater Available Coping was defined as scores above the median value.

Table 17

Work Status, Role Conflict and Dissatisfaction With Maternal Role

	Mean High Role Conflict	Mean Low Role Conflict	Source	(SS)	(MS)	F		P
Non-Workers Dissatisfaction	3.4381	3.8616	Between	3.3184	3.3184	(1,72)	13.577	.004
			Within	17.5978	.2444			
			Total	20.9162				
Non-Workers Dislike Infancy	2.7568	3.2297	Between	4.1385	4.1385	(1,72)	5.084	.02
			Within	58.6081	.8140			
			Total	62.7466				
Workers Dissatisfaction	3.8431	3.9021	Between	.0433	.0433	(1,48)	.255	N.S.
			Within	8.1444	.1697			
			Total	8.1877				
Workers Dislike Infancy	2.8889	3.2174	Between	1.3403	1.3403	(1,48)	1.712	N.S.
			Within	37.5797	.7829			
			Total	38.9200				

Note: Worker role conflict was derived by performing a median split on the "Work Problems" scale. High role conflict was defined as a score above the median. Nonworker role conflict was derived from a median split of the "Miss Work" scale. High role conflict was defined as a score above the median.

Table 17A

Mean Age and Mean Role Conflict Scores

	Age 19-29	Age 30-40	Source	(SS)	(MS)	F		F
Miss Work	1.4902	1.5217	Between	.0158	.0158	(1,72)	.061	N.S.
			Within	18.4842	.2567			
			Total	18.5000				
Work Problems						(3,36)	.43	N.S.

Table 18

Mean Scale Scores for Infant Sex

	Female	Male	Source	(SS)	(MS)	F(1,123)	P
Responsiveness	2.05	2.17	Between	.4802	.48020	2.47	N.S.
			Within	23.9470	.1947		
			Total	24.4272			
Dissatisfaction	3.73	3.75	Between	.9805	.9805	.04	N.S.
			Within	30.7070	.2496		
			Total	31.6875			
Dislike Infancy	3.02	3.01	Between	.2097	.2097	.00	N.S.
			Within	101.7299	.8271		
			Total	101.9396			
Active Coping	1.94	2.02	Between	.2001	.2001	.90	N.S.
			Within	27.3518	.2224		
			Total	27.5519			
Regret	3.71	3.67	Between	.3842	.3842	.15	N.S.
			Within	31.5212	.2563		
			Total	31.9054			

Table 18A

Mean Scale Scores for Infant Illness/Irregularity

	Present	Absent	Source	(SS)	(MS)	F(1,121)	P
Responsiveness	2.085	2.003	Between	.3813	.3813	.11	N.S.
			Within	23.4116	.1935		
			Total	23.7929			
Dissatisfaction	3.865	3.892	Between	.2721	.2721	.78	N.S.
			Within	28.8776	.2387		
			Total	29.1497			
Dislike Infancy	2.929	3.174	Between	1.1321	1.1321	2.91	.09
			Within	98.4894	.8140		
			Total	99.6215			
Active Coping	2.017	2.022	Between	.7228	.7228	.35	N.S.
			Within	26.6861	.2205		
			Total	27.4089			
Regret	3.792	3.710	Between	.1393	.1393	.02	N.S.
			Within	30.7074	.2538		
			Total	30.8467			

Note: Illness/Irregularity is defined as the presence of one or more of the following conditions: minor illness, rashes, colic or irregularities of sleep or feeding. This is contrasted to the absence of any illness or irregularity.

Table 19

Mean Scale Scores for Planned vs. Unplanned Pregnancies

	Planned	Unplanned	Source	(SS)	(MS)	F(1,123)	P
Responsiveness	2.13	2.04	Between	.1148	.1148	.58	N.S.
			Within	24.3124	.1977		
			Total	24.4272			
Dissatisfaction	3.73	3.82	Between	.1241	.1241	.50	N.S.
			Within	30.5928	.2487		
			Total	30.7169			
Dislike Infancy	3.04	2.87	Between	.4619	.4619	.56	N.S.
			Within	101.2701	.8233		
			Total	101.7320			
Active Coping	1.99	1.92	Between	.9113	.9113	.41	N.S.
			Within	27.4608	.2233		
			Total	28.3721			
Regret	3.68	3.77	Between	.1201	.1201	.47	N.S.
			Within	31.4395	.2556		
			Total	31.5596			

Table 19A

Mean Scale Scores for Duration of Marriage

	<1 Yr.	1-3 Yrs.	>3-6 Yrs.	>6	Source	(SS)	(MS)	F(3,113)	P
Responsiveness	2.22	2.06	2.33	1.91	Between	.3425	.1142	.61	N.S.
					Within	21.2956	.1885		
					Total	21.6380			
Dissatisfaction	3.80	3.75	3.54	3.73	Between	.5447	.1816	.70	N.S.
					Within	29.1523	.2580		
					Total	29.6970			
Dislike Infancy	2.97	3.18	2.73	2.94	Between	2.1216	.7072	.82	N.S.
					Within	96.9903	.8583		
					Total	99.1119			
Active Coping	1.92	1.95	2.09	2.29	Between	.7068	.2356	1.05	N.S.
					Within	25.3136	.2240		
					Total	26.0205			
Regret	3.75	3.68	3.55	3.71	Between	.3189	.1063	.40	N.S.
					Within	30.3160	.2683		
					Total	30.6349			

