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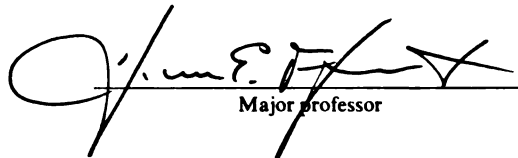
Transition to Fatherhood: A study
of First-Time African-American
Fathers

presented by

Tammy L. Mann

has been accepted towards fulfillment
of the requirements for

Doctorate degree in Psychology


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TRANSITION TO FATHERHOOD: A STUDY OF FIRST-TIME
AFRICAN AMERICAN FATHERS

By

Tammy L. Mann

A DISSERTATION

Submitted to
to Michigan State University
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ABSTRACT

TRANSITION TO FATHERHOOD: A STUDY OF FIRST-TIME AFRICAN AMERICAN FATHERS

By

Tammy L. Mann

While research on fatherhood has increased over the last 15 years, studies that move beyond describing what fathers do, to those that offer an understanding of processes influencing their behavior have been very limited. The paucity of studies that include African American men represents an additional problem with the literature on fatherhood. In fact, Hobbs and Wimbush (1976) was the only study found that exclusively focused on the transition process with African American fathers. This deficit has resulted in a very limited understanding of how African Americans adjust to their new roles as fathers. Several earlier studies identified variables that might predict paternal involvement in general household tasks, family-decision making and child care tasks, including: childhood experiences, self-esteem, sex-role orientation, parental attitude, employment status, couple relationship, parental stress, and infant characteristics. Forty-nine primarily middle-class African American men between 18 and 44 years-of-age were

recruited from childbirth classes and medical clinics from the metropolitan Detroit area. Data were collected twice, one during the third trimester of their partner's pregnancy (demographics, childhood experiences, self-esteem, sex-role orientation, couple relationship) and again, three months post delivery (couple relationship, parental stress, infant characteristics, father participation). Fathers reported balanced involvement in general household tasks and family decision-making while mothers performed most duties related to child care tasks, according to father's perceptions. Sex role-orientation was a significant predictor of father's involvement in child care tasks; fathers with a masculine sex-role orientation were less likely to report high levels of involvement in such activities. Higher levels of paternal stress were associated with lower father involvement. Fathers who attributed greater significance to the role men play in their child's development were more likely to report higher levels of involvement. Paternal attitude, paternal stress, and father's recollection of their relationship with their own fathers were significantly related to father involvement in family decision making as well as involvement in child care tasks. While these data did not support the mediational relationships postulated in the model many of the direct effects were in the expected direction.

DEDICATION

This work is dedicated to the memory of Terry Smith,
Clarence Mann, and Derrick Mann, all of whom are special
family members whose presence is deeply missed.

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I would especially like to acknowledge the assistance of several individuals who have made the completion of this project possible. I thank Dr. Fitzgerald for keeping his end of the agreement (rapidly reviewing and returning drafts) to have my work completed during the summer to afford my assuming a position in the fall. His load was quite heavy and I certainly appreciate his willingness to hang in there with me!! I thank my parents for their support and encouragement, even though they were not always clear about the nature of my work; both of them have always been solid supporters throughout my academic pursuits. I thank Cedric, my husband, for understanding and encouraging me to persevere even when I really felt like abandoning ship; his support has always meant a great deal. I thank my son Joshua for his patience with me on our many recruitment ventures; I hope in some meaningful way my work will positively impact his thinking as he develops and comes to understand the potential impact he might also have on his own children. My extended kinship, Bessie Mann and family, Annette & Michael, C.S. & Mia, along with my youngest sister Coretta, and my Mt. Zion family; the support that all of you have provided has

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INTRODUCTION

Fatherhood has become an increasingly popular topic in scientific research as well as the popular press (Fein, 1989). Research on paternal involvement in child-rearing has shifted dramatically from being centered primarily on father absence during the 1960s and 1970s to father-infant attachment and interaction in the 1980s and early 1990s (see Pedersen, 1987). With this shift in focus, men have suddenly been granted "permission" to speak freely about their experiences as they become fathers.

While there has been an increase in knowledge regarding fathers, serious problems continue to plague this literature. First of all, there is a need for researchers to shift from merely describing "what" fathers "do" to understanding the influences that shape the processes associated with becoming a father. Belsky (1981) emphasized the need for researchers to develop a conceptual framework as a guide to selecting variables studied in transition to parenthood research. Recently, others have also stressed the importance of such research (Cowan & Bronstein 1988; Cowan & Cowan 1987; Cowan 1988). To date, however, few researchers have proposed models that conceptualize this transition process. Consequently,

when surveying the literature on fatherhood, a very fragmented picture emerges regarding progress made over the last 20 years. Additional research is needed that synthesizes findings across studies if an integrated perspective on issues in fatherhood is to be achieved.

Second, most studies on the transition to fatherhood have focused primarily on middle-class, European American males (Berman & Pedersen, 1987). Too few researchers have elected to study this process among other ethnic groups. This limitation prevents researchers from making generalizations regarding the nature of the transition among men who are not middle class European American fathers. McAdoo (1993; 1986; 1988) criticized early studies for focusing exclusively on the impact of father absence in African American families without controlling for socioeconomic status (SES). In his 1993 article McAdoo argued strongly for the need to study African Americans within their own ecological context. He posited that those studies which do include adequate samples of African Americans are done so in a comparative fashion. When African Americans perform different from their European counterparts this continues perpetuate a deficit model of functioning, rather than one that seeks to understand and explain differences within a relevant context.

McAdoo (1986) suggested that many studies on African

American fathers inappropriately compared lower SES fathers to middle and upper middle class European American fathers. The failure to control for such effects has lead to an unbalanced perspective on the role of African American fathers in their families. Moreover, he asserted that those researchers who maintained that African American fathers were absent figures in their families, failed to present, until recently, empirical evidence to support that "popular" view. While McAdoo does not deny the higher rates of female headed households among African American families, his criticisms relate specifically to the common generalization that "all African American fathers" are absent figures within the family system. McAdoo reviewed several areas of research on African American fathers and concluded that there are similarities in their parenting practices when compared to other cultural groups. However, the need for additional quality research in this area is clearly stressed by McAdoo, along with the absence of studies that address this segment of the American population.

Comer (1989) echoed conclusions made by McAdoo (1993; 1986; 1988) regarding the relationship between limited employment opportunities and decreased male presence in the home among African American fathers. Comer emphasized that this finding must be viewed in light of the fact that many males continue to view their primary role in the family as the breadwinner. Aforementioned references to

both Comer's and McAdoo's writing are based on a review of existing data rather than empirical investigations, with the exception of McAdoo (1988). Furthermore, their focus was on several aspects of fatherhood (e.g., provider role, decision making, parenting style, etc.) rather than factors involved in the transition to parenthood.

Thus, the purpose of this study involves examining influences that impact observed paternal behavior among first-time African American fathers. A model that links predictor variables identified in the transition to parenting literature, to observed paternal involvement in general household tasks, family decision-making, and involvement in child care tasks is proposed and tested.

Review of Relevant Literature

Conceptual Models

In an effort to address the lack of systematic investigations regarding models describing the transition to fatherhood, the first portion of this review will focus on models that have been proposed but not yet empirically validated. The latter portion of the review will focus on select variables that have been identified as important in the transition to fatherhood. This latter portion will also serve as the foundation for a proposed process model of the transition to fatherhood among African American men.

May's Model

May (1982) collected interview data from 20 fathers and their partners from divergent ethnic backgrounds. Participants were largely European Americans (65%) with the remaining 35% consisting of Filipinos, Latinos, and one African American. These fathers were from primarily middle to lower class backgrounds as determined by years of education and income. She hypothesized that new fathers travel through three qualitatively different psychological phases as they make the transition to fatherhood. She labeled the first component of this process as the Announcement Phase. During the Announcement Phase, fathers deal with their feelings associated with the confirmation of the pregnancy. The

length of this phase is dependent upon the degree to which the pregnancy was planned. In cases where pregnancies were planned this phase might last a shorter period of time with the reverse being true for unplanned pregnancies. May postulated that once fathers become aware of their wife's pregnancy and demonstrate decreased interest in the pregnancy, compared to the wife's level of interest, they move into the Moratorium Phase. This phase could last from a few weeks to several months. Fathers experience a sense of emotional distance which is probably related to their inability to "see" the physical evidence of the pregnancy. Marital tension may become evident since men may experience neglect as their wives become more involved with the pregnancy. Once fathers have worked through their ambivalence associated with feelings of excitement about the pregnancy and/or their frustration over marital changes, they move into the final phase, namely, the Focusing Phase. This phase is likely to last until after the birth of the child. In this phase, fathers see the pregnancy as real and begin to focus on feelings associated with becoming a father. Role definitions may be discussed by both parents during this phase. May suggested that fathers who undergo these phases early are likely to experience less difficulty during the transition process compared to those fathers who do not experience these phases until late in the pregnancy.

Jordan's Model

Jordan (1990) also proposed a stage theory to explain processes involved in the transition to fatherhood. Her study involved an ethnically diverse sample of 56 fathers interviewed at seven different periods during their partner's pregnancy. No data was provided on the specific ethnic composition of the sample. There was a wide range of educational levels (between 11 and 21 years) and income levels (zero to \$90,000) represented among participants.

Jordan suggested that the first stage in the transition to fatherhood involves grappling with the reality of the pregnancy. According to Jordan, most fathers are not able to "really" believe there is a baby until they are provided with "proof" (i.e., heart beat, ultra sound pictures, etc.). Once they have come to accept the reality of the pregnancy, they move to the second stage which involves struggling for recognition as a parent. During data collection interviews, men indicated that they often felt "left out." This perception of being viewed as an observer, rather than a parent, was felt from family, friends, and health care providers. The third and final stage involves plugging away at role-making involved in fatherhood. Men sampled in this study reported few male role models available during their own childhood experiences, thus they were at a loss for how to behave in this role.

Intuitively, May's model seems to be valid; however,

there are several limitations that need to be mentioned. She provided no information about the reliability or validity of the interview method used for data collection. In addition, it was unclear how the phases were statistically derived. Her sample was also very limited in size and ethnic composition, which prevented the possibility of adequately assessing socioeconomic and ethnic differences. Jordan (1990), like May (1982), also used an interview method for her data collection, but failed to indicate how the data were coded and whether there were inter-rater reliability checks for accuracy. She studied 28 fathers longitudinally and 28 couples cross sectionally but failed to clearly articulate how these differences were handled statistically. She posited that most men do not move beyond stage two in their development, but provided no empirical justification for this conclusion. Moreover, she also failed to delineate how the stages proposed were statistically derived or how they were qualitatively distinct from one another.

Both Jordan and May included minorities in their sample and each failed to indicate how their inclusion was assessed. Jordan provided no specific data on the ethnic composition; she only noted that the sample was diverse. The sample size in May's study precluded the possibility of conducting any meaningful within group analyses. These flaws limit the usefulness of such data and relate directly to concerns articulated by McAdoo (1986).

Belsky's Model

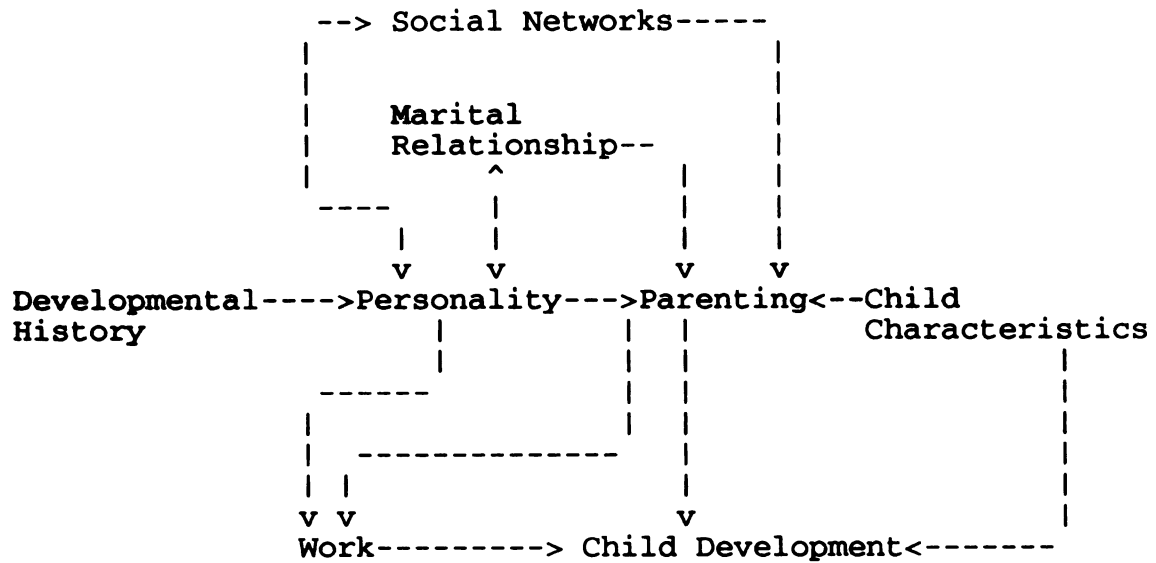
Belsky (1984) proposed a process model for understanding the determinants of the "normal parenting" process. His proposed model was based upon what is known about the parenting process in abusive families. While a model of parenting among abusive families introduces a limitation regarding generalizations that can be about the parenting process in non-abusive families, the model's development is based upon the integration of data across several studies, an approach that is seriously lacking in the parenting literature. Belsky proposed that personal psychological resources, child characteristics, and the contextual source of stress/support determines parenting behaviors. Within the component of personal psychological resources, Belsky reviewed research which suggested that personal characteristics (e.g., age, sensitivity, responsivity, early childhood experience, etc.) have often been associated with child outcomes from infancy through adolescence. Data on child characteristics have also been found to relate to the quality of parental functioning. For example, parents of children with "difficult" temperaments have been found to be less responsive to their infants when compared to parents who fail to characterize their child's temperament as difficult (Milliones, 1978; Dunn & Kendrick, 1980; Peter-Martin & Wachs, 1984).

