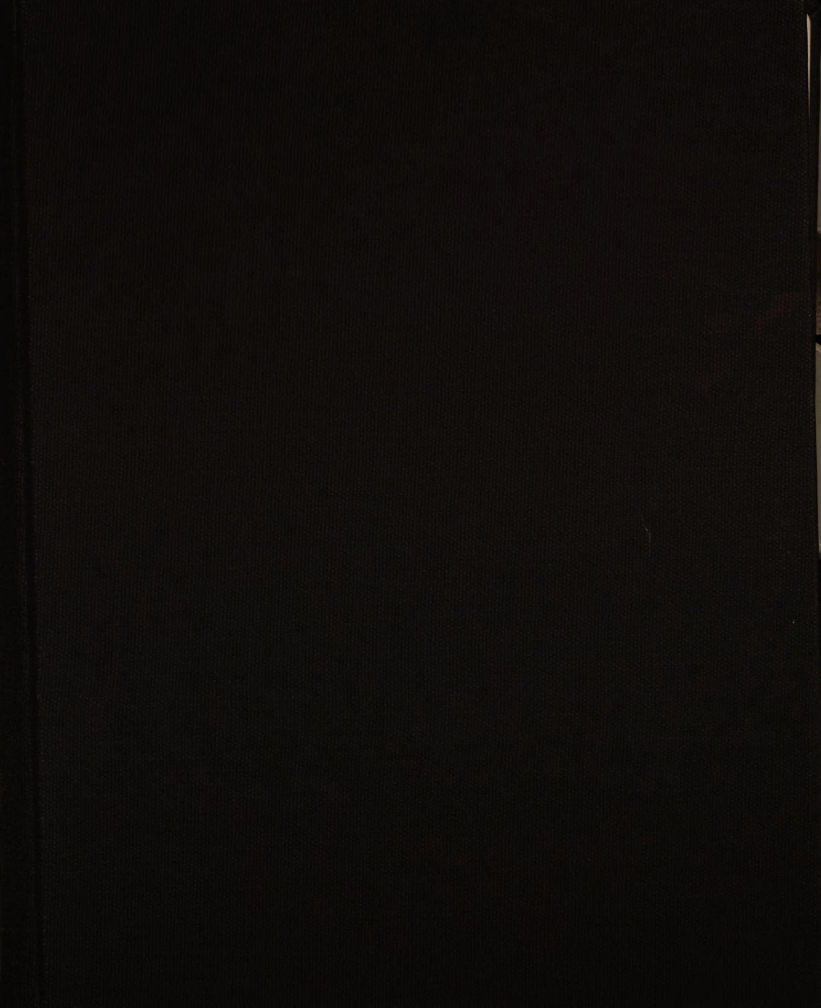






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SOCIAL NETWORKS, STRESS, AND ADJUSTMENT**