Table 20

Mean Responsiveness to Infant for Infant Age and Maternal Work Status

	Infant Age < 3 Months	Infant Age > 3 Months	Source	(SS)	(MS)	F	P
Workers	2.2053	1.8557	Between	1.5432	1.5432	(1,49) 10.727	.001*
			Within	7.0492	.1439		
			Total	8.5924			
Non-Workers	2.1530	2.1694	Between	.0038	.0038	(1,72) .018	N.S.
			Within	15.4606	.2147		
			Total	15.4643			

*Student Newman-Keuls significant .05 level

Table 21

Mean Responsiveness to Infant for Maternal Work Status

Workers	Non-Workers	Source	(SS)	(MS)	F(1,123)	P
3.6449	3.8762	Between	1.5462	1.5462	6.514	.01*
		Within	29.1943	.2374		
		Total	30.7405			

*Student Newman-Keuls significant at .05 level

Table 22

Mean Scale Scores for Method of Feeding Infant

	Breast Feeders	Bottle Feeders	Source	(SS)	(MS)	F(1,123)	P
Responsiveness	2.0368	2.3327	**Between**	2.0853	2.0853	11.484	.009*
			Within	22.3339	.1816		
			Total	24.4191			
Dislike Infancy	2.9086	3.3125	Between	3.8839	3.8839	4.882	.02*
			Within	97.8481	.7955		
			Total	101.7320			

*Student Newman-Keuls significant at .05 level

Table 23

Mean Scale Scores for Maternal Work Status and Method of Feeding Infant

	Breast Feeders	Bottle Feeders	Source	(SS)	(MS)	F	P
Workers Dissatisfaction	3.8005	4.0974	Between	.8540	.8540	(1,49) 5.637	.02*
			Within	7.4241	.1515		
			Total	8.2781			
Non-Workers Dissatisfaction	3.7199	3.4472	Between	1.0502	1.0502	(1,72) 3.806	.05
			Within	19.8660	.2759		
			Total	20.9162			
Workers Dislike Infancy	2.8158	3.6923	Between	7.4418	7.4418	(1,49)11.584	.001*
			Within	31.4798	.6424		
			Total	38.9216			
Non-Workers Dislike Infancy	2.9727	3.0526	Between	.0902	.0902	(1,72) .104	N.S.
			Within	62.6565	.8702		
			Total	62.7466			

*Student Newman-Keuls significant at the .05 level

Table 24

Mean Responsiveness to Infant for Maternal Work Status, Method of Feeding Infant and Maternal Age

	Maternal Age 19-29	Maternal Age 30-40	Source	(SS)	(MS)	F	P
Workers:							
breast	2.0808	1.9010	Between	.2992	.2992	(1,36) 2.040	N.S.
			Within	5.2794	.1466		
			Total	5.5785			
bottle	2.1424	2.2197	Between	.0184	.0184	(1,11) .074	N.S.
			Within	2.7253	.2478		
			Total	2.7437			
Non-Workers:							
breast	2.1651	1.8399	Between	1.2806	1.2806	(1,53) 7.268	.009*
			Within	9.3392	.1762		
			Total	10.6199			
bottle	2.3864	2.6000	Between	.1681	.1681	(1,17) 1.102	N.S.
			Within	2.5945	.1526		
			Total	2.7627			

*Student Newman-Keuls significant at the .05 level

Table 25

Mean Dissatisfaction with Parenthood for Two Levels of Maternal Age at Two Levels of Work Status for Breast and Bottle Feeding Mothers

	Maternal Age 19-29	Maternal Age 30-40	Source	(SS)	(MS)	F		P
Workers:								
breast	3.8523	3.7293	Between	.1401	.1401	(1,36)	.936	N.S.
			Within	5.3865	.1496			
			Total	5.5265				
bottle	3.9282	4.3681	Between	.5954	.5954	(1,11)	5.030	.04*
			Within	1.3021	.1184			
			Total	1.8976				
Non-Workers:								
breast	3.6833	3.7951	Between	.1512	.1512	(1,53)	.601	N.S.
			Within	13.3295	.2515			
			Total	13.4807				
bottle	3.6724	2.8167	Between	2.6976	2.6976	(1,17)	12.436	.002*
			Within	3.6877	.2169			
			Total	6.3853				

*Student Newman-Keuls significant at the .05 level

Table 26

Mean Responsiveness to Infant for Maternal Education

<College Graduate	College Graduate	Postgraduate	Source	(SS)	(MS)	F(2,222)	F
2.2157	2.2105	1.9060	**Between**	**2.6016**	**1.3008**	7.274	.001*
			Within	**21.8175**	**.1788**		
			Total	24.4191			