Finally, at the contextual stress/support level,

marital relationship, social networks, and employment characteristics can either serve as sources of stress or support to the parenting process. Belsky hypothesized that the marital relationship probably serves as the strongest predictor of parenting behavior followed by the social network and employment characteristics. In fact, a number of researchers have begun to report findings that further support the robust connection between parenting and the quality of the marital relationship (Wente & Crockenberg, 1976; Belsky & Volling, 1987).

Belsky's model (see Figure 1) highlights the bi-directional effects he hypothesized are involved in the parenting process. Developmental history serves as the basic foundation from which many other factors (personality, marital relations, social networks, and parent-child relations) emerge. Belsky argued that parenting is a multi-determined process where difficulty in one domain does not necessarily suggest a maladaptive child outcome. More studies are needed that involve evaluation of each component delineated if the model is to be empirically validated. It should also be noted that Belsky did not comment on the diversity of populations studied, thus it is not clear if this model would apply to parents from culturally divergent backgrounds or those for nonabusive parents.

Figure 1*



*Belsky, J. (1984) The determinants of parenting: A process model. Child Development, 55, 83-96.

In a more recent review, Vondra and Belsky (1993) elaborated on the importance of personality and relationship factors as major determinants of observed parenting behaviors. The authors cite research which suggests that parents, especially mothers, with negative affectivity (e.g., depression, anxiety) may be compromised in their ability to provide sensitive or adequate care to their children. Furthermore, parents whose relationship histories started out with poor attachment experiences, were more likely to encounter similar difficulties with their own children, especially if there was little change in the quality of their experiences over time (e.g.,

negative peer relations and teacher relations that continue to reinforce negative relationship experiences or lack of social support). This review compared to Belsky's (1984) earlier paper, seemed to focus more heavily on personality and relationships as perhaps the most important determinants of parental behavior, rather than all the variables suggested in the model presented in Figure 1. This shift in focus implies that early interpersonal experiences may be especially important in shaping later relationships, especially parent-child relationships.

Cowan & Cowan's Model

In another effort to shift from a quantitative to qualitative perspective, Cowan and Cowan (1987) and Cowan (1988) suggested a five-tier structural model, which moves from micro- to macro-levels, to address the lack of conceptualized thinking found in the parenthood literature. The following areas were hypothesized to relate to the transition to fatherhood: (1) father's level of self-esteem and sense of self competence; (2) marital relationship; (3) parent child relationship; (4) intergenerational relationships; and (5) institutional practices (e.g., work relationships).

In their own research, (Cowan & Cowan, 1987; Cowan 1988) it was reported that self-concept decreased for both mothers and fathers following the birth of their first

child whereas self-esteem remained stable. Both studies (1987 & 1988) were based on data from their "Becoming a Family Project"; 47 primarily European American couples either participated in a group for six months ($n = 23$) or completed information before and after their child's birth ($n=24$). Minority sample composition (15%) consisted of African Americans, Asian Americans and Hispanic couples. Couples in the intervention group completed questionnaires and were interviewed when their infants were 6, 18, and 42 months. Results described here are based on couples who participated in the intervention group. Both parents reported a decrease in marital satisfaction with mothers reporting this decrease much sooner than fathers (3 months verses 6-18 months post-delivery). Both parents expected higher levels of paternal participation than was actually demonstrated by fathers once participation was assessed post-delivery. Thus, both parents predicted higher levels of paternal involvement during the pre-natal data collection phase than they seemed able to enact once the baby was born.

Those fathers who reported a change in parental attitudes following the child's birth stressed the need for greater parental control and limit setting. At the intergenerational level of analysis, men sought more contact with their own parents via telephone calls or visits when their parents lived in close proximity. At

the fifth and final level of analysis, men reported an increase in the number of hours worked following the birth of their child whereas mothers reported a decrease in the number of hours worked.

While both studies (Cowan 1988; Cowan & Cowan, 1987) seemed to address the issue of integrating variables from the transition literature in a meaningful manner, these studies fell short on providing insight on what this process might involve with different ethnic groups. Their data supported the validity of the model with their largely middle-class European American sample. Undoubtedly a majority and minority comparison would be statistically biased in favor of majority participants, however, the failure to provide any descriptive information or statement indicating how the inclusion of minority participants was handled limits the results. These criticisms are also directly related to concerns articulated by McAdoo (1993, 1988).

Despite differences in labels for variables used by Cowan and Cowan (1987) and Cowan (1988) to operationalize the concepts articulated in their model, there is some degree of overlap with their structural model and the one proposed by Belsky (1984). Self-esteem, self-concept and intergenerational relationships can be encompassed within the personal psychological resources system proposed by Belsky. In addition, marital and institutional

relationships are similar to Belsky's ideas regarding the social network stress/support system. Although Cowan and Cowan failed to clearly articulate the impact of child characteristics in their model, the parent-child relationship level of analysis could incorporate such effects. The models of Belsky and Cowan and Cowan differ from those proposed by May (1982) and Jordan (1990) because they do not focus solely on the changes fathers experience during the pre-natal period. Thus, transition, according to Belsky and Cowan and Cowan, is conceptualized as a process occurring from the prenatal period through the early years of the child's development.

Unfortunately, the work of Belsky (1984), Cowan and Cowan (1987) and Cowan (1988) represent practically the only efforts directed at theory development regarding processes involved in the transition to fatherhood. Both models (Belsky, and Cowan & Cowan) incorporate variables to be discussed in the next section of this review. Even though empirical support for the models is limited, at a descriptive level the variables identified in each model are important for conceptualizing the processes involved in the transition to fatherhood.

Childhood Experiences & Father Involvement

While the thought, "we learn to parent from our own parents" has long been suggested in the popular press, several researchers have recently demonstrated that the

early parent-child relationship most likely serves as the basis for building subsequent relationships--including second generation parent-child relationships (Jacobvitz, Morgan, Krethchmar, & Morgan, 1991; Main & Goldwyn 1984; Main, Kaplan, & Cassidy, 1985; Ricks, 1985). Although the majority of research has focused on the social transmission of attachment, which is defined as the social-emotional relationship between the infant and primary caregiver, it seems highly plausible that these early experiences might also impact the quality of parental behavior since the attachment experience is hypothesized to impact functioning in later relationship development (Emde, 1989; Cohn, Silver, Cowan, Cowan & Pearson, 1992).

Cohn et al. (1992) studied the impact of childhood attachment relationships on parenting style and child behavior. Twenty-seven participants from the longitudinal Becoming a Family Project (see Cowan 1988; Cowan & Cowan, 1987) were evaluated when their first-born infants were 42 months-of-age. These researchers assessed adult attachment utilizing the Adult Attachment Interview and parent child interaction via structured and unstructured laboratory tasks. Fathers who were classified as insecure displayed significantly less warmth, and provided less structure in their interactions with their children than those who were classified as

secure. A similar pattern of findings emerged regarding maternal attachment and observed parental behavior. Interestingly, there were also observed differences in the behavior of the children based on their parent's attachment classification. Children whose fathers were classified as insecure were less task engaged, showed more negative affect, and were less warm than those children whose fathers were classified as secure. This is one of the first studies that firmly demonstrates a relationship between attachment and subsequent parental behavior. However, results are still limited to predominantly middle-class European fathers; no separate data were provided on minority participants who comprised 18% of the sample.

The identification of early attachment experiences as important predictors of later socioemotional functioning is closely akin to a psychoanalytic perspective on development. There are other researchers who have proposed that "orthodox" psychoanalytic theory might also influence the transition to parent process. Zayas (1987) and Diamond (1986) proposed that most new fathers experience a re-awakening of the childhood experiences associated with the Oedipus complex and sibling rivalry. Fathers often feel threatened by the relationship that develops between the mother and the unborn child. These feelings become symbolic to feelings boys are hypothesized

to experience as they compete with their own fathers for maternal affection during their childhood. It is speculated that fathers who are able to control and process these feelings are more likely to adjust well to fatherhood compared to those who are unable to control such feelings. Little direct empirical data has emerged to support these postulations.

Radin (1988) studied 59 married, middle class European American fathers with a pre-school aged child. Couples again completed questionnaires four years following initial data collection to determine which parent could be identified as the primary caregiver (identical questionnaires were completed each time). Radin found that family of origin experiences were related to the length of time men devoted to serving as their child's primary caregiver. Fathers who remained in this role for at least four years, recalled a negative relationship with their own father. Sagi (1982) suggested that those fathers who extend their role as primary care taker usually are compensating for what was lacking in their own childhood experiences. In Radin's work, fathers who recalled nurturant experiences were less likely to serve as primary caregivers for an extended period of time due to a number of other factors. For example, fathers who reported nurturant experiences with their own father had wives who were less satisfied with the relationship

they had with their father, they lived in areas that were non-supportive of non-traditional child-care arrangements, and the wife's mother did not work during her child-rearing years. Thus, for these fathers maintenance of a caregiver's role was multi-determined and not solely based on his relationship with his father. The importance of family of origin variables have also been identified in other studies (Lamb & Oppenheim 1987; Radin 1982).

Studies reviewed in this section suggest that early experiences with primary caregivers can directly impact later parental behavior. While there may be variation in whether these experiences are referred to as an attachment relationship or a re-awakening of the Oedipus complex, the general point that these experiences can impact later development is worth noting. It also indirectly provides support for the inclusion of developmental history, and parent-child relationship in the models proposed by Belsky (1984) and Cowan and Cowan (1987).

Marital Relationship & Father Involvement

In addition to early childhood experiences, a number of researchers have identified the marital relationship as an important factor in men's transition to fatherhood. Fein (1976) argued that earlier studies conducted in the area had focused exclusively on the "crisis" associated with the transition. This practice led some to believe that men were unable to cope with this transition and

clinical problems often developed following the birth of their first child (Dyer, 1963; Freeman 1951; Hartman & Nicolay 1966; Hobbs, 1965; Kaplan & Blackmon 1969; LeMasters 1957; Liebenberg 1969; Wainwright 1966). Fein conducted one of the first studies that highlighted the importance of the marital relationship when examining men's adjustment to parenthood.

Fein (1976) interviewed 32 middle income couples expecting their first child; no data were provided on the ethnicity of participants. Fathers were interviewed four weeks prior to stated due date and 6 weeks post delivery. Results from questionnaire and interview data revealed that fathers experienced a decrease in the level of wishes for emotional support, generalized anxiety, and infant related anxiety six weeks following delivery. Fein also reported that fathers who adjusted well to this transition had firmly adopted a traditional role (breadwinner) or non-traditional role (primary care-giver) in their approach to parenthood whereas those fathers who were ambivalent were more likely to have experienced difficulty during this transition.

Wente and Crockenberg (1975) interviewed 46 European American, middle income couples in their research on marital relations and the transition to parenthood. They found that the more difficulty fathers reported in their marital relationship, the greater the adjustment

difficulty experienced following the birth of their first child. This remained true even when fathers had attended Lamaze child-birth preparation classes. Unfortunately, little information was provided on how interview data were coded or the actual inter-rater reliability estimates.

Cowan and Cowan (1987) also reported findings that suggested that the fathering role is more dependent on the quality of the marital relationship than does the mothering role. While the direction of impact could not be determined, Cowan and Cowan suggested that paternal and spousal roles are more interdependent than the maternal and spousal roles. This implies that women may be better able to separate the marital relationship and parent-child relationship when compared to fathers.

Belsky and Volling (1987) were also interested in the relationship between the couple's relationship and the transition to parenthood. Their study was based on data from a second cohort of participants in the Pennsylvania Infant and Family Development Project. These investigators found that for 64 European American, middle income couples observed in their homes at one, three, and nine months following the birth of their first child, the quality of the marital relationship was most important in predicting the quality of fathering. Marital behaviors that were baby focused (i.e., interactions, stimulation, care-giving, etc.) were highly related to paternal

behavior at 3 and 9 months. Together, these results lend support to the importance of the couple relationship when examining the transition to fatherhood.

Belsky and Kelly (1994) summarized data from the Pennsylvania Infant and Family Development Project, based on observations that had been made through the first child's third birthday. Couples were grouped into one of the following four categories in an effort to understand the impact that parenthood had on their marriage (percentage of participants within that category): (a) severe decliners (13%); (b) moderate decliners (38%); (c) no change (30%); and (d) improvement (19%). These numbers suggest relationship change is not an inevitable occurrence when couples become parents. The data also suggest that if and when changes do occur, these are not always negative changes; some couples found that the quality of their relationship greatly improved following the birth of their first child.

Hobbs and Wimbush (1977) studied the transition to parenthood among African American couples and reported results similar to those obtained in their previous research examining European American couples (Hobbs 1965; Hobbs & Cole 1976). Hobbs and Wimbush reported comparable demographics across all three samples with respect to father's age. However, there were some differences with respect to father's years of education, fathers from the

1976 had slightly higher levels of education than those from the present study; no mention was made of how these differences were controlled. No information was provided on the comparability of socioeconomic status. These flaws are directly related to those articulated by McAdoo (1993, 1988), where inappropriate comparisons can possibly lead to inappropriate conclusions regarding differences observed. Thus, findings must be viewed with caution, since results might very well reflect demographic differences.