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KATHLEEN WONG SEITZ

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of the requirements for

Ph.D. degree in **Psychology**

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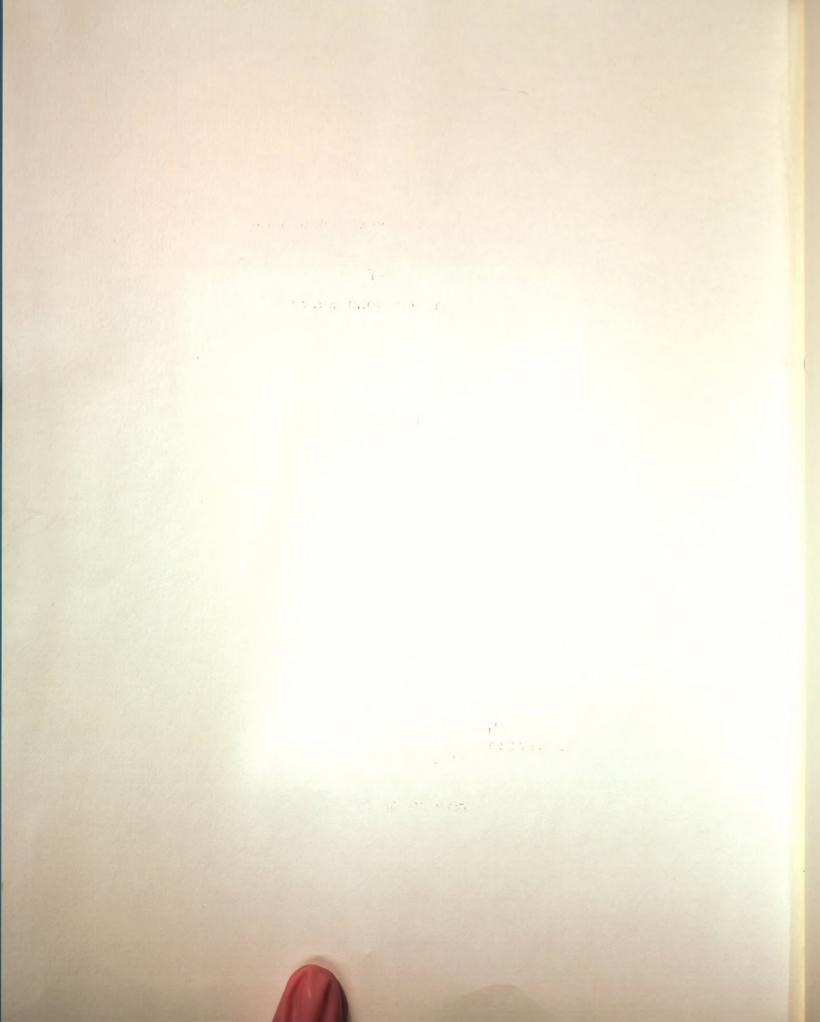
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ABSTRACT

A STUDY OF THE TRANSITION TO PARENTHOOD:
SOCIAL NETWORKS, STRESS, AND ADJUSTMENT
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Kathleen Byg Seitz

Kathleen Wong Seitz

This study explored the relationships among stressors, social network characteristics, and adjustment for couples during the transition to parenthood. This is a family life cycle stage which has been found to be experienced as stressful, often leading to clinical concerns. Depression, and lowered marital satisfaction are common and include those specific to the transition to parenthood: marital role stress, as well as the transition to parenthood life event changes. Social support was hypothesized to mediate the relationship between stressors and adjustment. It was hypothesized that couples with different types of social network characteristics would affect their adjustment and that specific network characteristics would mediate the relationship between stressors and adjustment. Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

A DISSERTATION

Submitted to
Michigan State University

for the degree of

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By

Lushene, 1976), the Center for Epidemiologic Studies

Kathleen Wong Seitz

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ABSTRACT

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SOCIAL NETWORKS, STRESS, AND ADJUSTMENT

By

Kathleen Wong Saltz

This study explored the relationships among stressors, social network characteristics, and adjustment for couples during the transition to parenthood. This is a family life cycle stage which has been found to be experienced as stressful, often resulting in greater anxiety, depression, and lowered marital satisfaction. Stressors may include those specific to pregnancy and postpartum period, role stress, as well as stress associated with general life event changes. Research reports have been found to be a major mediating factor between high stress and adjustment. It was hypothesized that during this transition period, different stressors would affect males and females, and that specific network characteristics would be more facilitative of adjustment for postbirth couples experiencing high stress than for prebirth couples.

Fifty couples were interviewed in this cross-sectional study, 25 in the last trimester of their first pregnancy, and 25 couples three to six months postpartum. Families were recruited primarily from a local health maintenance

organization. Most families were white, and middle class in socioeconomic status. Separate interviews of each spouse were conducted in their home. Measures included: the State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970), the Center for Epidemiologic Studies Depression Scale (Radloff, 1977), the Rosenberg Self-Esteem Scale (Rosenberg, 1965), the Social Readjustment Rating Scale (Holmes & Rahe, 1967), the Spanier Dyadic Adjustment Scale (Spanier, 1976). A social network questionnaire and interview schedule were also administered.

In general, prebirth and postbirth groups did not differ on network characteristics. Sex differences were found, however, with females experiencing greater stress, anxiety, and depression than males. There were no differences between prebirth and postbirth females on these measures. Stress and maladjustment scores were more strongly related for postbirth females than for the other subgroups. Marital adjustment was significantly related to stress and other maladjustment measures for postbirth males and females. In general, the buffering hypotheses for the social network variables were not supported. However, social network size did demonstrate a pure buffering effect amongst postbirth females.