*Student Newman-Keuls significant at the .05 level

Table 27

Mean Scale Scores for Postponement of Childbearing

	Years Postponed								
	0	<2 Yrs	3-5 Yrs	>6 Yrs	Source	(SS)	(MS)	F(3,47)	P
Dissatisfaction	3.8473	3.6780	4.1851*	3.6964	Between	1.9151	.6384	4.715	.005*
					Within	6.3630	.1354		
					Total	8.2781			
Active Coping	2.0083	2.0707	1.7842**	2.4048	Between	1.7901	.5967	2.335	.08**
					Within	12.0135	.2556		
					Total	13.8036			

*Student Newman-Keuls significant at .05 level
**Least Significant Differences test significant at .05 level

Table 28

Mean Scale Scores for Percentage of Time Worked

	Full Time	Part Time	Source	(SS)	(MS)	F	P
Work Problems	2.1667	2.8841	Between	6.1651	6.1651	(1,46) 6.017	.01*
			Within	47.1353	1.0247		
			Total	53.3003			
Active Coping	2.1822	1.8426	Between	1.4124	1.4124	(1,47) 5.469	.02*
			Within	12.1373	.2582		
			Total	13.5498			

*Student Newman-Keuls significant at the .05 level

Table 29

Means and Standards Deviations for Background Variables and Maternal Age

	Maternal Age 19-29	SD	30-40	SD	Source	(SS)	(MS)	F(1,122)	P
Duration of Marriage	1.519	.69	2.186	1.08	Between	12.5161	12.5161	17.61	.0001
					Within	86.7339	.7109		
					Total	99.2500			
Education	1.753	.80	2.349	.75	Between	9.9692	9.9692	16.25	.01
					Within	74.8292	.6134		
					Total	84.8261			
SES	1.901	.82	2.302	.74	Between	4.5187	4.5187	7.23	.008
					Within	76.2796	.6252		
					Total	80.7983			
Yrs. Childbearing Postponed	1.543	.58	2.512	1.03	Between	26.3425	26.3425	35.38	.00001
					Within	90.8429	.7446		
					Total	117.1854			
Planned Pregnancy	1.210	.17	1.047	.21	Between	.7496	.7496	5.96	.01
					Within	15.3391	.1257		
					Total	16.0887			
Infant Age	1.247	.43	1.512	.51	Between	1.9683	1.9683	9.31	.002
					Within	25.8059	.2115		
					Total	27.7742			
Infant Feeding	1.272	.45	1.233	.43	Between	.4283	.4283	.22	N.S.
					Within	23.6991	.1943		
					Total	24.1274			
Infant Illness/ Irregularity	1.506	.50	1.558	.50	Between	.7585	.7585	.30	N.S.
					Within	30.8516	.2529		
					Total	31.6101			
Work Status	1.630	.49	1.512	.51	Between	.3911	.3911	1.61	N.S.
					Within	.2429	.0020		
					Total	.6341			

Note: Duration of Marriage: 1=≤2 years 2=3-4 years 3=5-6 years 4=>6 years
Education: 1=some college 2=college graduate 3=postgraduate
SES: 1=low 2=medium 3=high Based on current sample means
Years Postponed Childbearing: 1=≤ year 2=2-3 years 3=4-6 years 4=>6 years
Planned Pregnancy: 1=yes 2=no
Infant Age: 1=≤3 months 2=>3 months
Infant Feeding: 1=breast 2=bottle
Infant Illness/Irregularity: 1=yes 2=no
Work Status: 1=working 2=not working

Table 30

Mean Traditional Feminine Role Identification Scores for Different Levels of Maternal Age in Bottle Feeding Mothers

	Maternal Age 19-29	Maternal Age 30-40	Source	(SS)	(MS)	F	P
Workers	3.1667	4.1333	Between	2.8752	2.8752	(1,11) 5.559	.03
			Within	5.6889	.5172		
			Total	8.5641			
Non-Workers	3.1905	3.4000	Between	.1617	.1617	(1,17) .140	N.S.
			Within	19.5810	1.1518		
			Total	19.7427			

	Maternal Age <33	Maternal Age >33	Source	(SS)	(MS)	F(1,30)	P
	3.2	4.0	Between	1.3366	1.3366	1.451	N.S.
			Within	27.6322	.9211		
			Total	28.9687			

	Maternal Age <28	Maternal Age >28	Source	(SS)	(MS)	F(1,30)	P
	2.9167	3.6333	Between	3.8521	3.8521	4.601	.04*
			Within	25.1167	.8372		
			Total	28.9687			

*Student Newman-Keuls significant at the .05 level

Table 31

Mean Dissatisfaction with Parenthood for Two Levels of Maternal Age at Two Levels of Work Status and Two Levels of Responsiveness to Infant

		Maternal Age		Source	(SS)	(MS)	F(7,117)	P
		19-29	30-40					
Workers:								
	Greater Responsiveness	3.9059	3.9055	**Between**	4.4854	.6408	2.855	.008*
				Within	26.2551	.2244		
				Total	30.7405			
	Lesser Responsiveness	3.8225	3.8492					
Non-Workers:								
	Greater Responsiveness	3.8755	3.8322					
	Lesser Responsiveness	3.5644	3.3098*					

*Student Newman-Keuls significant at .05 level

Note: The "Responsiveness Towards Infant" variable was derived by performing a median split on the Responsiveness scale.
A score of 1 denotes a value above the median, 2 denotes a value below the median.