Data from all three studies suggested that mothers experienced more difficulty than fathers following their child's birth as measured by a checklist of 23 bothersome items. The data from their 1977 study also revealed some differences. For example, they found that overall, African American couples experienced slightly more difficulty than European American couples. When degree of difficulty was related to selected predictor variables, differences emerged for males and females. For fathers, difficulty scores varied significantly with parent's age, post-birth marriage ratings, whether the pregnancy was planned or desired, number of children desired, and preference for sex of the child. For mothers, degree of difficulty varied with the parent's and baby's age. Although, the results should be viewed with caution, overall the data suggests that different processes may be

related to the difficulties experienced by mothers and fathers during their transition to parenthood.

Unfortunately, Hobbs and Wimbush's work represents the only study, to date, that has focused exclusively on African-American parents. While Cowan and Cowan (1987) and Cowan (1988) included a small sample of minorities (15%) in their studies, no information was provided on analyses relevant to their inclusion. This omission represents another problem with research on minorities. Many researchers will include minorities, but sample sizes are usually too small to allow for comparisons, even if they are appropriately matched on income and educational levels. Inclusion of minorities for "inclusion's sake" does little to advance understanding of how processes might be similar or different among included groups if samples are too small and consequently reduce statistical power. The majority of studies assessing changes in the marital relationship following the birth of a child failed to include groups other than European Americans (e.g., Barnett & Baruch, 1988; Belsky & Volling, 1987; Wente & Crockenberg, 1976; Feldman, 1987; Feldman, Nash, & Aschenbrenner, 1983). Thus, it might be concluded from the studies reviewed in this section that there is strong evidence suggesting that the marital relationship may impact paternal behavior, whether this conclusion is applicable to African American fathers remains to be seen.

Infant Characteristics & Father Involvement

Although there are many current conceptualizations of temperament, the work of Thomas and Chess (1977) has been cited frequently as establishing the critical distinction of temperament referring to the qualitative manifestation of behavior [style] rather than the motivation for behavior. According to Thomas and Chess there are nine dimensions of behavior that capture these stylistic differences that are evident very early in infancy: rhythmicity, activity level, attention span-persistence, distractibility, adaptability, approach-withdrawal, threshold, intensity of reaction, and mood. These researchers proposed that these stylistic patterns are constitutionally rooted and may be relatively consistent across development.

Many variations of this definition have been proposed by other researchers (Buss & Plomin, 1984; Rothbart & Derryberry, 1981; Goldsmith & Campos, 1982) that challenge or expanding the assumptions implicit in Thomas and Chess' work (e.g., genetic endowment, stability of characteristics, etc.). The recent work of Lerner (1993) builds upon the work of Thomas and Chess by examining how these stylistic differences in infant behavior impact parental behavior. Lerner proposed that temperament potentially impacts that quality of caregiving received. More specifically she posits, to the extent that there is

a good-fit between an infant and his/her environment this can determine, to some extent, child development outcomes.

Bates (1987) concluded from a review of the literature that data appear conflictual regarding the impact of temperament on parental behavior. Bates cited studies which found that mothers of babies with "difficult" temperaments were less responsive in their interactions as well as studies which found no such differences. In fact, Bates, Olson, and Pettit (1982) provided data that suggested that mothers with 6-month-old infants with difficult temperament were more likely to be responsive to cries and demands for attention. Bates argued that differences in maternal characteristics may explain the conflicting results. For example, in studies where temperament was found to impact a mother's behavior, this could also be due to maternal characteristics such as depression or level of education, and not solely due to the infant's temperament. Bates felt this was a likely explanation because the studies that reported no impact or increased responsivity were studies that included middle class, well educated parents.

Garcia-Coll, Kagan, and Reznick, (1984) identified inhibition and uninhibition as two temperament constructs evident as early as four months-of-age. These constructs [inhibition, and uninhibition] refer to an infant's response to an unfamiliar situation. Latency and

proximity to caregiver are the variables Kagan has developed to operationalize each construct.

Robinson, Kagan, Reznick and Corley (1992) provided data to support the stability and heritability of inhibition and uninhibition based on a twin study. All participants were involved in the MacArthur Longitudinal Twin Study. Twins were observed in a laboratory setting at 14, 20, and 24 months-of-age. Actual sample sizes vary as a result of the different data collection periods; 90% of the participants were European Americans with the remaining 10% consisting primarily of Hispanics. Data were video-taped and later coded with interrater reliabilities on a sample of 22 tapes ranging from .77 to .99. Results suggested that those monozygotic twins identified as shy, wary, and avoidant of the unfamiliar at 14 months displayed such features at 24 months; whereas the concordance rate observed with dizygotic twins at 14, 20 or 24 months did not reach significance. Heritability estimates were also significant at each data collection period for the entire sample. Several earlier studies by Kagan and his colleagues documented differences in biological correlates among inhibited and uninhibited children, providing further support for a strong biological basis associated with shyness and avoidance (Kagan, Reznick, & Snidman, 1988; Kagan, Reznick, & Gibbons, 1989). Kagan is careful to note that although

the evidence supporting a biological basis for these constructs seems to be mounting, environmental response to these styles may result in maintenance or alteration depending on the nature of the interactions (Kagan, 1991).

Crockenberg (1981) studied 46 European American and 2 Asian-American mothers from middle and working class backgrounds as defined by Hollingshead. Crockenberg examined the relationship between infant irritability, maternal responsiveness, and social support as they related to the developing mother-infant attachment relationship by using data from the Neonatal Behavioral Assessment Scale (NBAS), in-home mother infant observations, interviews, and the strange situation. Results indicated that infants considered irritable, as measured by the NBAS, were only at risk for developing insecure attachments when mothers reported low levels of social support. When adequate social support was present, maternal responsiveness was not adversely affected. Those infants who were less irritable, however, were not at risk for developing an insecure attachment relationship even in cases where mothers reported low levels of social support.

In a later review by Crockenberg (1986) addressing this same issue, she concluded that studies examining the relationship between maternal responsiveness and temperament were highly conflictual. Of the 16 studies she reviewed that specifically examined the relationship

between maternal responsiveness and negative emotionality (difficult temperament) only nine studies (56%) reported that irritability was associated with decreased maternal responsiveness, whereas the remaining seven studies (44%) reported that a difficult temperament was associated with increased maternal responsiveness. Crockenberg concluded that results obtained in seven of the nine studies reporting an inverse relationship were not based upon independent measures of infant temperament. These studies assessed temperament after the neonatal period and Crockenberg argued that this introduces a confound because maternal behavioral influences are likely to impact the infant's behavior beyond the neonatal period of development. Because of this confound, Crockenberg concluded that the relationship between temperament and maternal responsiveness is simply not clear at present. The fact that she reviewed studies reporting increased maternal responsiveness among mothers with "difficult" infants further complicates this picture.

Crockenberg's position appears to differ from that of others (e.g., Lerner, Kagan) in that when temperament is not assessed during the neonatal period, ratings are subject to the bias of the reporter, which in most cases are maternal perceptions. Crockenberg seems to interpret this bias as a confound or error variance, rather than as the context in which a disposition might be maintained or

altered as Lerner does in her work on goodness-of-fit. Kagan and his colleagues present strong data supporting a biological basis for inhibition, but note that the interactions in the environment may impact stability or change. Thus, these interactions are not perceived as taking away from the validity of temperament as an "entity", they simply provide the context in which temperament must be viewed as an infant develops.

What appears problematic as studies are reviewed in the temperament literature is the limited attention given to temperament and its impact on paternal responsiveness and involvement. Most of the studies cited in each review (Bates 1987; Kagan 1987, Crockenberg 1986) examined the impact of temperament on parental behavior from a maternal perspective. Might fathers be more easily affected by infant characteristics given their limited involvement in caregiving activities? Would such effects further decrease the amount of time they are likely to spend with their infants? Would the effect of not being able to sooth their "difficult" infant further immobilize those who already feel poorly prepared for their new role? These are all questions that have yet to be addressed in this area. If the full scope of factors impacting the transition are to be identified, these data suggest that infant characteristics must certainly be included.

Sex-Role Orientation & Father Involvement

It has been suggested that fathers with a strong traditional sex-role orientation (masculine or feminine) would be less likely to be highly involved with traditional caregiver activities compared to those fathers with an androgynous sex-role orientation (Palkovitz, 1984). While data examining the impact of sex-role orientation on father involvement during the newborn period of development is sparse, a few researchers have investigated this process with fathers and slighter older infant and toddlers.

Palkovitz (1984) examined the relationship between sex role orientation and father participation among 40 middle class couples with 5 month-old infants. Data obtained from in-home observations suggested that fathers' sex role orientation as well as the couple's feelings regarding the nature of the paternal role were related to paternal involvement. In fact, sex-role orientation accounted for 21% of the variability in father involvement. Father involvement was highest among those who had an androgynous sex-role orientation compared to those who scored highest on the masculine, feminine, or undifferentiated scale of sex-role orientation.

DeFrain (1979) interviewed 100 androgynous couples in a descriptive study to gather information regarding child-rearing practices and distribution of labor among

parents. Among these couples 82% reported that they shared child-care duties (i.e. feeding, diapering, etc.) and had done so since the birth of their first child. DeFraim also questioned couples regarding their own parental experiences and found that 32% of the mothers rated their own parents as having "very traditional" child rearing practices (mother at home while father worked), 56% indicated that their parents had "traditional practices", while only 12% reported "non-traditional" patterns of child-rearing behaviors. A slightly different picture emerged for fathers. Of those surveyed, 24% reported "very traditional" child rearing patterns, 59% reported "traditional" while 4% reported "non-traditional" patterns. These results, on the other hand, provide support for a high level of paternal involvement among men and women considered androgynous, but limited support for the idea that such individual differences may emerge from families with "non-traditional" practices.

Russell (1982) conducted a comparative study utilizing data obtained from a structured interview technique of traditional and non-traditional Australian families. Results suggested that fathers who were highly involved in child-care activities (those families with non-traditional child-rearing practices) placed more value on interpersonal sensitivity, expressiveness, and independence in thought and action. Most of these men

were among the non-traditional families surveyed. He concluded that these fathers probably held such views prior to becoming active fathers and that high father participation probably did not lead to these behavior practices, rather their established values most likely influenced their behavior. The design of Russell's study did not allow for evaluation of this hypothesis. While Russell did not specifically measure sex-role orientation, the characteristics identified are similar to those that would describe an androgynous sex-role orientation.

In fact, an earlier study by Russell (1978) with Australian fathers adds some support for the relationship between father involvement and sex-role orientation. In this study of 48 families, Russell identified several patterns in the data set. First of all, sex-role orientation and parental participation were related for fathers but were not related for mothers. Thus, maternal participation does not appear to be related to sex-role orientation. Fathers who were classified as androgynous or feminine were more involved in daily care activities and play interactions than those fathers classified as masculine or undifferentiated.

The differences between sex-typed (masculine or feminine) fathers and androgynous fathers does not imply that the latter group possesses an advantage over the former group of fathers. This point is argued vehemently

by Baumrind (1982) who suggested that data simply do not exist to support the popularized perspective that androgynous individuals make better parents. In fact, parents who are quite comfortable with their traditional parenting roles are likely to be at an advantage over those parents who are classified as androgynous but are unhappy with the values espoused by this orientation. The data reviewed in this section simply suggest a strong relationship, at least for fathers, between level of participation and sex-role orientation.

Father Participation

If paternal involvement alone, as it relates to child-care, serves as the behavioral indicator of the quality of the transition to fatherhood, most men would score average primarily because studies demonstrate that fathers' involvement in child-care activities (i.e., feeding, diapering, etc.) continues to lag behind mothers. Lamb and Oppenheim (1987) reviewed five years of research on father-child relationships and concluded, quantitatively, mothers are more involved in child-care activities than are fathers. Increases that have been found in father participation regarding child care activities appears to be an artifact of mother's presence in the work place. Thus, fathers have changed very little in terms of the amount of time they spend with daily child-care activities over the last 10 to 15 years.

May and Perrin (1985) reported that in 1972 only 27% of fathers were present during the birth of their child, whereas 10 to 15 years later, at least 50% to 75% of fathers actively participate in the child-birth experience. Barnett and Baruch (1988) provided evidence suggesting that differences in the amount of time fathers spend with their children, compared to mothers, are also evident during the elementary school years. In their research with 160 primarily European American, middle class parents of kindergarten and forth-grade children they found that fathers reported low levels of responsibility for child-care and house-hold tasks even if they performed such duties. This finding suggests that traditional role definitions regarding paternal and maternal behavior are quite robust, despite contemporary efforts to alter such views well beyond the infancy period of development. Barnett and Baruch (1988) reported that family structure variables (i.e., number of children, maternal employment, maternal sex-role orientation, and childhood experiences, etc.) were the most consistent predictors of paternal involvement.

The difference in quantity of time fathers spend doing child-care related activities should not imply that fathers do not play a role in the early years of their child's development. In fact, various researchers have provided data which suggest that fathers are more likely

to serve as playmates than as caregivers when compared to mothers (Clarke-Stewart, 1978; Lamb, 1976a; Lamb, 1976b; Lamb, 1977). Data have also been provided that attest to differences between mothers and fathers regarding their style of play when interacting with their toddlers (Lamb, 1976a; Ross & Taylor, 1989; Yogman, 1981; Yogman 1982). Thus, different, in terms of quality, does not imply deficient. Nonetheless, it is important that when differences are identified they are noted and discussed, especially when considering the applied significance of such differences.