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In general, findings for postpartum groups did not differ on network characteristics. Sex differences were found, however, with females experiencing greater stress, anxiety, and depression than males. There were no differences between prebirth and postbirth females on these measures. Stress and readjustment scores were more strongly related for postbirth females than for the other subgroups. Marital adjustment was significantly related to stress and other readjustment measures for postbirth males and females. In general, the buffering hypotheses for the social network variables were not supported. However, social network size did demonstrate a pure buffering effect amongst postbirth females.

and families, to my special mentors of graduate school who
provided excellent training and support. I am grateful to

ACKNOWLEDGMENTS

I would like to extend my heartfelt appreciation to the
following people who have made this study possible:

First, to all of the families who shared their thoughts
and feelings about this special experience.

To my Committee Chairman, Dr. [Name], who, from the beginning, has been a source of support
in social networks, and humor guided me through the process.
To Kevin
and humor guided me through the process.
deeply grateful;

To my co-chair, Dr. [Name], who, from the beginning, has been a source of support
Robin Redner, who, from the beginning, has been a source of support
thoughtful comments and support throughout the process.
supported my efforts and provided a different perspective with their insights.

To those who have great understanding and interest in
my clinical interests throughout my graduate studies -
Lucy Ferguson, Ph.D., John McKinney, Ph.D., Robert Wall,
Ph.D., Elizabeth Seagull, Ph.D., Cyril Worley, M.D., and
Robert Zucker, Ph.D.;

To my family - Kevin, Kelee, and Daniel, for having
shared me with this project over the years, and to my
parents, Irene and Andrew Wong, for their support;

to Kevin

And finally, to my special network of friends who have provided continual caring and concern. Thank you all.

ACKNOWLEDGEMENTS

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To my Committee Chairman, Professor Robert Caldwell, who, from the beginning, shared my enthusiasm and interest in social networks, and whose sense of focus, perspective and humor guided me along each step of the process, I am deeply grateful;

To my committee members, Professors William Davidson, Robin Redner, and Dozier Thornton, who contributed thoughtful comments and suggestions on this project, and who supported my desire to integrate a broader community perspective with a clinical concern;

To those who have given encouragement and respect for my clinical interests throughout my graduate program - Lucy Ferguson, Ph.D., John McKinney, Ph.D., Robert Noll, Ph.D., Elizabeth Seagull, Ph.D., Cyril Worby, M.D., and Robert Zucker, Ph.D.;

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INTRODUCTION

stress. There does appear to be some overlap at times between stressors and stress, or a contagion effect. The transition to parenthood is that time in a family's life course when the couple prepares for and adjusts to the addition of a child. While this process may occur through birth, adoption, or remarriage, this study has focussed on the birth of the first child as the critical event.

The transition to parenthood involves a number of stressors. They may be stage specific stressors, related to the pregnancy and the newborn period. These stressors often include increased financial demands, housing/space problems, drains on emotional and physical resources, changes in interpersonal relationships (marital relationship, other social relationships), and changes in intrapersonal factors (mood, self-esteem). These specific stressors may be compounded by other more general life stressors, such as the death or illness of other relatives or friends, job changes, residential moves. General survey research has shown that with the birth of the first child, families report high levels of experienced stress and drops in levels of happiness and life satisfaction. This has been shown to be especially true for women.

In general, a stressor refers to an environmental condition, or changes in one's social status or social

INTRODUCTION

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The transition to parenthood involves a number of stressors. They may be stage specific stressors, related to the pregnancy and the newborn period. These stressors often include increased responsibility demands, household space problems, strains on existing family resources, changes in interpersonal relationships, other changes in interpersonal factors, and changes in the social support system. These stressors may be compounded by other stressors, such as the death of a family member, the loss of a job, or changes in the family's financial situation. General survey research has shown that with the birth of the first child, families report high levels of experienced stress and drops in levels of happiness and life satisfaction. This has been shown to be especially true for women. In general, a stressor refers to an environmental condition, or changes in one's social status or social

situation that results in strain or distress for the individual. The resultant state will be referred to as stress. There does appear to be some overlap at times between stressors and stress, or a contagion effect.