Table 32

Mean Dissatisfaction with Parenthood for Two Levels of Maternal Work Status and Two Levels of Traditional Role Identification

	Maternal Work Status						
	Workers	Non-Workers	Source	(SS)	(MS)	F(3,121)	P
Greater Traditional Role Identification	3.9645*	3.7135	Between	2.3454	.7818	3.332	.02*
			Within	28.3951	.2347		
			Total	30.7405			
Lesser Traditional Role Identification	3.8144	3.5392*					

*Student Newman-Keuls significant at .05 level

Note: "Traditional Role Identification" was derived by performing a median split on the "Maternal Role Definition" Scale.
A lower score denotes stronger identification with traditional feminine values.

APPENDIX B

QUESTIONNAIRE

1

1) Holding and caressing a baby when he cries is good for him.

(strongly agree undecided disagree strongly)
agree disagree

2) A woman's personality suffers when she is only involved in keeping house and raising children.

(strongly agree undecided disagree strongly)
agree disagree

3) Sometimes I feel like I'm home alone too often.

(strongly agree undecided disagree strongly)
agree disagree

4) If I had had this baby earlier, I might not have appreciated him as much as I do now.

(strongly agree undecided disagree strongly)
agree disagree

5) When I'm unsure about what to do, I try to find the answers in childcare books.

(strongly agree undecided disagree strongly)
agree disagree

6) Being a mother is much harder than I expected.

(strongly agree undecided disagree strongly)
agree disagree

7) A newborn baby doesn't cry unless something is wrong.

(strongly agree undecided disagree strongly)
agree disagree

8) A woman does not find her true self until she is a mother.

(strongly agree undecided disagree strongly)
agree disagree

9) Sometimes I wonder if all the bad times are worth it.

(strongly agree undecided disagree strongly)
agree disagree

10) If only I had waited longer to have this baby my husband and I might agree more on things.

(strongly agree undecided disagree strongly)
agree disagree

11) Taking care of babies is hard but I know it will get easier when the baby gets older.

(strongly agree undecided disagree strongly)
agree disagree

12) Being a mother is much more rewarding than I expected.

(strongly agree undecided disagree strongly)
agree disagree

13) Babies wish that their mothers would stop fussing over them too much.

(strongly agree undecided disagree strongly)
agree disagree

14) Raising children and keeping house is more interesting than the kind of work most men do for a living.

(strongly agree undecided disagree strongly)
agree disagree

15) Having a baby has not been as enjoyable as I expected it to be.

(strongly agree undecided disagree strongly)
agree disagree

16) I am the only one of my friends with a child in diapers.

(strongly agree undecided disagree strongly)
agree disagree

17) Since I've had this baby I eat more than I should.

(strongly agree undecided disagree strongly)
agree disagree

18) Cleaning, diapering and caring for a baby can get a woman down.

(strongly agree undecided disagree strongly)
agree disagree

19) Parents often over-estimate the importance of encouraging children's curiosity about the world around them.

(strongly agree undecided disagree strongly)
agree disagree

20) I sometimes miss the stimulation and challenge of work while I am at home with the baby.

(strongly agree undecided disagree strongly)
agree disagree

21) On the whole, I'm satisfied with myself.

(strongly agree undecided disagree strongly)
agree disagree

22) When a couple waits too long to have a baby, they may resent the baby for coming between them.

(strongly agree undecided disagree strongly)
agree disagree

23) Sometimes it feels like the only person who is not taken care of in this family is me.

(strongly agree undecided disagree strongly)
agree disagree

24) Compared to most mothers I am having a much easier time of it.

(strongly agree undecided disagree strongly)
agree disagree

25) A three month old baby can't really tell you what he is thinking by a smile.

(strongly agree undecided disagree strongly)
agree disagree

26) I sometimes think that I may be missing out on maternal pleasures by working.

(strongly agree undecided disagree strongly)
agree disagree

27) The experience of having a baby has made me a happier person.

(strongly agree undecided disagree strongly)
agree disagree

28) People who don't have time to experience work before starting a family miss out.

(strongly agree undecided disagree strongly)
agree disagree

29) When things get rough, I try and put my trust in the Lord.

(strongly agree undecided disagree strongly)
agree disagree

30) Taking care of the baby leaves me on edge and tense.

(strongly agree undecided disagree strongly)
agree disagree

31) In deciding when a baby is really ready to give up the bottle, a mother's judgement should be more important than what the baby seems to want.

(strongly agree undecided disagree strongly)
agree disagree

32) I sometimes worry that the child may be sick or hurt while I am at work.

(strongly agree undecided disagree strongly)
agree disagree

33) All parents have moments when they wish they didn't have children.