Employment Status and Father Participation

To discuss variables likely to influence father participation and not include employment status would certainly result in a less than complete model depicting variables that are related to the transition to fatherhood. Employment status is likely to play a significant role in predicting father involvement given the fact that data suggest that fathers continue to view their role in the home as that of provider (Lewis, 1986; Comer 1989). Further evidence for this belief is found in studies that report an increase in the number of hours fathers work following the birth of the first child (Barnett & Baruch, 1988; Cowan & Cowan 1987; Cowan 1988). Given that trend, this is an extremely important variable to consider especially for African American fathers

because of the traditionally higher rate of unemployment when compared to their European American counter-parts (both male and female). According to the Department of Labor (1989) the unemployment rate for African American men in 1988 was 19.4% compared to 7.4% and 6.7% for European American males and females, respectively (Department of Labor, 1989).

Current unemployment rates for African American have worsened. In 1992 and 1993 unemployment rates for African American men between 20 and 24 years-of-age was 24.5 and 23.0 respectively, whereas the rates for European American males the same age was only 10.4 and 9.5, respectively. Rates for African American men over 25 were 11.7 and 10.5 for the years 1992 and 1993 respectively, while the comparable rates for European American men were 5.8 and 5.2, respectively. What seems most striking is the fact that unemployment rates for African American men, regardless of age, are nearly double those of their European American counterparts (Bureau of Labor, 1994). What is even more alarming is the difference between the median incomes of African American families (18,807) in 1991 compared to European American families (\$31,569) (Bureau of the Census, 1993).

In an effort to demonstrate how labor statistics directly impact parental functioning, McLoyd (1990) reviewed several studies on the impact of poverty on

parenting and child development outcomes in African American families. McLoyd cited data that suggested African Americans and European Americans experiencing job or income loss were more depressed, anxious, hostile and had elevated feelings of victimization and dissatisfaction with themselves and their lives when compared to employed individuals. These individuals consume more alcohol, have more somatic complaints, and are at a higher risk for neurosis, psychosis, and suicide.

McLoyd also reviewed data that suggested parents who experience job or income loss may be less nurturant, more punitive and inconsistent in their interactions with their children. Economic distress can limit opportunities for formal family formation because fathers who are unemployed may be less likely to have resources to commit to marriage, even if children have been conceived. Economic stress also impacts the quality of the marital relationship. In most cases, conflict over not having enough resources to meet the family's need can lead to difficulties that might result in separation or divorce, especially for those fathers who continue to view their primary role in the family as the provider. The data McLoyd reviewed in many cases suggest that the same negative effects experienced by African American families struggling with economic hardships are observable among other ethnic groups, including poor European Americans.

The difference seems to reside in the disproportionate number of African Americans who are negatively impacted by the problems of economic hardship.

If men continue to view their primary role in the family as the breadwinner, it seems reasonable to speculate that those fathers who are unable to provide financial support for their children may be less active in their role as fathers because they are unable to "live up" to societal expectations. Some fathers may be able to remain active despite their unemployment status because of support from their partner or family. However, given the historical problems with discrimination against African American males and the intrapsychic impact of such discrimination, coupled with a disproportionate number of African American men dying at younger ages, being incarcerated, or becoming addicted to licit and illicit substances, such factors make it challenging for this group of men to remain optimistic regarding future opportunities when the present appears quite bleak.

Just as employment status can adversely impact father participation, those fathers who are able to work and provide for their children may be equally unavailable for interactions associated with play and general care-taking activities. Thus, when considering the importance of this variable, it's important to note that just as unemployment may render fathers unavailable, employment may result in a

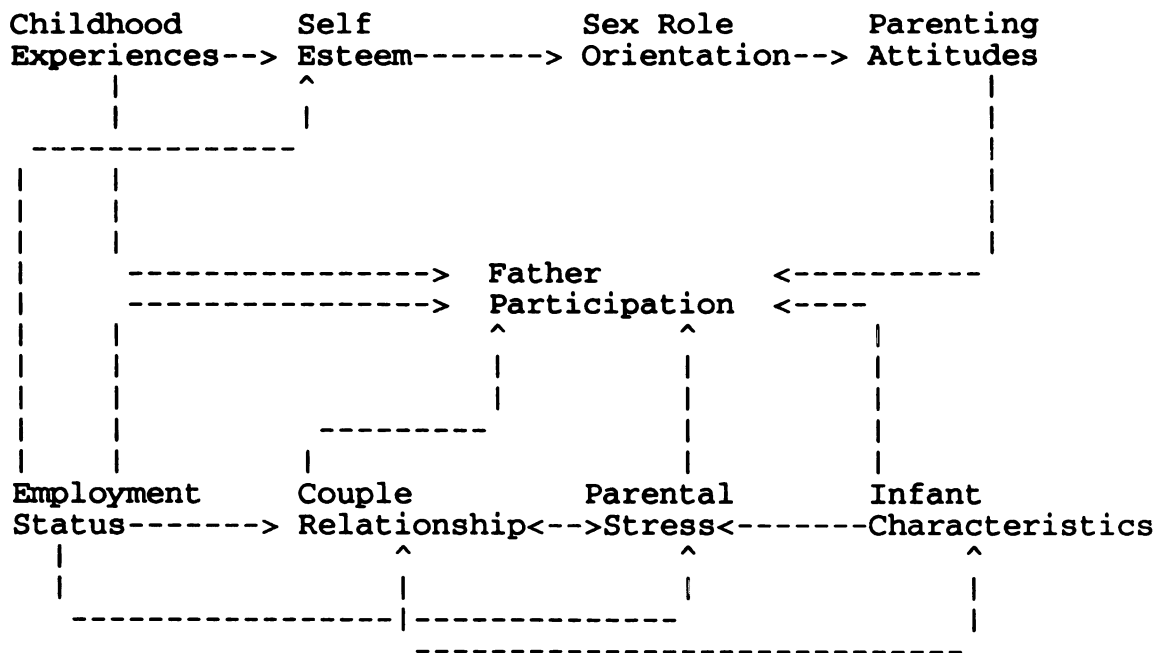
similar pattern, but for a different set of circumstances.

Summary & Statement of Hypotheses

While the transition to fatherhood is a major life adjustment, most men are able to manage this experience with few, if any "clinical" difficulties; data reviewed in the aforementioned section attest to this conclusion. These data have been integrated to derive the model depicted in Figure 2.

Figure 2

Transition to Fatherhood Model



Several relationships are hypothesized based on the literature reviewed. Research from the attachment literature suggests that early experiences being parented

strongly impact later relationship development and such experiences may ultimately impact later parenting behavior (Main & Goldwyn, 1985). Thus, childhood experiences serve as an independent variable that has both direct and indirect effects on father participation. Indirect effects originate from self esteem, sex-role orientation, and parental attitudes. Parental attitude is the final mediating variable in this chain primarily because self-esteem and sex-role orientation can be easily conceptualized as evolving out of experiences generated from being parented and may serve as the foundation from which later attitudes regarding actual parental roles and responsibilities evolve.

Employment status is a second major independent variable proposed to have a direct effect on father participation and self-esteem. Fathers who are unemployed as well as those who are employed may be less active in direct care activities for two entirely different reasons. Fathers who are employed are likely to report higher levels of global self-esteem than those struggling with unemployment/underemployment, especially since men still view their primary roles within this culture as the "breadwinner" (Comer, 1989). Employment status might also impact level of parental stress; those fathers who are unemployed/underemployed might report higher levels of stress which might also result in limited

father participation. Just as employment status might affect attitudes related to a male's role as a father, it might also impact the quality of the couple relationship; financial stressors have been cited on numerous occasions as a primary culprit in the dissolution of marital relationships.

The couple relationship and parental stress are additional independent variables hypothesized to impact father participation. Fathers who are dissatisfied with their relationship might also be more likely to report higher levels of distress in their role as parents. Similarly, those fathers who report lower levels of stress in their role as parents might also be more likely to report lower levels of dissatisfaction in their spousal relationship. The interdependence of the marital and paternal roles fathers are purported to experience makes disentangling which is most important over the other a challenge (Cowan, 1987). Each variables [couple relationship and parental stress] is hypothesized to have direct effects upon level of father participation.

While infant temperament has not been studied extensively with fathers, one might speculate, since this variable does appear to impact maternal behavior, a similar effect. For example, infant characteristics might directly impact degree of involvement a father might have with his/her child with fathers spending less time with an

infant who is temperamentally challenging. These challenging infants might also impact level of stress expressed regarding parental roles/responsibilities as well as the quality of the couple relationship.

The choice to select father participation as the dependent variable, rather than a personal variable reflects various considerations. Several studies examining the transition to parenthood have selected such variables because they are sensitive to changes not just apparent within the parent-child relationship, but within the entire family system (Cowan & Cowan, 1992; Cowan and Cowan, 1990a; Cowan & Cowan, 1990b; Cowan & Cowan 1988; Cowan, 1988; Cowan, 1987; Cowan et al., 1985). Because transition is the central focus it makes sense to select areas of functioning that might be most sensitive to variation following the birth of a child. This does not imply that there are not other equally valid areas to assess, these ecological variables simply have already been empirically established as sensitive to changes. Specific hypothesis to be tested in this study are indicated below:

Hypotheses:

1. The effect of childhood experiences on father participation will be mediated by global self-esteem, sex-role orientation, and parental attitudes.

2. The effect of employment status on father participation will be mediated by the couple relationship and by parental stress.
3. Employment status will have a direct effect on global self-esteem.
4. Satisfaction with couple relationships will have a direct effect on father participation.
5. Level of parental stress will have a direct effect on father participation.
6. Infant characteristics will have a direct effect on father participation. This proposed relationship will be mediated by the couple relationship and by the level of parental stress.

Method

Sample:

Ninety-seven Participants were recruited from various prenatal clinics and Lamaze classes in Detroit, Michigan. While this method probably limited the results only to those fathers who attend medical appointments and childbirth classes, this was considered the best systematic approach to access a large number of prospective fathers. Fathers selected for participation were either married or living with their partners who were in the third trimester of their pregnancy.

The final sample consisted of 49 self-reported, first time African American fathers between 18 and 44 years-of-age ($M = 29.82$; $SD = 5.04$); years of education ranged from 12 to 20 years ($M = 15.00$; $SD = 2.55$). Over half (53%) of the respondents reported incomes higher than \$30,000 annually. The remaining respondents (47%) reported annual incomes from \$4,000 to \$30,000. In terms of educational level, 27% had earned a high school diploma or general education equivalency; 20% reported some college, but no degree; 6% had earned an Associate's degree; 42% had a Bachelor's or Master's degree and 6% earned degrees beyond the Master's level (i.e., Ph.D., JD). Utilizing Duncan's occupational status rating (Stevens & Featherman, 1981), 32% of respondents were classified in professional occupations; 21% percent managerial; 5% clerical; 5%

operatives; 2% transports; 11% laborers; 11% service; and 4% were unemployed. In addition, average the average socioeconomic index score for fathers was 40.65 (SD = 21.69) with a median score of 37.07. Thus, nearly 47% of the total sample had earned at least a bachelor's degree and nearly 43% had professional or managerial occupations.

Mothers were also required to provide information on background/demographic variables. Mothers were between 18 and 37 years-of-age (M = 28.49; SD = 4.57); years of education ranged from 12 to 20 (M = 15.88 SD = 1.99). Thirty-two percent reported incomes [their own income, not total family income] greater than \$35,000 annually. The remaining proportion of mothers (68%) earned from zero to \$35,000 annually, with the largest percentage [within 68%] reporting incomes between \$15,001 to \$25,000 (30%). Educational attainment levels were as follows: 10% reported earning a high school diploma; 22% reported some college, but no degree; 2% had attained an Associates degree; 38% had attained a Bachelor's degree; 25% had attained a Master's degree; and 4% had attained a degree beyond the Master's level. Again, using Duncan's occupational status rating, 40% were classified in professional occupations; 25% managerial; 8% sales; 13% clerical; 6% crafts; 2% transports; and 6% unemployed. Among mothers the average socioeconomic index score was

51.67 (SD = 20.42) with a median score of 52.63. Twenty-two percent of all mothers were in their seventh month when couples completed information, 41% were in their eighth month, and 36% were in their ninth month of pregnancy.

Table 1 lists sample employment characteristics for fathers and mothers. Data from Table 1 suggest that this sample is comprised primarily of participants who are employed on a full-time basis prior to the birth of their first child with the majority of mothers (97%) returning to work on a full-time basis once their maternity leave ended. Mothers reported nearly 12 weeks of leave (M = 11.58, SD = 4.57).

Table 1
Employment Data for Fathers and Mothers
from the Personal Data Sheet

Variable	Percentage
Father's Employed	96%
Full-time	87%
Part-time	13%
Father's unemployed	4%
By choice	0%
Seeking employment	4%
Mother's Employed (Pre-Birth)	94%
Mother's unemployed	6%
By Choice	6%
Seeking Employment	0%
Mother's Employed (Post-Birth)	
Full-time	97%
Part-time	3%

Eighty-two percent of the participants were married while the remaining 18% were living together. Couples reported being married nearly three years ($M = 34.47$, $SD = 22.44$) prior to the birth of their first child; those couples who were not married reported living together at least two years ($M = 25.83$, $SD = 27.61$) prior to their child's birth. There was some discrepancy between fathers and mothers regarded the planned nature of the pregnancy, as with 85% of fathers reporting that the pregnancy was planned and only 80% of mothers reporting that the pregnancy was planned. Fifty-four percent of the infants were male and 46% were female. Infants were all born between 34 and 42 weeks ($M = 39.14$, $SD = 1.96$) with an average birth weight of 7.26 pounds ($SD = 1.11$). There were no reported extended hospitalizations or medical problems. More than half of the mothers reported nursing their infant (62%) with 49% reporting that they express their milk, potentially allowing fathers opportunities to participate in feeding. At the time of post evaluation, infants averaged 14 weeks-of-age ($M = 14.42$, $SD = 2.06$).