Role theory suggests that the husband and wife may be experiencing a number of role changes during this period. They may be relinquishing some roles while acquiring the parental role. They may vary in the extent to which they have prepared for the new role of parent.

Research on general life stress and adjustment factors has shown that persons experiencing high stress are prone to have greater physical and psychological distress than persons with lower levels of stress. Social support has been found to be a major mediating factor between high stress and adjustment. Specifically, in regards to new mothers making the transition to parenthood, low social support has been related to pregnancy complications, emotional distress, postpartum depression, and higher maternal rejection scores, especially under conditions of high stress.

While many studies point to the "buffering" role that social support may play for persons under high stress conditions, there are other studies that have found conflicting or contradictory results. A better understanding of exactly what constitutes social support for a given individual under which circumstances is needed.

situation that results in strain or distress for the individual. The resultant state will be referred to as stress. There does appear to be some overlap at times between stressors and stress, or a contagion effect. Role theory suggests that the husband and wife may be experiencing a number of role changes during this period. They may be relinquishing some roles while acquiring the parental role. They vary in the extent to which they have prepared for the new role of parent. Research on parental life stress and adjustment factors has shown that persons experiencing high stress are prone to have greater physical and psychological distress than persons with lower levels of stress. Social support has been found to be a major mediating factor between high stress and adjustment. Specifically, in regards to new mothers, many of the difficulties in parenthood, low social support has been related to pregnancy complications, emotional distress, postpartum depression, and higher maternal rejection scores, especially under conditions of high stress. While many studies point to the "buffering" role that social support may play for persons under high stress conditions, there are other studies that have found conflicting or contradictory results. A better understanding of exactly what constitutes social support for a given individual under which circumstances is needed.

Social network analysis is one methodological approach that may shed further light on understanding the nature of social support. This approach was originally used in anthropology and sociology, and has recently gained widespread application in other areas of the social sciences. In social network analysis, one's field of social contacts is analyzed structurally, interactionally, and chronologically. Hill, 1964). While the theoretical use of this study explored the relationships among stressors, social networks and adjustment for the individual as well as the marital dyad during the prebirth and postbirth phases of the transition to parenthood. Prior to discussing the specific hypotheses that were tested, literature relevant to the study will be reviewed.

large part, differences in the way that the transition to parenthood is defined, as well as the way that the transition is experienced. The transition to parenthood is a period when a couple prepares for and includes a first child in their family. This period may be experienced as a crisis by some, or merely as a stressful transition by others (Spert, 1961; Hobbs, 1965; LeMasters, 1957; Meyerowitz & Feldman, 1964; Rapoport & Rapoport, 1968; Russell, 1974). A number of changes occur, as the dyadic family system readjusts to accommodate a third person. There are changes in roles and

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This study explored the relationships among stressors, social networks and adjustment for the individual as well as the marital dyad during the prebirth and postbirth phases of the transition to parenthood. Prior to discussing the specific hypotheses and data tested, literature relevant to the study will be reviewed.

role expectations within the family unit, as well as with persons outside the family (e.g., friends, etc.). The following sections will discuss the nature of the stressors, Transition to Parenthood Stage

The transition to parenthood is one of the primary family life cycle stages that has been described by family theorists (Duvall, 1962; Glick, 1955; Hill, 1949; Rhodes, 1977; Rodgers & Hill, 1964). While the theoretical usefulness of the family life cycle concept has been accepted, some researchers have questioned its empirical utility to predict or explain variance in families' behaviors (Nock, 1979; Spanier, Sauer, & Larzelere, 1979). Others (Tamir & Antonucci, 1981) have found this variable to be useful in assessing developmental change in families. In large part, differences in findings may be due to differences in the specificity with which the stages are defined, as well as in the dependent variables selected. The transition to parenthood is that period when a couple prepares for and includes a first child in their family. This period may be experienced as a crisis by some, or merely as a stressful transition by others (Dyer, 1963; Hobbs, 1965; LeMasters, 1957; Meyerowitz & Feldman, 1966; Rapoport & Rapoport, 1968; Russell, 1974). A number of changes occur, as the dyadic family system readjusts to accommodate a third person. There are changes in roles and parenthood transition. The 4 of this stage specific

LITERATURE REVIEW

Transition to Parenthood Stage

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role expectations within the family unit, as well as with persons outside the family (relatives, friends, etc.). The following sections will discuss the nature of the stressors, support and adjustment that families may experience during this transition period.