(strongly agree undecided disagree strongly)
agree disagree

34) Most mothers are not mature enough when their first child is born.

(strongly agree undecided disagree strongly)
agree disagree

35) When I feel myself getting down, I try to get out of the house.

(strongly agree undecided disagree strongly)
agree disagree

36) Compared to most mothers I am having a much harder time.

(strongly agree undecided disagree strongly)
agree disagree

37) Newborn babies are much more like each other than they are different from each other.

(strongly agree undecided disagree strongly)
agree disagree

38) Most men have more interesting work to do then their wives have.

(strongly agree undecided disagree strongly)
agree disagree

39) Taking care of a baby is much more work than pleasure.

(strongly agree undecided disagree strongly)
agree disagree

40) Since I've had this baby I have begun smoking cigarettes more often.

(strongly agree undecided disagree strongly)
agree disagree

41) People don't respect me enough for being a mother.

(strongly agree undecided disagree strongly)
agree disagree

42) If I had known what it was like, I doubt I would have had this baby.

(strongly agree undecided disagree strongly)
agree disagree

43) Most of the time small babies don't even understand it when their mothers smile at them.

(strongly agree undecided disagree strongly)
agree disagree

44) I sometimes worry that my child will not be adequately cared for while I am at work.

(strongly agree undecided disagree strongly)
agree disagree

45) Babies are more difficult to take care of when they are very young than when they are older.

(strongly agree undecided disagree strongly)
agree disagree

46) If a woman waits too long she won't have enough energy to have a baby.

(strongly agree undecided disagree strongly)
agree disagree

47) Running a household and raising a child are not that difficult if you are organized.

(strongly agree undecided disagree strongly)
agree disagree

48) I've been nervous and jumpy since having this baby.

(strongly agree undecided disagree strongly)
agree disagree

49) The six-month-old baby can tell you exactly what he wants if you watch and listen.

(strongly agree undecided disagree strongly)
agree disagree

50) I sometimes miss contacts with people at work while I am at home with the baby.

(strongly agree undecided disagree strongly)
agree disagree

51) One big trouble about having babies is that you can't do the things you liked before the baby was born.

(strongly agree undecided disagree strongly)
agree disagree

52) I wish I had done more things before becoming a parent.

(strongly agree undecided disagree strongly)
agree disagree

53) Even though I have little time to myself these days, I know how to take care of my needs.

(strongly agree undecided disagree strongly)
agree disagree

54) Now that I am a mother, I will never reach my career dream.

(strongly agree undecided disagree strongly)
agree disagree

55) A baby's crying gets on your nerves after a while.

(strongly agree undecided disagree strongly)
agree disagree

56) A seven-month-old infant should be picked up when he cries.

(strongly agree undecided disagree strongly)
agree disagree

57) Even the best mother feels some disgust when cleaning up the mess in her infant's diaper.

(strongly agree undecided disagree strongly)
agree disagree

58) If I'd have waited longer to have this baby I'd probably have more patience.

(strongly agree undecided disagree strongly)
agree disagree

59) I still am involved in at least one activity outside the house.

(strongly agree undecided disagree strongly)
agree disagree

60) I lost a lot of respect from people when I quit work to become a mother.

(strongly agree undecided disagree strongly)
agree disagree

61) My mother was more mature than I am now when she had her first child.

(strongly agree undecided disagree strongly)
agree disagree

62) If a mother plays very much with her seven-month-old baby he will want her to be around all the time.

(strongly agree undecided disagree strongly)
agree disagree

63) A woman's life is really not complete unless she has a child.

(strongly agree undecided disagree strongly)
agree disagree

64) I'm glad I didn't wait any longer to have this baby or I'd be too set in my ways.

(strongly agree undecided disagree strongly)
agree disagree

65) Sometimes it is so hard taking care of a baby that I just want to go to sleep.

(strongly agree undecided disagree strongly)
agree disagree

66) I enjoy the responsibility of being a mother.

(strongly agree undecided disagree strongly)
agree disagree

67) A mother gets physical pleasure out of holding, hugging and kissing her child.

(strongly agree undecided disagree strongly)
agree disagree

68) A mother has more pride in herself than a childless woman.

(strongly agree undecided disagree strongly)
agree disagree

69) What bugs me is when people tell me I'll get bored just being a mother.

(strongly agree undecided disagree strongly)
agree disagree

70) I feel too old to be the mother of an infant.

(strongly agree undecided disagree strongly)
agree disagree

71) Since I've had this baby I drink alcoholic beverages more often.

(strongly agree undecided disagree strongly)
agree disagree

72) I find it hard to be patient with my child.

(strongly agree undecided disagree strongly)
agree disagree

73) Babies need love and attention, but not nearly as much as most mothers give them.

(strongly agree undecided disagree strongly)
agree disagree

74) A mother has to make great sacrifices for her child.

(strongly agree undecided disagree strongly)
agree disagree

75) A woman has a hard time adjusting to motherhood when she's been free for too long.