Procedure

Data collection occurred over 16 months. This prolonged time frame reflected the fact that post-measures were collected 10 to 12 weeks following the child's birth. The primary investigator attended several Lamaze and child-birth classes offered through a local hospital, and

was allowed to announce the project at the start of each class. All prospective participants were informed of the criteria for participation (i.e., expecting their first child, third trimester in pregnancy, married or living together). Those couples who agreed to take information were provided with a statement of informed consent (see Appendix A & B) and a description of the project (see Appendix C). Because classes were long, and only a short period of total class time was provided to recruit interested participants, it was not possible to gather detailed information from each couple prior to their taking materials. In addition, insufficient resources were available to facilitate tracking of those participants who failed to follow through.

Those fathers recruited from a medical facility were approached in the waiting room area and given a brief description of the project. To maintain consistency in procedural process, these fathers were also provided with instructions to mail materials once completed. Couples were provided with a statement of informed consent and asked to return materials to the investigator.

Ninety-seven fathers agreed to complete materials but only 51% of that group actually completed and return materials from the pre-natal data collection period. Again, because of the limited information the investigator was able to obtain during classes and medical visits,

further analysis of those who failed to follow through was not possible.

The high response rate (82%) for those fathers completing both phases of the study (pre and post) was most likely attributable to the numerous follow-up phone calls urging them to return the materials. They were instructed that the information from the first phase would not be valuable without the information from the second phase. Most fathers were very cooperative and glad to participate in the study. They also expressed interest in receiving general information about the study after its completion.

Measures

The Personal Data Sheet (PDS) was developed by the investigator to assess demographic information from fathers and mothers (see Appendix D & E). Two separate forms were created, one for mothers and one for fathers. These forms essentially elicited the same information (i.e., level of education, length of relationship education, pregnancy planned, etc.). Fathers and mothers completed the PDS form prior to their child's birth. After delivery, mothers provided information regarding nursing, length of maternity leave, and their baby's sex.

The Mother-Father-Peer Scale (MFP) is a 70-item Likert type questionnaire that addresses the respondent's

recollections of early relationship experiences with both parents (Epstein, 1983). This scale was selected over other measures because dimensions assessed have been identified in other research as reliable predictors of later parental behavior (Ricks, 1983; Ricks & Noyes, 1984).

Dimensions assessed by the scale include the following: (a) Acceptance-Rejection; (b) Independence-Overprotection; and (c) Defensive-Idealization. The Acceptance-Rejection dimension assessed the degree to which a child felt loved and accepted by their parents versus feeling unwanted and rejected. The Independence-Overprotection dimension referred to a parent's tendency to foster independent behavior versus behavior leading to increased dependency. Finally, the Idealization dimension referred to the extent to which recollections of experiences were based on unrealistic or perfectionistic views of ones' parents.

Inter-item reliabilities for each dimension of the MFP were provided in non-published manuscript format and are as follows: (a) mother encouraged independence $\bar{r} = .88$; (b) mother acceptance $\bar{r} = .82$; (c) father encouraged independence $\bar{r} = .82$; (d) father acceptance $\bar{r} = .91$. Similar reliability scores for the idealization dimension was not available due to its recent inclusion in the questionnaire. Data obtained from questions

associated with peer relationships were not used in this study since such information does not directly relate to hypotheses under investigation.

Respondents answered questions on a five-point scale (strong disagreement = 1; and strong agreement = 2). Thirty-eight items are positively phrased, and 22 are reversed scored. A perfect score on the Acceptance-Rejection scale would be 65 while a perfect score on the Independence-Overprotection scale would be 50. Generally the higher the score on either of the two scales, the more likely the individual's early experiences were characterized as positive (i.e., parents conveyed feelings of acceptance and were facilitative of their child becoming independent). The MFP was completed by the father prior to the child's birth.

The Bem Sex Role Inventory (BSRI) was used to assess father's sex role orientation prior to the child's birth (Bem, 1974). The original form of this inventory consists of 60 items designed to assess sex-typed attitudes regarding masculinity, femininity, and androgyny. Bem (1974, 1981) identified problems with the long form in terms of internal consistency and suggested that the short form, which contains only 30 items, is a refined version of the original scale and has higher reliability estimates. Thus, the short form was used in this study.

Bem's Scale was selected primarily because item

selection focused on choosing items considered socially desirable for men and women rather than traditional approaches that classified items as masculine or feminine based on the differences in male and female endorsement of items. The BSRI also possesses sound psychometric properties. Standardized on university students from two California universities, Bem (1981) reported coefficient alpha's from .84 to .90 for the masculinity, femininity, and androgyny difference scores, based on the short form version of the instrument. Four-week test-retest reliability scores ranged from .76 to .91 for the three scales. The BSRI was completed by fathers prior to the child's birth.

The Dyadic Adjustment Scale (DAS) was used to assess quality of the couple's relationship prior to and following the child's birth (Spanier, 1976). This measure was selected because of its sound psychometric properties and the adjustments made in statement presentation to allow for administration to unmarried couples. The inventory consists of 32 items that separate into the following scales: (a) Consensus; (b) Satisfaction; (c) Cohesion; and (d) Affective expression. There is also an overall Index of Dyadic Adjustment. Coefficient alpha's for each of the scales are as follows: (a) Consensus [\underline{r} = .90]; (b) Satisfaction [\underline{r} = .94]; (c) Cohesion [\underline{r} = .86]; (d) Affectional Expression [\underline{r} = .73]; and

Dyadic Adjustment [$r = .96$].

Responses are scored on a Likert scale; theoretically, scores can range from 0 to 151 with zero indicating an absence of satisfaction with the couple relationship and 151 representing complete harmony and satisfaction. Fathers completed the DAS prior to and at least 3 weeks following the child's birth to measure significant changes in ratings.

The Role of The Father Questionnaire (ROFQ; Palkovitz 1980) was used to assess the degree of importance men attributed to the fathers' role in child development (parental attitudes measure). This 15-item scale was designed to assess how fathers viewed the importance of their role; it is one of the few attitudinal measures available developed specifically for use with fathers. Palkovitz (1984) found that a father's conception of his paternal role was positively related to involvement with his child, thus establishing some construct validity for the instrument. My review of the ROFQ items also suggested face validity. Thus, given the lack of available instruments uniquely designed for fathers, I included the ROFQ as the measure of parental attitudes; reliability estimates were computed to establish internal consistency of items with this sample of fathers.

Questions are scored in a Likert scale format with (1) suggesting strong agreement with a statement and (5)

suggesting strong disagreement; three items are reversed scored. Scores can range from 15 to 75 with higher scores suggesting that a father values paternal input and believes that such involvement impacts the infant's development. The ROFQ was completed by fathers at least 12 weeks following the child's birth.

The Parenting Stress Index (PSI) was used to assess degree of parental stress experienced by fathers following the child's birth (Abidin, 1986). This instrument was selected because of its strong psychometric properties and its extensive use in clinical and research settings to assess levels of parental stress related to the role of parent. The PSI is also one of the few measures that included a sub-set of fathers in the standardized sample.

The PSI contains 120 items designed to assess parental stress and child characteristics; only those items (54) associated with parental stress were used since the majority of child items are inappropriate for three-month-old infants. The 54 items assessing parental stress are comprised within one of the following seven scales:

- (a) Depression; (b) Attachment; (c) Restrictions of Role;
- (d) Sense of Competence; (e) Social Isolation;
- (f) Relationship with Spouse; and (g) Parental Health.

In a sample consisting of 534 participants, Abidin (1986) reported the following coefficient alpha's for each sub-scale as well as for the overall stress index:

(a) Depression [\underline{r} = .80]; (b) Attachment [\underline{r} = .55];
 (c) Restriction of role [\underline{r} = .79]; (d) Sense of Competence [\underline{r} = .73]; (e) Social Isolation [r = .70]; (f) Relationship with Spouse [\underline{r} = .70]; (g) Parent Health [\underline{r} = .57] and (h) Total Stress [\underline{r} = .95]. Similar alpha's were obtained in a separate study (Hauenstein, Scarr, & Abidin, 1986).

Responses were scored on a five-point Likert scale with one indicating strong agreement and five indicating strong disagreement with a statement. There are several reversed scored items; scores are summed for each scale and then added (all scales for each domain, parent and child items) to compute a summary score. Generally lower scores indicate lower levels of stress. Father's completed the PSI at least 12 weeks following the child's birth.

The Rosenberg Self-Esteem Inventory was used to assess father's global self-esteem prior to the child's birth (Rosenberg, 1986). This is a 10-item Gutman-scale measuring global self-esteem. An individual can be either positive or negative on each of the six sub-scales. For example, by responding to the following questions with agreement: (1) At times I think I am no good at all and, (2) I feel I do not have much to be proud of, an individual would then be positive for low self-esteem for this particular sub-scale; disagreement would mean the individual is negative for low self-esteem. When an individual responds negatively to all six sub-scale he/she

is said to have high self-esteem; those individuals who are positive on all six scales have low self-esteem. In two separate studies cited by Rosenberg (1986) he indicated two-week test re-test reliabilities of .85 and .88 among two samples of college students. Fathers completed the self-esteem measure prior to the birth of their child.

The Infant Behavior Questionnaire (Rothbart, 1981). was used to assess infant temperament. This instrument was selected for its psychometric properties and it is one of the few temperament measures available for use with infants 3 months-of-age. This 94-item questionnaire is based on a seven-point Likert scale which consisted of the following six scales (with coefficient alpha's immediately following): (a) Activity Level [\underline{r} = .73]; (b) Smiling and Laughing [\underline{r} = .85]; (c) Distress to Limitations [\underline{r} = .80]; (d) Distress and Latency Approach to Novel Stimuli [\underline{r} = .84]; (e) Soothability [\underline{r} = .84]; and (f) Duration of Orienting [\underline{r} = .72]. The standardization sample consisted of 463 infants ranging from three to six months-of-age; the coefficient alpha's indicated above are based on infants who were three months-of-age.

A score of one on this seven-point scale indicates that a behavior had "never" been observed within the last week whereas a seven indicates that the behavior occurred frequently (i.e., always) within the past week. Scores

for each temperament scale are averaged to yield a mean score that would describe the infant on each of the temperament dimensions assessed with this measure. Fathers completed the IBQ at least 12 weeks after the child's birth.

Father participation was measured by the Who Does What Questionnaire (Cowan & Cowan, 1987; 1988). This instrument assessed the division of labor among couples on tasks related to household and child-care activities. Specifically the instrument assessed spouses' perceptions of responsibilities along the following three dimensions: (a) General Household tasks; (b) Family Decisions; and (c) Family Tasks related to caring for children. The authors report alpha's ranging from .92 to .99 for the three dimensions. There are three versions of the instrument based on the age of the infant (6, 18 and 36 months); the version for infants aged six months was used in this study because the items are appropriate for infants three months-of-age.

Fathers indicated on a scale from one to seven if their partner does it all (one) or if they do it all (seven); a score of five indicates that each equally performs the related task. Fathers responded to questions based upon how the task is currently performed and how they would ideally like it to be performed. Fathers were required to complete this instrument at least 12 weeks

following their child's birth.

Rather than operationalizing employment status as a purely dichotomous variable, the relationship between father participation and occupational status as determined by Stevens and Featherman (1981) was examined. The following categories represent the coding scheme for occupations based on the 1970 census information: (a) professional; (b) managerial; (c) sales; (d) clerical; (e) crafts; (f) operatives; (g) transport; (h) laborers; (i) service; (j) services-private house-hold. These data were obtained from responses on the Personal Data Sheet. The socioecomonic index score was based upon the scores provided by Stevens and Featherman (1981) given each respondent's identified occupation. The higher the index score, the greater prestige that is associated with the occupation.

Results

Instrument Reliability

Prior to performing any statistical analyses coefficient alphas were computed to establish internal consistency of the instruments utilized in this study. Alpha coefficients were not calculated for the Rosenberg Self-Esteem measure since its scale construction (Gutman) is incompatible with a uniform measure of internal consistency. The same is true for the Who Does What Questionnaire; a test-retest procedure was used with the normative sample and would likely serve as a better estimate of reliability.

Table 2 lists each measure, its corresponding coefficient alpha along with alphas from the sample on which the measure was standardized (where such information was available). Examination of these coefficient alphas suggests that fathers generally responded to most questionnaires in an internally consistent manner with a few exceptions.

Table 2

Scale Coefficient Alpha's for Fathers
Completing Measures Before and Following
Infant's Birth

Measure	Current	Normative Sample
Measures Completed Pre-Birth (<u>N</u> = 49):		
Dyadic Adjustment Scale	.79	---
Mother-Father-Peer Scale		
Mother Acceptance	.66	.82
Mother Independence	.63	.88
Father Acceptance	.80	.91
Father Independence	.68	.82
Bem Sex Role Inventory		
Masculinity	.68	.85
Femininity	.82	.87
Measure Completed Post Birth (<u>N</u> = 40):		
Role of Father Questionnaire	.76	---
Parenting Stress Index	.90	.95
Depression	.77	.80
Attachment	.64	.55
Restrictions of Role	.77	.79
Competence	.77	.73
Social Isolation	.56	.70
Relationship with Spouse	.80	.70
Parental Health	.61	.57
Infant Behavior Questionnaire		
Activity	.71	.73
Smiling and Laughing	.87	.85
Distress to Limitations	.74	.80
Soothability	.82	.84
Duration of Orientation	.81	.72
Distress & Latency Approach to Novel Stimuli	.51	.80

Two of the Parental Stress Index scales, Social Isolation and Parental Health, have extremely low estimates of internal consistency. One item seems to lower the reliability of the Social Isolation scale ("When I run into a problem taking care of my children I have a lot of people to whom I can talk to or get advice"). Removal of this item increased reliability to .65. The low reliability for the Parental Health was actually higher than the alpha obtained with the normative sample, however, there appears to be little explanation for the poor estimate of internal consistency for this scale.