Space allocation in the home may change to meet the Stress

For couples entering parenthood, stress may be experienced in several areas:

1. Anticipatory Stress. There is some evidence suggesting that a period prior to the infant's birth may be experienced as more stressful in certain respects than the period following birth. Fein (1976) studied men experiencing the transition to parenthood and found significant decreases in general anxiety and infant-related anxiety from four weeks prebirth to six weeks postpartum. He speculated that lack of previous experience with young children, and uncertainty about parental role behaviors caused anxiety. Thus, following the infant's birth, as the men participated in the parental role, anxiety levels decreased. This notion of stress related to uncertainty regarding role expectations needs further investigation. This idea has relevance when considering interventions aimed at parenthood preparation.
2. Stress Specific to the Parenthood Transition.

Stress also occurs that is directly related to the parenthood transition. The level of this stage specific

role expectations within the family unit, as well as with persons outside the family (relatives, friends, etc.). The following sections will discuss the nature of the stressors, support and adjustment that families may experience during this transition period.

Stress

For couples entering parenthood, stress may be

experienced in several areas:

1. Anticipatory Stress. There is some evidence suggesting that a period prior to the infant's birth may be experienced

as more stressful in certain respects than the period following birth. For example, primiparous men experiencing the transition to parenthood reported significant decreases in general life satisfaction and increased anxiety from four weeks prebirth to the week postpartum. He speculated that lack of previous experience with young children, and uncertainty about parental role demands caused anxiety. Thus,

following the infant's birth, as the men participated in the parental role, anxiety levels decreased. This notion of stress related to uncertainty regarding role expectations needs further investigation. This idea has relevance when considering interventions aimed at parenthood preparation.

2. Stress Specific to the Parenthood Transition.

Stress also occurs that is directly related to the parenthood transition. The level of this stage specific

stress may vary depending on factors such as the mother's health, and the meaning of the pregnancy for the couple. With the birth, stress may increase, as basic functions of family life expand to meet the infant's needs and constant demands. Eating and sleeping routines may need altering. Space allocation in the home may change to meet the newborn's need for constant care and supervision. Spouses may feel deprived of time and attention as the infant's demands create a drain on their personal resources. The mother may feel less attractive, as her body undergoes physical changes following delivery and, for some, accompanying nursing. Health concerns of the mother or infant may also be present at this time. All of these changes/stress derive from the baby entering the family system (Hobbs, 1965; Miller, 1983).

3. General Life Stress. General life stressors as used in this paper refer to those events that may occur in one's life independent of the baby entering the family system which evoke coping or adaptive behavior. These stressors include job changes, residential moves, deaths or illnesses in family or close friends, and major financial changes. In general populations, these events have been found to be associated with negative change in health, as well as changes in adaptive or coping behaviors (Holmes & Rahe, 1967; Lin, Ensel, Simeone, & Kuo, 1979; see Dean & Lin, 1977, for a review of studies and summary of findings).

stress may vary depending on factors such as the mother's health, and the meaning of the pregnancy for the couple. With the birth, stress may increase, as basic functions of family life expand to meet the infant's needs and constant demands. Eating and sleeping routines may need altering.

Space allocation in the home may change to meet the newborn's need for constant care and supervision. Spouses

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accompanying this new health condition of the mother or

infant may also be viewed as a strain. All of these

changes may lead to the family system's ability to

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associated with negative change in health, as well as

changes in adaptive or coping behaviors (Holmes & Rahe,

1967; Lin, Ensel, Simons, & Kuo, 1979; see Dean & Lin,

1977, for a review of studies and summary of findings).

This area of research has not been without controversy as some researchers have raised questions regarding the validity of these measures, and have theoretically questioned the exact nature of the association between these events and illness (Dohrenwend & Dohrenwend, 1974). At the present time, however, the use of general life events inventories as a measure of stress continue to be used in research in this area.