(strongly agree undecided disagree strongly)
agree disagree

76) Parents should ignore their child's crying when it is just for attention.

(strongly agree undecided disagree strongly)
agree disagree

77) Children should be more considerate of their mothers, since their mothers do so much for them.

(strongly agree undecided disagree strongly)
agree disagree

78) If only I had waited longer to have this baby my husband might have had more time to help around the house.

(strongly agree undecided disagree strongly)
agree disagree

79) I worry about what's happening to my career while I am taking time off for mothering.

(strongly agree undecided disagree strongly)
agree disagree

80) When things get this bad, nothing you can do will help.

(strongly agree undecided disagree strongly)
agree disagree

81) Sometimes it's hard to put the baby's needs first.

(strongly agree undecided disagree strongly)
agree disagree

82) Things may be difficult now but I know things will not always be this hard.

(strongly agree undecided disagree strongly)
agree disagree

83) I have more patience for my child than I ever imagined I would.

(strongly agree undecided disagree strongly)
agree disagree

84) A child should be fed when he is hungry.

(strongly agree undecided disagree strongly)
agree disagree

85) I wish more of my friends were having their babies now too.

(strongly agree undecided disagree strongly)
agree disagree

86) I there's one thing I know it's how to organize my time.

(strongly agree undecided disagree strongly)
agree disagree

87) I am more mature than a lot of the new mothers I see.

(strongly agree undecided disagree strongly)
agree disagree

88) Babies act like they are the most important people in the household and are always demanding things.

(strongly agree undecided disagree strongly)
agree disagree

89) The pain of childbirth is so great that a woman sometimes wonders if it's worthwhile.

(strongly agree undecided disagree strongly)
agree disagree

90) Now that I am a mother, there are a lot of things I'll never get to try.

(strongly agree undecided disagree strongly)
agree disagree

91) When things get me down, I just try and put it out of my mind.

(strongly agree undecided disagree strongly)
agree disagree

92) Being able to watch while she gives birth is one of the most thrilling experiences of a mother's life.

(strongly agree undecided disagree strongly)
agree disagree

93) If I'd have waited any longer to have this child, I'd have been too old.

(strongly agree undecided disagree strongly)
agree disagree

94) I have had to give up all my activities outside the home since the baby was born.

(strongly agree undecided disagree strongly)
agree disagree

95) Even though time is short, I still make time for some physical excercise.

(strongly agree undecided disagree strongly)
agree disagree

96) When problems come up in the house, I'm the one who can solve them.

(strongly agree undecided disagree strongly)
agree disagree

97) I just take each day as it comes and don't worry about the future.

(strongly agree undecided disagree strongly)
agree disagree

98) When things get rough, I try and talk about them with my husband.

(strongly agree undecided disagree strongly)
agree disagree

99) People say I have a good attitude.

(strongly agree undecided disagree strongly)
agree disagree

100) I'm the kind of person that is basically happy.

(strongly agree undecided disagree strongly)
agree disagree

101) If I have any problems with the baby, I can talk to my mother about it.

(strongly agree undecided disagree strongly)
agree disagree

102) When I'm not sure about something, I can always call my pediatrician.

(strongly agree undecided disagree strongly)
agree disagree

103) I get all the emotional support I need from my family.

(strongly agree undecided disagree strongly)
agree disagree

104) When I have questions about taking care of my baby, I can talk to other mothers about it.

(strongly agree undecided disagree strongly)
agree disagree

105) I see friends at least once a week.

(strongly agree undecided disagree strongly)
agree disagree

106) I attend meetings at a parents organization.

_____ Yes _____ No

107) Did you postpone having this child?

_____ Yes _____ No

If your answer to question 107 was yes,
answer questions 108 and 109.
If your answer to question 107 was no, go to question 110.

108) How long did you postpone having this child (Circle the appropriate response)

1. less than one year
2. 1-2 years
3. 3-5 years
4. 6-8 years
5. 9-10 years
6. over 10 years

15

109) Why did you postpone having this child? (circle up to three responses)

1) to have time to establish a strong relationship with my husband

2) To get settled in my job so I could come back to it after the baby was born

3) to allow time for my husband to get settled in his job

4) to have a chance to work before being a full time mother

5) to finish my education

6) to allow my husband to finish his education

7) to wait until I felt emotionally ready for a child

8) to wait until my husband felt emotionally ready for a child

9) to save up some money before having a child

10) to buy a house before having a child

11) to find the right relationship with a man before starting a family

12) I could not conceive

13) other _____

_____

_____

110) Overall, how would you rate the degree of difficulty you've had in adjusting to this baby? (please circle one response)

1	2	3	4	5
none	slight	moderate	extensive	severe

Subject I.D. _____ (1-3)

Card No. 01 (4-5) Date _____ (6-11) Type ___ (12)

BELOW IS A LIST OF QUESTIONS ABOUT YOU AND YOUR FAMILY. THE INFORMATION WILL BE USED TO REPORT THE GENERAL CHARACTERISTICS OF THE MOTHERS IN THIS STUDY. ONLY GROUP RESULTS WILL BE PUBLISHED AND THE IDENTITY OF INDIVIDUALS WILL REMAIN ANONYMOUS. PLACE A CHECK MARK NEXT TO THE ANSWER THAT BEST DESCRIBES YOU OR YOUR FAMILY.