The reliability estimate for the Distress and Latency Approach to Novel Stimuli Scale of the Infant Behavior Questionnaire is also lower than desirable. Although this observation is purely speculative, perhaps the constellation of questions relate to behaviors that fathers may be less aware of given their presumed role as playmates (note the Smiling and Laughter Scale has the highest degree of internal consistency). The lower estimate might also reflect the fact that the scale was normed on information mothers completed and not fathers. Despite these noted exceptions, fathers generally responded to all measures administered in an internally consistent manner.

Independent & Dependent Variable Summary Scores

Prior to actually running a regression analysis to test the model under study, several score transformations were necessary to yield single index scores for each measure. Essentially, index scores consisted of an average of responses or the sum of responses, depending upon the particular measure and its criteria for scoring. The eight independent variables included: (1) early childhood relationships; (2) self-esteem; (3) sex-role orientation; (4) parental attitudes; (5) couple relationship; (6) parental stress; (7) infant characteristics; and (8) employment status. The Who Does What Questionnaire was used to assess level of father participation (dependent variable). The process of score transformation for each variable is detailed below.

Early Childhood Experiences:

The Mother-Father-Peer Scale served as the measure of early childhood experiences. Participants reported experiences with mothers ($\bar{M} = 40.87$; $SD = 5.28$) as more accepting than experiences with their fathers ($\bar{M} = 35.69$; $SD = 8.14$), $t(45) = 4.65$, $p < .000$. Each parent was reported as equally encouraging of independence (mothers, $\bar{M} = 50.24$; $SD = 7.00$, fathers $\bar{M} = 49.13$; $SD = 7.93$), $t(44) = 1.41$, $p < .23$. These scores are quite similar to mean scores reported by Epstein (1983); see Appendix F for the scores obtained from normative sample.

Self-Esteem:

Responses from the Rosenberg Self-Esteem Questionnaire classified all respondents as possessing high global self-esteem; 67% of all respondents had zero scales positive for low self-esteem and the remaining 33% had between one and two scales positive out of a possible six. The absence of variability with this independent variable renders it statistically inappropriate to include in further analyses.

Sex-Role Orientation:

The median split technique proposed by Bem (1981) was utilized for classifying sex-role types. Those with average masculinity scores less than 5.34 and average femininity scores less than 5.40 were classified as androgynous. Average masculinity scores greater than 5.34 and femininity scores less than 5.40 were classified as masculine. Average masculinity scores greater than 5.34 and femininity scores greater than 5.40 were classified as androgynous. Average masculinity scores less than 5.34 and femininity scores greater than 5.40 were classified as feminine. Among respondents in this study, 22% were classified as having masculine sex-role orientations, 22% as androgynous, 20% as undifferentiated; 27% as feminine; and 8% were not classified due to missing data. The medians used to derived this classification were taken from the actual sample, since participants in this study

differed significantly from those in the standardization sample. This distribution is different from the distribution obtained with the standardization sample where 16% were classified as feminine, 33% as masculine, 24% as androgynous and 28% as undifferentiated when using the short form (Bem, 1978). Differences may reflect the fact that the measure was standardized on a college population; these differences might also reflect ethnic differences. Russell (1978) who also used the median split technique with Australian fathers and reported that 30% were classified as androgynous, 14% feminine; 33% masculine, and 23% as undifferentiated resulting also in a distribution different from the one obtained in this study.

Paternal Attitude:

Responses from the Role of the Father Questionnaire suggest participants strongly believe that fathers are capable of and demonstrate involvement with child care responsibilities, and that their sensitivity to these needs plays a role in child development ($M = 61.11$, $SD = 7.93$). Since Palkovitz (1984) did not provide data on summary scores, it is difficult to determine if fathers in this sample appear similar to other fathers in how they rate a their role in a child's development.

Couple Relationship:

There were no significant differences between pre ($M = 103.79$; $SD = 11.93$) and post ($M = 104.47$; $SD = 13.10$) scores from the Dyadic Adjustment Scale (DAS) which assessed overall satisfaction with the couple relationship. Pre and post scores are lower than the DAS score ($M = 114.8$; $SD = 17.8$) reported by Spanier (1976). Nonetheless, both pre and post scores obtained from this sample of participants suggest high levels of satisfaction with the couple relationship.

Paternal Stress:

Mean summary scores from the Parenting Stress Index for the total score and scale scores are found in Table 3. Participants in this sample appear to report levels of stress similar to those of fathers in the normative sample. Abidin (1986) reported that there were five African American fathers in the sample; however, no data were provided on their scores separate from the 95 fathers who were European American. Fathers in this study report low levels of stress when compared to data provided from the normative sample of fathers. There were no statistically significant differences in overall stress level (Total PSI) when stress ratings were separated by sex of infants. When stress was examined within scales of PSI, ratings were significantly higher for the Parental Competence Scale with the fathers of male infants

reporting higher levels of stress (\underline{M} = 27.65, \underline{SD} = 7.61) regarding their sense of competence than the fathers of female infants (\underline{M} = 23.00, \underline{SD} = 5.51), $t(35) = -2.15$, $p < .05$.

Table 3

Father's Mean Summary Scores
for Parenting Stress Index Scales for
Current and Normative Sample

	Current Sample		Normative Sample	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Scale:				
Depression	15.7	5.2	17.2	4.6
Attachment	13.5	3.7	11.3	2.1
Role Restriction	16.6	5.2	15.6	5.1
Competence	25.3	6.9	26.9	5.3
Isolation	11.2	3.1	10.4	2.8
Spouse	15.9	5.1	15.5	4.9
Health	12.9	3.2	10.9	2.7
Total PSI	110.7	24.3	108.7	18.4

Infant Temperament:

Infant characteristic data were obtained from responses to the Infant Behavior Questionnaire (see Table 4). Recall from information presented in section on sample characteristics, that infants were at least 14

weeks-of-age (\bar{M} = 14.42; SD = 2.06) when post-delivery packets were completed; fifty-four percent of the infants were male and 46% were female. Fathers reported observing behaviors that were most characteristic of positive affect (e.g., smiling and laughing behaviors). They also reported some success with utilizing soothing techniques that resulted in decreased distress (e.g., rocking, holding, etc.). There were no significant differences between male and female infants on any of the scales of the IBQ. See Appendix F for data on IBQ mean scores obtained in a validity study by Rothbart (1986).

Table 4

Father's Mean Summary Scores from the
Infant Behavior Questionnaire for Male and
Female Infants Combined*

Scale	<u>M</u>	<u>SD</u>
Activity Level	3.54	.78
Smiling & Laughter	4.57	.94
Distress & Latency to Approach & Novel Stimuli	2.80	.81
Distress to Limitations	3.65	.72
Duration of Orienting	3.90	1.12
Soothability	5.03	.89

*Note: Responses on the IBQ ranged from one to seven with one indicating infrequent observation of identified behavior and seven indicating frequent observation of such behavior within the past week.

The small percentage of unemployed (4%) compared to employed fathers (96%) made it difficult to evaluate how employment status, per se, might relate to father participation. Thus, level of employment was evaluated using the classification system proposed by Stevens & Featherman (1981). Recall from information provided previously, that the various occupations represented among participants (32% of respondents were classified as professionals; 21% percent managerial; 5% clerical; 5% operatives; 2% transports; 11% laborers; 11% service) were quite diverse.

Father Participation:

Data from the Who Does What Questionnaire was categorized into three separate scales. Fathers responded to questions that assessed their level of involvement in General Household Tasks (i.e., cleaning-up after meals, paying bills, looking after the car, house cleaning, etc.), Family Decisions (i.e., deciding friends and family to see, religious practices, family vacations, financial planning, etc.) and Family Tasks related to children (i.e., changing diapers, responding to cries at night, arranging for baby-sitters, etc.). Recall that fathers responded to questions based upon how the task is currently performed and how they would ideally like it to be performed on a scale from one to seven.

Fathers reported equal division of labor regarding performing General Household Tasks; however there was a significant difference between how these tasks are currently performed ($\underline{M} = 5.22$; $\underline{SD} = .77$) and how they would ideally like to see such tasks performed ($\underline{M} = 5.56$; $\underline{SD} = .61$), $t(33) = -2.74$, $p < .01$). There were significant difference in actual ($\underline{M} = 3.74$; $\underline{SD} = .88$) and ideal ($\underline{M} = 4.46$; $\underline{SD} = .72$), $t(36) = -6.77$, $p < .000$, responses to items assessing parental involvement with Family Tasks related to children. There were no significant differences between actual ($\underline{M} = 5.05$; $\underline{SD} = .47$) and ideal ($\underline{M} = 5.04$; $\underline{SD} = .35$) responses to items assessing balance of involvement with Family Decisions.

Independent and Dependent Variables Correlations

Complete correlation matrices for the independent and dependent variables are found in Appendix F. Data in this section will highlight the significant correlations that were consistent across areas of participation (i.e., household tasks, family decision-making, and child care tasks). The strongest relationships were observed between response to the ROFQ and paternal involvement in Family Decision-Making and Child Care Tasks. Paternal attitudes was associated with higher involvement in Family Decisions ($\underline{r} = .69$, $p < .01$) and Child Care Tasks ($\underline{r} = .59$, $p < .01$). Stronger feelings of acceptance by one's own

father was also associated with greater involvement in Family Decisions ($r = .38$, $p < .05$) and involvement in Child Care Tasks ($r = .37$, $p < .05$). Lower levels of stress related to parental competence was associated with greater participation in Family Decisions ($r = -.38$, $p < .05$) and Child Care Tasks ($r = -.42$, $p < .01$).

Regression Analyses

Results that follow are presented with a restatement of the hypothesis to be tested. Since father participation can be examined in three different areas (i.e., household tasks, family decision making, and child care activities) the results include those independent variables that explain a significant portion of the variance in each area. All reported analyses were based on the stepwise method of regression analysis.

Hypothesis One:

The effect of childhood experiences on father participation will be mediated by global self-esteem, sex-role orientation, and parental attitudes.

This relationship was not substantiated when examining father participation in General Household Tasks. There were no significant main effects or interaction effects when demographic variables were entered into the regression equation.

The proposed mediational relationship with sex-role orientation and parental attitudes was also not

substantiated when father's Involvement in Family Decisions was examined. Paternal attitudes, however, did have a direct impact of father participation (see Table 5); this variable alone accounted for 42% of the variance with a beta weight of .65.

Table 5
Regression Analysis for
Paternal Attitude and Father Participation
in Family Decisions

Multiple R	.65		
R Square	.42		
Adjusted R	.40		
Standard Error	.35		

Analysis of Variance:	DF	SS	MS
Regression	1	3.18	3.18
Residual	35	4.40	.13

F = 25.33	Significance = .0000
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The proposed mediational relationship was not supported when examining father participation in child care tasks. However, there were direct effects for both sex-role orientation and paternal attitudes. Sex-role orientation accounted for 12% of the explained variance (beta = $-.32$) with respect to father participation in child care tasks. Fathers with a masculine sex-role orientation were less likely to self-report high levels of

involvement with child care tasks when compared to those with a feminine, androgynous, or undifferentiated sex role orientation (see Table 6). Paternal attitude accounted for 35% of the variance (see Table 7). The robustness of paternal attitudes as a meaningful predictor ($\beta = .59$) was not affected by demographic characteristics when both Involvement in Family Decisions or Participation in Child Care Tasks served as the dependent variables.

Table 6
Regression Analysis for
Sex role Orientation and Father Participation
in Child Care Tasks

Multiple R	.34		
R Square	.12		
Adjusted R	.09		
Standard Error	.83		
Analysis of Variance:			
	DF	SS	MS
Regression	1	3.23	3.23
Residual	35	24.09	.69
F = 4.07	Significance = .05		

Table 7
Regression Analysis for
Paternal Attitude and Father Participation
in Child Care Tasks

Multiple R	.59
R Square	.35
Adjusted R	.33
Standard Error	.72

Analysis of Variance:

	DF	SS	MS
Regression	1	9.64	9.64
Residual	35	19.07	.51

F = 19.07 Significance = .0001

While childhood experiences was not a significant predictor of father participation; this variable did predict sex-role orientation (see Table 8). Men who identified their father as more encouraging of their independence were also more likely to be classified with masculine sex role orientations compared to those fathers who did not recall parents (i.e., fathers) encouraging independence (beta = $-.34$).

Table 8

Regression Analysis for
Childhood Experiences and Father's Sex Role
Orientation

Multiple R	.32
R Square	.10
Adjusted R	.08
Standard Error	.42

Analysis of Variance:

	DF	SS	MS
Regression	1	.90	.90
Residual	43	7.85	.18

F = 4.92 Significance = .05

Hypothesis Two:

The effect of employment status on father participation will be mediated by the couple relationship and parental stress.

As indicated earlier, employment status was operationalized as occupational status and by socioeconomic index scores. Because there were seven possible categories for this variable and only 49 participants, this variable was re-coded as those in professional/managerial occupations, compared to those in other occupations (clerical, operatives, transports, laborers, service) to increase power. Even though dichotomizing occupational status restricted the ability

examine if and how occupational variation might account for a significant portion of the variance, the problem posed by this small sample size was judged more important in this particular situation.