Gorsuch and Key (1974) found high life change events in the last two trimesters of pregnancy to be positively correlated with abnormalities of pregnancy, parturition, and infant status. Gordon, Kapostins, and Gordon (1965) report that in studies of pregnant women, a direct positive predictive relationship was found between past and present stressors and the degree of the mother's emotional reaction postpartum.

4. Role Changes and Role Conflicts. While role changes (e.g., job change) may also be defined as general life stressors, the major role change to parent, and concomitant changes in other roles affected by the parenthood transition, appear to constitute a major area of stress that occurs at this time. Thus, this particular area is being considered separately here.

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A number of researchers have used role theory to understand and explain the changes that occur during the early parenthood period. Rollins and Cannon (1974) suggest

that it may be the number of roles that an individual occupies rather than the particular family life cycle stage itself which may account for changes in adjustment measures in family life cycle stage studies. Colletta (1981) found that adolescent mothers who were able to break the day's routine (usually by working) were warmer and less rejecting of their infants. Colletta suggests that their participation in more than the parental role was experienced as helpful.

Role conflict is one factor that has been addressed. Rossi (1968) noted that cultural values influence one's definition of the adult role, as well as one's definition of the parental role. Traditionally, for the woman, being a mother and raising children was synonymous with the adult woman's primary role, whereas for the man, his role as worker was his primary adult role, with his role as father secondary. As cultural definitions change, providing alternative role definitions, the individual's role expectations for both the adult and parental role may conflict and problems may arise. On the dyadic level, spouses may have different expectations of the other's roles which may create additional conflict (Chadwick, Albrecht, & Kunz, 1976; Tharp, 1963). Fein (1976) studied couples four weeks before and six weeks after the birth of their first child. He found that men who adjusted to postpartum life with relatively little

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Role conflict is one factor that has been addressed. Rosal (1988) noted that cultural values influence one's definition of the adult role as well as one's definition of the parental role. Interestingly, for the women, being a mother and raising a child was synonymous with the adult woman's primary role, whereas for the men, his role as worker was his primary adult role, with his role as father secondary. As cultural definitions change, providing alternative role definitions, the individual's role expectations for both the adult and parental role may conflict and problems may arise. On the dyadic level, spouses may have different expectations of the other's roles which may create additional conflict (Chadwick, Albrecht, & Kuntz, 1975; Tharp, 1983).

Teln (1975) studied couples four weeks before and six weeks after the birth of their first child. He found that men who adjusted to postpartum life with relatively little

difficulty had adopted either of two roles - the traditional breadwinner or the non-traditional father who shared more equally in childcare and housework. Those who experienced greater difficulty in adjustment were unsure of the extent to which they wanted to be involved with either the childcare or the breadwinner role. The wives of these men also shared this ambivalence or unsureness of role definition. Wandersman, Wandersman, and Kahn (1980) found that self-perceived comfort in one's parental role was more important than equality in division of labor at home in predicting postpartum adjustment. Similar findings were also found in a longitudinal study by Hock (as reported in Power & Parke, 1984). Role conflict/ambiguity thus appears to be associated with poorer adjustment.

Komarovsky and Phillips (1967) looked at the influence of socioeconomic status on role models and role definition. They suggest that middle class mothers may turn to experts, other mothers, and friends as role models while lower class mothers may turn to their parents as a positive reference group. They also suggest that those who are upwardly mobile may reject parental models. Findings by Gordon, Kapostins, and Gordon (1965) support this latter idea. They found that couples whose occupation and education were higher than their parents' occupation and education, tended to have greater difficulty in postpartum adjustment.

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Homans (1950) and others have looked at the influence of social structure and role models and role definition. They suggest that this role definition may turn to expectations, other mothers, and friends as role models while lower class mothers may turn to their parents as a positive reference group. They also suggest that those who are upwardly mobile may reject parental models. Findings by Gordon, Kapostan, and Gordon (1982) support this latter idea. They found that couples whose occupation and education were higher than their parents' occupation and education, tended to have greater difficulty in postpartum adjustment.