1. What is your marital status? (13)
   - ( ) 1. Married
   - ( ) 2. Single
   - ( ) 3. Divorced
   - ( ) 4. Separated
   - ( ) 5. Widowed

2. How long have you been married? _____ (14-15)

3. If you are unmarried, how long have you been in your current relationship? _____ (16-17)

4. What is the last school grade that you completed? (18)
   - ( ) 1. 1st to 8th grade
   - ( ) 2. 9th to 12th grade
   - ( ) 3. Some college but did not graduate
   - ( ) 4. Graduated college
   - ( ) 5. Postgraduate college or professional

5. What is the last school grade completed by your husband (19)
   - ( ) 1. 1st to 8th grade
   - ( ) 2. 9th to 12th grade
   - ( ) 3. Some college but did not graduate
   - ( ) 4. Graduated college
   - ( ) 5. Postgraduate college or professional

6. What is your age? _____ (20-21)

7. What is your husband's age? _____ (22-23)

8. What is your baby's age in months? _____ (24-25)

9. What is your baby's birth date? _____

10. What is your baby's sex? (26)
( ) 1. Female
( ) 2. Male

11. Did you participate in any prenatal training classes? (27)
( ) 1. Yes
( ) 2. No

12. Approximately what is your present annual family income? (28)
( ) 1. Under $4,000
( ) 2. $4,001 - $7,000
( ) 3. $7,001 - $10,000
( ) 4. $10,001 - $13,000
( ) 5. $13,001 - $16,000
( ) 6. $16,001 - $20,000
( ) 7. $20,001 - $30,000
( ) 8. Over $30,000

13. What is your racial or ethnic backround? (29)
( ) 1. White
( ) 2. Black
( ) 3. Mexican-Americar
( ) 4. American Indian
( ) 5. Oriental
( ) 6. Other (Specify) _____

14. What is your occupation? _____ (30)

15. What is your husband's occupation? _____ (31)

16. Are you currently working? _____ (32)
( ) 1. Yes
( ) 2. No

17. If you are currently working, what is your work status? (33)
    ( ) 1. Full time
    ( ) 2. Part time

18. If your are not currently working, have you ever worked in the past?
    ( ) 1. Yes (34)
    ( ) 2. No

19. If you are not currently working, do you plan to work in the future?
    ( ) 1. Yes (35)
    ( ) 2. No

20. Did you plan to have this baby? (36)
    ( ) 1. Yes
    ( ) 2. No

21. How is your infant fed? (56)
( ) 1. Breast fed
( ) 2. Bottle fed
( ) 3. Some combination of breast and bottle
( ) 4. Other (Specify) _____

22. What was your infant's weight at birth? _____ (57-59)

23. What was your infant's length at birth? _____ (60-61)

24. Has your infant had any prolonged or general illness since birth? (62)
( ) 1. Yes
( ) 2. No
If yes, please describe the problem. _____ (63-64)

_____

_____

25. Has your infant had any special problems with:
Colic: ( ) 1. Yes (65)
( ) 2. No
Rashes ( ) 1. Yes (66)
( ) 2. No
Feeding ( ) 1. Yes (67)
( ) 2. No
Sleeping( ) 1. Yes (68)
( ) 2. No
If yes, please describe the problem. _____ (69-70)

_____

_____

_____

26. How many biological children do you have? _____ (71-72)

27. How many stepchildren do you have? _____ (73-74)

MICHIGAN STATE UNIVERSITY UCHRIS PERMISSION FORM

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
238 ADMINISTRATION BUILDING
(517) 355-2180

EAST LANSING • MICHIGAN • 48824

April 7, 1982

Ms. Esther Dienstag
Department of Psychology
Psychology Research Building

Dear Ms. Dienstag:

Subject: Proposal Entitled, "Parenting Study: Maternal Age as a Variable in Transition to Parenthood"

I am pleased to advise that because of the nature of the proposed research, it was eligible for expedited review. This process has been completed, the rights and welfare of the human subjects appear to be adequately protected, and your project is therefore approved.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval prior to April 7, 1983.

Any changes in procedures involving human subjects must be reviewed by the UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

Sincerely,

Henry E. Bredeck
Chairman, UCRIHS

HEB/jms

cc: Dr. Fitzgerald

PARENT RECRUITMENT LETTER

Dear Parent,

Thank you for agreeing to participate in the parenting project. This is a study of first time mothers which looks at responses to the demands of being a parent. Please read each question carefully and circle the response that best describes your feelings at the present time. If you find that a particular question does not apply to you, simply write "NA" (not applicable) next to that question.

Please answer each question as honestly as possible trying not to skip any. Do not discuss your answers with your husband or friends until after you have completed the entire questionnaire.