The proposed mediational relationship, involving the Couple Relationship and Parental Stress, was not supported when examining family participation in General Household Tasks, Family Decisions or involvement in Child Care Tasks. Furthermore, there was absence of a direct relationship between occupational status and father participation in all three areas, both when occupational ranking and socioeconomic index scores served as they independent variables. Level of parental stress did account for 13% of the variance in father participation ($\beta = -.36$); fathers who reported higher levels of stress relative to their new parent status were less likely to demonstrate high levels of involvement in Family Decision making (see Table 9). Relevant demographic variables (e.g., age, years of education) failed to further explain a significant portion of the variance.

Table 9
Regression Analysis for
Parental Stress and Father Participation in
Family Decisions

Multiple R	.36
R Square	.13
Adjusted R	.10
Standard Error	.19

Analysis of Variance:

	DF	SS	MS
Regression	1	.98	.98
Residual	35	6.60	.19

F = 5.18 Significance = .05

Hypothesis Three:

Employment status will have a direct effect on global self-esteem.

The highly restricted range in self-esteem ratings rendered this hypothesis non-testable. The bias employment status of the sample (87% employed verses 13% unemployed) would also result in a skewed presentation of the impact of employment status upon self esteem.

Hypothesis Four:

Satisfaction with couple relationship will have a direct effect on father participation.

This hypothesis was not supported when involvement in General Household Tasks, Family Decisions or involvement with Child Care Tasks served as the dependent variable. There were also no significant main effects obtained when demographic variables were examined relative to father participation in General Household Tasks, Family Decisions, or Child Care Tasks.

Hypothesis Five

Level of parental stress will also have a direct effect on father participation.

This hypothesis was not supported when involvement in General Household Tasks or Child Care Tasks served as the dependent variables. However, recall from hypothesis two that level of parental stress did predict level of involvement in family decision-making. This variable explained 13% of the variance (see Table 9) with a beta weight of $-.36$. Essentially, those fathers reporting higher levels of stress were less likely to be involved in Family Decision-making. There were no significant main or interaction effects with demographic variables.

Hypothesis Six

Infant characteristics will have a direct effect on father participation. This proposed relationship is also mediated by the couple relationship and level of parental stress.

The proposed direct relationship was not supported when either of the six scales of the IBQ were entered in separate regression equations for involvement in General Household Tasks, Family Decisions, or Child Care Tasks. Thus, for this sample infant characteristics did not appear to significantly impact level of father involvement. When the infant's age and length of mother's pregnancy were entered in separate equations, they each explained a significant portion of the variance for father involvement in Family decisions and Child Care tasks. However, when both variables were entered in a single equation (stepwise method) for each area of involvement, length of mother's pregnancy was retained as the variable explaining a significant portion of variance (see Tables 10 & 11). In each case less involvement was reported by those fathers whose partners delivered closer to term (40 weeks); this variable explained 20% of the variance when involvement with Family Decisions was examined (beta = $-.44$), and 19% of the variance when involvement in child care tasks was involved (beta = $-.43$).

Table 10

Regression Analysis for
Length of Pregnancy and Father Participation
in Family Decisions

Multiple R	.44
R Square	.20
Adjusted R	.17
Standard Error	.42

Analysis of Variance:

	DF	SS	MS
Regression	1	1.50	1.50
Residual	35	6.08	.17

F = 8.06 Significance = .01

Table 11

Regression Analysis for
Length of Pregnancy and Father Participation in
Child Care Tasks

Multiple R	.44
R Square	.19
Adjusted R	.17
Standard Error	.63

Analysis of Variance:

	DF	SS	MS
Regression	1	5.26	5.26
Residual	35	22.06	.63

F = 8.35 Significance = .00

The lack of evidence supporting the mediational relationships hypothesized renders the model invalid with this sample of men. Observed direct effects suggests that sex role orientation, paternal attitudes, and parental stress were best predictors of father involvement only in Family Decision Making, and Child Care activities; none of the independent variables were significant predictors of father involvement in household tasks. These relationships were not impacted by age, education, or income. Length of pregnancy was the only demographic variable that had a direct impact on father involvement in Family Decision Making and Child Care Tasks.

Discussion and Conclusions

While the model did not prove valid with this sample, some meaningful descriptive data emerged regarding the transition process. These fathers reported fairly balanced partner involvement in both family decision making and involvement in general household tasks, although fathers did report a desire to increase their level of involvement in general household tasks. Mothers were depicted as most active in performing child care tasks, however, ideally fathers would like to increase their level of involvement in these activities as well. This finding has been repeatedly replicated (Beail, 1985; Rendina & Dickerscheid, 1976; Lamb & Oppenheim, 1987; Lewis, 1986). These data corroborate McAdoo's (1988) assertion that when middle class samples of African Americans are studied, results are fairly consistent with findings from other ethnic groups.

Unfortunately the study did not include questions that might elucidate why balanced involvement in child care tasks is difficult to achieve--despite the apparent desire of fathers to share more in these responsibilities. The sex-role orientation measure failed to provide any meaningful empirical data on this issue. Perhaps these fathers reported a desire to increase their involvement in child care activities largely as a result of societal

pressures to change due to greater numbers of mothers present in the work place.

Fathers with a masculine sex-role orientation were less likely to demonstrate high levels of involvement in child care tasks. In addition, those fathers who regard paternal involvement as an important factor contributing to their child's development reported higher levels of participation in child care activities and involvement in family decisions. The higher involvement in child care tasks is consistent with the findings of Palkovitz (1984) and Palkovitz & Cope (1988), who also reported higher levels of involvement in child care tasks for fathers who had high scores on the paternal attitudinal measure.

As expected, higher levels of stress was a significant predictor of lower levels of involvement in family decision-making, although not of involvement in child care tasks or in general household tasks. The content of several questions on the Decision-Making scale related to financial matters, that might indirectly relate to ones' perceived role as "provider." Thus, participation in family decision-making may be most sensitive to effects of stress because it indirectly relates to the traditional role of provider.

Length of pregnancy was the only demographic variable that had a direct effect on level of father participation. Fathers whose partners delivered closer to term reported

significantly lower levels of involvement in family decision-making and child care tasks. This finding has not been reported by other researchers, especially regarding greater involvement in family decision-making. One might interpret this as a chance finding or examine if research involving fathers and pre-term infants might clarify this result. In one study examining parental interactions between Israeli parents and their infants during the first month at home, researchers reported that fathers of preterm infants, when compared to fathers of full-term infants, had higher levels of caregiving and holding (Levy-Shiff & Mogilner, 1989). In some way, perhaps fathers are more sensitive to need for involvement with child care tasks when an infant is born earlier than expected; there may be a sense of heightened sensitivity that is otherwise absent when mothers deliver closer to term. Yogman (1982) also provided similar data with American fathers demonstrating higher levels of involvement when their infants were born prematurely.

Several concerns should be discussed relative to the failure of the data to support the model tested in the study. First, and perhaps most importantly, the limited sample size likely resulted in limited statistical power; it is generally recommended that there be at least 10 subjects per independent variable in order to insure that there is adequate statistical power when regression is

selected as the method of analysis (Cohen, 1977; Cohen & Cohen, 1983; Pedhazur, 1982). There were eight proposed independent variables, with one omitted from analyses due to a restricted range, leaving seven which still resulted in too many variables given the sample size. In addition, all measures were self-report and problems associated with self-report data may have also impacted findings. A perfect example would be the observed discrepancy (5%) between fathers and mothers on whether the pregnancy was planned. While the majority of couples agreed on this question; the discrepancy introduces problems with the reliability of self-report information, especially when one is relying upon the responses of one individual on matters that might be viewed differently by another relevant respondent (e.g., spouse, partner, etc.).

In addition to the problems with sample size there are several other issues to be considered. The short 12-week interval between the two data collections may not have provided sufficient time to examine changes that required more time to evolve. Perhaps because this was the first child, the novelty of the experience masked any adverse changes. Results from the studies of Cowan and Cowan (1987) and Cowan (1988) examining their five-tier model of marital relationship changes during the transition to parenthood were derived from a longitudinal study over 18 months that did result in significant

findings. Methodological issues may have also impacted the results obtained. May (1982) and Jordan (1990) both used interview data rather than return mail questionnaires which were used in this study; interview methods generally limit problems with missing data that are inherent when return mail methods are utilized which further limits statistical power.

Furthermore, because there were similarities in the variables selected for this model and those included in the model proposed by Belsky (1984), it is possible that this model proved invalid with this sample, because the variables selected were chosen based on what is known about the parenting process in abusive families. While intuitively it might seem that the processes shaping parental behavior in clinical populations would also prove valid for non-clinical populations, perhaps there are sharp differences in those factors that shape parental behavior in abusive and non-abusive parents. While this possibility should be considered, I am much more inclined to believe that a retest of the model with a larger sample, over a longer period of time might result in an outcome in support of the model, perhaps with the inclusion of additional variables that might be relevant for African American families (e.g., extended family support, involvement in religious activities). The data partially provided insight regarding this possibility.

For example, the direct effects obtained regarding sex-role orientation, paternal attitudes, and parental stress were all in the expected direction. The ability to test for mediational relationships in part reflects power, which was limited. The failure to obtain nonsignificant changes in the marital relationship could reflect concerns discussed earlier related to time period between pre- and post-data collection.

It is also possible that the model failed because it does not relate to the transition process as experienced by African American fathers. Much of the research that served as the foundation from which the model was based was conducted with middle class, well-educated European American fathers. Perhaps these findings do not generalize to African American men. However, evidence supporting this interpretation is questionable in light of McAdoo's (1993, 1988) assertion that differences interpreted as culturally based seem to disappear when education and income are appropriately controlled in comparative research designs. Middle income, educated African American fathers, just as middle income, educated European American fathers reported sharing equally in household and family decision making. Both groups of men were reported to be predominantly nurturant, warm, and loving towards their children. Differences that emerged between the two groups were related to attitudes of

restrictiveness towards their children; African American fathers were found to be more restrictive in their expectations and reported behavior. This finding, when interpreted within a socio-historical context, is consistent with the experience of African Americans in this country where a parent's sensitivity to environmental factors their child would encounter played a strong role in influencing parental behavior (Taylor, 1991).

The failure of childhood experiences to directly impact father participation was an unexpected outcome. This may reflect the incompatibility of the two measures used to assess both childhood experiences and father participation. Much of the attachment literature suggests that early attachment relationships may serve as the foundation for later socioemotional relationships (Emde, 1989; Ricks, 1985). In this study, however, attachment relationships were not assessed. Perhaps had the early attachment relationship been examined this would have resulted in a different outcome. The fact that the Mother-Father-Peer scale is a retrospective measure may have also impacted the non-significant findings. Recall of childhood experiences may have been subject to error as is often the case with retrospective measures.

With respect to the second hypothesis, the failure of employment status to emerge as a significant predictor of father participation in part, reflects the biased sample

obtained. Recall from information presented earlier that 96% of this sample was employed (87% full-time and 13% part-time), rendering an employed versus unemployed analysis skewed in favor of those employed. A comparison of employed versus unemployed fathers would have provided meaningful data on how employment status, separate from level of occupation, might impact level of father participation. Of course, the absence of significance when employment status was collapsed into two categories does not rule out variation in participation across occupations even though the socioeconomic index scores also failed to predict participation. A larger sample including a fairly equal number of participants in each category would be needed before one can be certain that there are no differences in father participation across occupations rankings.

A comparison of participation among employed versus unemployed African American fathers would be a finding of interest given that much of what is available in the popular press (see Ingrassia, 1993) would suggest that limited employment opportunities might impact the presence of African American men in families where they have fathered offspring. The high level of employment among participants in this study is a sharp contrast to statistics that suggest most African American men are unemployed, albeit a sample size of 49 can hardly be

considered the majority of African American men.

Couples' relationship scores, neither pre- nor post-birth did not significantly predict father's participation. This may reflect the time period between the collection of pre- and post-ratings. Some researchers who have reported a decrease in marital satisfaction following the birth of the first child have reported that this decrease generally emerged six or more months postnatally (Cowan & Cowan, 1987; Cowan, 1988; Cowan et al., 1985). Cowan and Cowan (1987) reported that declines were evident among the participants in their intervention and non-intervention samples, suggesting that this delayed onset of decline was unrelated to participation in the intervention group. There were differences regarding the rate of change in satisfaction; couples in the intervention group maintained a stable rate of decline from 6 to 18 months postpartum whereas nonintervention couples declined more rapidly in dissatisfaction during this same period of time. Others have reported a decrease in marital satisfaction for fathers as early as 3 months postpartum (Belsky, et al 1985); thus there appears to be some conflict in the literature regarding this finding.

Finally, infant characteristics also failed to predict level of father participation. Because amount of time fathers spent with their infants on a daily basis was

not assessed, it is difficult to know if the lack of relationship between these variables is genuine or an artifact of fathers spending less time with their infants when compared to mothers. If fathers are spending less time with their infants and the content of that time differs from that of the time mothers spend with their infants, this difference in experience may explain why mothers appear more impacted by infant's temperament than fathers. While this study did not assess differences in temperament perception between mothers and fathers, Lamb, et al (1983) conducted such a study and explained that the lack of considerable agreement between maternal and paternal ratings of temperament at three months could have been due to amount of time fathers were spending with their infants. When interrater (mother and father) agreement was assessed at eight months, Lamb and his colleagues found that there was significant improvement in agreement with temperament ratings using the Infant Behavior Questionnaire.