After you have completed the questionnaire, please return it along with the signed consent form which I have enclosed. This form assures me that you understand the nature of the study and have agreed to participate. You will find a self-addressed, stamped envelope in the packet. Please return the completed questionnaire and the signed consent form in this envelope.

Participation in this research project is completely anonymous. You will be assigned a code number and your name will not be attached to any of the information which is received. Confidentiality and anonymity will be assured. The general group results of the study will be available to you if you are interested but individual records will not be available. If you wish to receive the group results, simply indicate this by checking the "Yes" response on the informed consent statement.

If you have any questions, please feel free to contact me during the day at (301) 528-2160 and during the evening at (301) 366-4629.

Thank you.

Cordially,

Esther Dienstag

Parenting Project

Informed Consent Statement

1. I have freely consented to take part in a study of parents being conducted by Esther Dienstag of the Department of Psychology, Michigan State University and the University of Maryland Hospital under the supervision of Professor Hiram Fitzgerald, the Department of Psychology, Michigan State University.

2. The study has been explained to me and I understand the explanation that has been given and what my participation will involve.

3. I understand that I am free to discontinue my participation in the study at any time without penalty.

4. I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.

5. I understand that my participation in this study does not guarantee any beneficial results to me.

6. I understand that, at my request, I can receive additional explanation of the study after my participation is completed, but that procedures used to assure confidentiality prevents the release of individual results.

Signed: _____

Date: _____

Do you wish to receive summaries of research reports that will be developed from the results of this study? Yes _____ No _____

SUBJECT FEEDBACK FORM

Esther Dienstag
910 Light St.
Baltimore, MD 21230

Dear Parent,

As you may recall, last year you participated in a research project for new mothers. At that time, you completed a questionnaire about your experiences with being a new parent. I'd like to share the results of this study with you.

The purpose of this study was to understand women's adjustment to parenthood. One hundred and twenty five women participated in this study. The average age of the mothers was 28 and most of the mothers had attended some college, though many held postgraduate degrees. All had recently delivered their first child. The average age of the infants was three months old. All of the women had worked at some time and all but eight believed they would return to work sometime in the future. Fifty-one were working at the time of the study and 74 were not employed outside the home.

Approximately half the mothers reported having postponed the birth of their first child, most for only a year or two but some for as many as 10 years. The most common reasons for postponing parenthood were to establish a strong marital relationship, financial reasons, or for one of the parents to feel emotionally prepared for parenthood, to finish an education or become established in a job.

When all of the mothers were considered together, the following observations were made about adjustment to parenthood. Mothers who were older tended to hold more advanced educational degrees and these mothers tended to more strongly hold attitudes that encouraged responsiveness to infant cues like picking the child up when he cries for attention. Mothers who held these "responsive attitudes" were more satisfied with parenthood. Those mothers who did not experience enough support from friends and relatives or who did not feel they had enough outside activities were more dissatisfied with parenthood.

Some of the infants in the study had been mildly ill, colicky, or had some difficulty with eating or sleeping. Mothers of these infants thought that having a young infant was difficult but had confidence that things would improve as the infants became older. These mothers were also more dissatisfied with parenthood.

Some of the mothers who worked felt they were missing out on benefits of being at home with the baby full time. The higher the mother's education, the less likely she was to feel this way but the more responsive her attitudes toward the baby, the more likely she was to regret not being home full time. Working mothers who worked full time were more likely to feel torn between home and work than part time workers. Many of these working mothers felt that time pressures necessitated reducing outside activities and social time with friends. Although mothers who felt this role conflict did not enjoy parenthood less than other mothers, working mothers who were not satisfied with their social support were much more likely to be dissatisfied with parenthood.

Working mothers who breast fed their infants felt the early infancy period was more difficult than did working mothers who bottle fed their infants.

For nonworking mothers, those mothers who missed the stimulation and challenge of work while they were at home full time were more likely to be dissatisfied with parenthood and to think early infancy was hard. Mothers who held higher educational degrees were more likely to miss work but mothers who held more "responsive attitudes" were less likely to miss work. Having a sick or difficult infant was harder for nonworking than for working mothers. They were more disstisfied with parenthood, possibly because they had fewer outlets and less time away from caretaking than their working counterparts. Nonworking mothers who breast fed their babies were not more likely to think early infancy was especially hard.

In general, mothers who had the easiest time during their adjustment period had more social support and outlets outside the home, were happy with their work decision whether or not they decided to return to work right away, and believed that motherhood was an important and fulfilling role for women. Women who had a more difficult time experienced less social contacts (and this was especially difficult for those working outside the home), had temperamentally difficult or ill infants, or felt a loss of some valued activities either at work or at home with the baby. Women who valued the mothering role less also tended to enjoy parenthood less, especially if they were not working outside the home where they might have the opportunity for other kinds of activities.

Thank you for your help in completing this project. Your assistance has helped to clarify some of the predictors of fulfillment in early mothering and to provide some clues for successful combination of work and motherhood. This is very useful since now about half of all mothers with children under age three work outside the home. If you have any further questions, please feel free to write for more information.

Sincerely,

Esther Dienstag