Fathers also left more items unanswered on the Infant Behavior Questionnaire than any other measure. This may have been due to the length of the measure (94 items) or their difficulty in identifying the cited behaviors, which might also reflect on the nature of a father's interaction with their infant. Much has been written about fathers being more likely to serve in the role of a playmate

verses that of a caretaker (Ross & Taylor, 1989; Clarke-Stewart, 1978; Lamb, 1976; Lynn & Cross, 1974). Perhaps their role as playmates may restrict observed affective states to those that are primarily positive in nature.

While the attempt to conceptually link variables predicting level of father participation did fail, many of the noted limitations that have been extensively discussed provide initial insights on how weaknesses may be overcome in future studies. It is the opinion of this researcher that before comparative studies are attempted (e.g., comparing different ethnicities, or fathers to mothers) one should be certain that a baseline has been established for the reference group, in this case African American fathers. Because comparative research has historically lead some to depict one group as better than another, the need for normative or baseline data is critical to understanding processes impacting behavior within ethnicity and gender. It should also be noted that a single study on African American fathers only sheds light on the transition process only for those fathers possessing identified sample characteristics. Criticisms of those studies including African American men usually involved inappropriate comparisons to fathers of not only different ethnicities, but different socioeconomic and educational backgrounds. The results of this study might generalize to those African American men who reside in a

metropolitan area, that have at least completed high school, with most reporting either 2- or 4-year degrees beyond the high school level.

Future studies in this area should also involve retaining a larger sample that could be followed for a longer period of time to assess changes over the first year rather than the first 3 months, especially since many fathers may still be excited about their newly obtained parental status. Balancing the number of employed verses unemployed fathers might also provide meaningful information on how this variable impacts involvement, especially since unemployment rates are much higher for African American fathers compared to most other ethnic groups. Variables specified in the model might serve as meaningful predictors if there are adjustments in the manner that father participation is conceptualized. The measure selected for this study does conceptualize father participation with the child primarily in terms of their involvement with child care activities.

Finally, results from this study appear consistent with others that suggests that child-care tasks continue to be performed primarily by mothers, even if fathers would ideally like to increase their involvement. Perhaps the definition of father involvement should be expanded to include areas such as involvement in social activities. Despite noted limitations, the data obtained do provide

some useful descriptive information on how paternal attitude, parental stress, and to a limited extent, sex role orientation, all serve as predictors of father participation in general household tasks, family decisions, and involvement in care activities.

APPENDICES

APPENDIX A STATEMENT OF INFORMED CONSENT-FATHERS

APPENDIX A STATEMENT OF INFORMED CONSENT-FATHERS

1. I understand that this study is interested in the transition to fatherhood among first-time African-American males.
2. I understand that I will be asked to complete seven questionnaires prior to my partner's delivery of the baby which should take approximately two hours to complete.
3. I understand that I will be mailed three questionnaires to complete once the baby is born (between 10 and 12 weeks) and that I must complete without consulting with my partner.
4. I understand that there are no benefits for myself or my child as a result of participation in this research project.
5. I understand that I can discontinue participation at any time without penalty.
6. I understand that data will be coded by number to insure confidentiality of information provided.
7. I understand that I will not be able to obtain any individual results of the study; however; group results are available upon request.

8. I understand that results of the study may be presented at scientific meetings or submitted for publication as long as the results are in group (summary) format and do not disclose my identity.

Participant's Signature:_____

Witness:_____

Date:_____

APPENDIX B STATEMENT OF INFORMED CONSENT-MOTHERS

APPENDIX B STATEMENT OF INFORMED CONSENT-MOTHERS

1. I understand that this study is interested in the transition to fatherhood among first-time African-American males but requires general information from the father's partner.
2. I understand that I will be asked to complete two questionnaires prior to my child's birth that should take approximately 20 minutes to complete.
3. I understand that I will be mailed a questionnaire to complete once the baby is born (between 6 and 8 weeks) and that I must complete without consulting with my partner.
4. I understand that there are no benefits for myself or my child as a result of participation in this research project.
5. I understand that I can discontinue my participation at any time without penalty.
6. I understand that data will be coded by number to insure confidentiality of information provided.
7. I understand that I will not be able to obtain any individual results of the study; however; group results are available upon request.

8. I understand that results of the study may be presented at scientific meetings or submitted for publication as long as the results are in group (summary) format and do not disclose my identity.

Participant's Signature:_____

Witness:_____

Date:_____

APPENDIX C DESCRIPTION OF PROJECT

APPENDIX C DESCRIPTION OF PROJECT

I am a graduate student enrolled in the clinical psychology program at Michigan State University. For the past two years I have worked with families with infants and toddlers. I am interested in understanding how various personal experiences relate to parental behavior among African American parents. The aim of this particular project involves understanding how various experiences relate to the transition to parenthood among African American males among males. To date, there is very little research on this group of men. By participating in this project, you will aid this researcher in developing a research foundation for understanding this process among African American male parents.

If you desire to participate in the project you will be asked to complete seven questionnaires prior to your child's birth to be arranged with researcher. Completion of this material will take approximately 1 to 1 and 1/2 hours of your time. You will also be required to complete three questionnaires 10 to 12 weeks after your child's birth, which should require one hour of your time. These questionnaires will be mailed to you and you will be

provided with a stamped, self-addressed return envelop. Your partner will also be asked to complete information before and after the child's birth. These questionnaires are designed to give the researcher information about issues that may be related to adjusting to one's new role as a father.

The researcher will contact all participants one week prior to expected due date to determine if baby has been born. In cases where the baby has been born fathers will be told to expect questionnaires within the 10 weeks. The questionnaires for the father and mother will be included and should be completed separately. Calls will be made to request all materials not received within 10 days (postage will be paid by the researcher). In cases where the baby has not been born the researcher will continue to contact (1 to 2 weeks later) to determine if baby has been born and inform parents about questionnaires to be mailed out. As indicated in the Statement of Informed Consent, group results can be requested once project is complete.

APPENDIX D PERSONAL DATA SHEET-FATHERS

APPENDIX D PERSONAL DATA SHEET-FATHERS

Subject ID#_____

Name:_____

Partner/Spouse Name:_____

Address:_____

City:_____ State:_____

Zip Code:_____

Telephone:_____

Date-of-Birth:_____ Age:_____

1. Marital Status: ___Single (Divorced)
 ___Single (Never married)
 ___Married
2. If married, how long? _____
(Years or months if under 1 year)
3. If Single, how long have you lived with your
partner?_____(Years or Months)
4. Please indicate your occupation (that is, what
exactly do you do, i.e., fast food service, bank-
teller, teacher, nurse, factory laborer, etc.) If you
are not currently employed please answer
unemployed:_____

If Employed, do you work:

Full-time_____ Part-time_____
Seasonal_____

If unemployed, is this because you work in a seasonal
job? Yes_____ No_____

If unemployed, is this by choice?
Yes_____ No_____

If unemployed, how long have you been out of work?
_____(please specify years or months)

If unemployed, are you actively seeking employment?
Yes_____ No_____

5. Father's Estimated Income per year:
(Please check ONE)

<input type="checkbox"/> 4,000 or under	<input type="checkbox"/> 20,001-25,000
<input type="checkbox"/> 4,001-10,000	<input type="checkbox"/> 25,001-30,000
<input type="checkbox"/> 10,001-15,000	<input type="checkbox"/> 30,001-35,000
<input type="checkbox"/> 15,001-20,000	<input type="checkbox"/> over 35,0006.

6. Please indicate your highest level of education completed:

<input type="checkbox"/> less than high school	<input type="checkbox"/> Associates
<input type="checkbox"/> GED	<input type="checkbox"/> Bachelors
<input type="checkbox"/> High School	<input type="checkbox"/> Master's
<input type="checkbox"/> Some College (____yrs)	<input type="checkbox"/> Ph.D., M.D., JD,

8. Was this pregnancy planned (Did you and your partner purposely decide to have this child?)

Yes_____ No_____

9. Even if this pregnancy was not planned did you desire or want this baby after the news that your partner was pregnant?

Yes_____ No_____

APPENDIX E PERSONAL DATA SHEET-MOTHERS

APPENDIX E PERSONAL DATA SHEET-MOTHERS

Subject ID#_____

Name:_____

Partner/Spouse Name:_____

Address:_____

City:_____ State:_____

Zip Code:_____

Telephone:_____ (area code first)

Date-of-Birth:_____ Age:_____

1. Marital Status: ___Single (Divorced)
 ___Single (Never married)
 ___Married
2. If married, how long? _____
(Years or months if under 1 year)
3. If Single, how long have you lived with your
partner? _____ (Years or Months)
4. Please indicate your occupation (that is, what
exactly do you do, i.e., fast food service, bank-
teller, teacher, nurse, factory laborer, etc.) If you
are not currently employed please answer
unemployed: _____

If Employed, do you work:

Full-time _____ Part-time _____
Seasonal _____

If unemployed, is this because you work in a seasonal
job? Yes _____ No _____

If unemployed, is this by choice?
Yes _____ No _____

If unemployed, how long have you been out of work?
 _____ (please specify years or months)

If unemployed, are you actively seeking employment?
 Yes_____ No_____

5. Mother's Estimated Income per year:
 (Please check ONE)

_____4,000 or under	_____20,001-25,000
_____4,001-10,000	_____25,001-30,000
_____10,001-15,000	_____30,001-35,000
_____15,001-20,000	_____over 35,0006.

6. Please indicate your highest level of education completed:

_____less than high school	_____Associates
_____GED	_____Bachelors
_____High School	_____Master's
_____Some College (____yrs)	_____Ph.D., M.D., JD,

8. Was this pregnancy planned (Did you and your partner purposely decide to have this child?)

Yes_____ No_____

9. Even if this pregnancy was not planned did you desire or want this baby after the news that your partner was pregnant?

Yes_____ No_____

10. Was this pregnancy planned (Did you and your partner purposely decide to have this child?)

Yes_____ No_____

11. Even if this pregnancy was not planned did you desire or want this baby after the news that your partner was pregnant?

Yes_____ No_____

(Post Information-Mothers)

If still on leave, do you plan to return to work, if so when (indicate the planned length of your maternity leave)

Length of leave _____ (years or months).

If you will return (or have returned to work) indicate your percent time employed:

Full-time_____

Part-time_____

Seasonal_____

Are you breast feeding, if so, how long do you plan to do so?

Yes_____ No_____

Length of time breast feeding_____ (months)

If you are breast feeding do you express your milk so your partner can participate in feeding?

Yes_____ No_____

If not, do you allow your partner to burp the baby following feeding

Yes_____ No_____

Information Regarding Delivery:

Baby's Date-of-Birth: _____ (Month-Day-Year)

Baby's weight: _____ (pounds)

How many weeks were you when you delivered:_____

Sex of Baby (please circle one): Male Female

APPENDIX F STATISTICAL SUMMARY

APPENDIX F STATISTICAL SUMMARY

Table 12

Mean Scores for Mother Father Peer Scale from
the Normative Sample

Scale	<u>M</u>	<u>SD</u>
Mother Encouraged Independence	47.33	9.95
Father Encouraged Independence	48.74	8.54
Mother Accepting	40.86	8.64
Father Accepting	39.12	9.23

Note. Data provided from scale author.

Table 13

Mean Summary Scores for Selected Infant
Behavior Questionnaire Scales from a
Validity Study

Scale	Mean	SD
Activity Level	3.43	.79
Smiling & Laughter	3.79	.82
Distress to Limitations	3.57	.63
Distress & Latency to Approach & Novel Stimuli	2.23	.63

Note. No data was provided on the Duration of Orienting or Soothability Scales (see Rothbart, 1986).

Table 14

Pearson Correlations Between the Who Does What
Scales and the Mother, Father, Peer Scale (N = 49)

	General Household Tasks	Family Decision Making	Child- Care Tasks
Mother Encouraged Independence	.19	.13	-.03
Father Encouraged Independence	-.04	.10	.09
Mother Acceptance	.16	.22	.13
Father Acceptance	-.07	.38*	.37*

Note. Correlations within the table had n's that ranged from 35 to 38.

*p < .05.

Table 15

Pearson Correlations Between the Who Does What
Questionnaire and Pre/Post Dyadic Adjustment Scale and the
Role of the Father Questionnaire (N = 49)

	General Household Tasks	Family Decision Making	Child- Care Tasks
Pre-Dyadic Adjustment Score	-.10	-.19	-.22
Post-Dyadic Adjustment Score	.03	-.00	-.18
Paternal Attitude	.26	.65**	.59**

Note. Correlations within the table had n's that ranged
from 37 to 38.

**p < .01.

TABLE 16

Pearson Correlations Between the Who Does What
Questionnaire and Parenting Stress Index Scores ($N = 49$)

	General Household Tasks	Family Decision Making	Child- Care Tasks
Depression	-.31	-.31	-.10
Attachment	.09	-.23	-.36*
Restrictions of Role	-.09	-.22	-.15
Competence	-.28	-.38*	-.42**
Social Isolation	-.10	-.23	.04
Relationship with Spouse	.02	-.19	.03
Parental Health	.01	-.21	.04
Total Index Score	-.17	-.35*	-.21

Note. Correlations within the table had n 's that ranged from 35 to 38.

* $p < .05$. ** $p < .05$.

Table 17

Pearson Correlations Between the Who Does What
Questionnaire and the Infant Behavior
Questionnaire (N = 49)

	General Household Tasks	Family Decision Making	Child- Care Tasks
Activity Level	-.12	-.06	.21
Smiling & Laughter	.09	-.11	.16
Distress & Latency to Approach & Novel Stimuli	-.11	-.04	-.20
Distress to Limitations	-.12	-.00	.16
Duration of Orienting	.01	.15	.02
Soothability	-.08	-.07	-.25

Note. Correlations within the table had n's that ranged from 36 to 38; no correlation reached the .05 level of confidence.

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