Thus, some researchers suggest that the number of roles that one occupies is a major factor influencing adjustment; however, there is no consensus as to the direction of the influence - whether more roles are helpful, or fewer roles. Role conflict is another variable addressed. It may arise in several areas: difficulties between expectations for various roles that one holds (e.g., adult male/female role vs. father/mother role), differences between spouses in their expectations of the other's parental role, and differences in the parental role of one's own parent and the role that one adopts oneself. It appears that the presence of role conflict has been associated with greater difficulty in adjustment.

Stressors discussed have included anticipatory stress, stage specific stress, general life stress, and stress related to the assumption of the parental role. The literature also points to social support as a factor that may help alleviate stress or that may protect or buffer an individual from stressors. This literature will be discussed below.

Social Support/Social Network

To date, most of the clinical research on social networks and individual functioning has looked at the general area of social support and its effect on physical and mental health. Social support has been defined as

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To date, most of the clinical research on social networks and individual functioning has looked at the general area of social support and its effect on physical and mental health. Social support has been defined as

emotional or instrumental assistance, or the helpful, positive aspects of a relationship. It has also been used to refer to the presence of helpful others. In general, in the literature, the definition of social support has remained vague, with inferences made about the helpful impact of certain persons or acts. Hopefully, by using a social network perspective that describes the contacts per se, a better understanding of functionally helpful contacts will emerge.

In the literature, social support has been found to be associated with fewer symptoms of physical and psychological distress for individuals experiencing stressful events (Beels, 1981; Caplan, 1964, 1974; Caplan, Mason, & Kaplan, 1965; Cassel, 1976; Cobb, 1976; LaRocco, House, & French, 1980; Lin, Ensel, Simeone, & Kuo, 1979; Moos & Mitchell, 1982; Turner, 1981).

Specifically with regards to new parents, one's involvement in a network of social relationships has been posited as a major factor mediating between the stressors and changes involved in the parenthood transition and adjustment (Colletta, 1981, 1983; Colletta & Lee, 1983; Gladieux, 1978; Gordon, Kapostins, & Gordon, 1965; Lipson, 1982; Minde, Shosenberg, Marton, Thompson, Ripley, & Burns, 1980; Norbeck & Tilden, 1983; Nuckolls, Cassel, & Kaplan, 1972; Wandersman, Wandersman, & Kahn, 1980). Research in the area of child abuse points to social isolation as one

key characteristic of the abusive family (Cochran & to young Brassard, 1979; Elmer, 1981; Garbarino & Gilliam, 1980; Shapiro, 1979).

Gordon et al. (1965) found that for new mothers "the lack of practical present-day assistance, emotional support, and encouragement appeared to be related to continuing emotional difficulty lasting at least 6 months" (p. 163). Lack of help and support from the husband due to his frequent absence from the home, and the unavailability of close relatives for baby-care help and advice were two significantly important items in predicting postpartum emotional difficulty in their study.

Fein (1976) found that family/relatives' support and work support were important factors in men's postpartum adjustment. Colletta (1981) found adolescent mothers with high levels of support to be more affectionate with their children, while those with low levels tended to be more hostile, indifferent, and rejecting. Emotional assistance from members of one's own family was the most important factor, with emotional assistance from partner or spouse next in importance. Colletta notes:

Without the capacity to develop supportive emotional relationships she is unable to share ambivalent feelings about motherhood, fails to receive reinforcement for her child-rearing practices, and lacks encouragement for her own flagging esteem (p.196).

Rossi (1968) proposes that social isolation may be one factor in new mothers' experience of postpartum distress.

key characteristic of the abusive family (Gochman & Brassard, 1977; Elmer, 1981; Garbarino & Gilliam, 1980; Shapiro, 1979). Gordon et al. (1982) found that for new mothers "the lack of practical present-day assistance, emotional support, and encouragement appeared to be related to continued emotional difficulty lasting at least 6 months" (p. 181). Lack of help and support from the husband due to his frequent absence from the home, and the unavailability of close relatives for day-to-day help and advice were two significantly important items of need during postpartum emotional difficulty (Gordon et al., 1982). Their findings suggest that postpartum work-related stress, lack of support from men's postpartum adjustment, conflictive relationships with mothers which high levels of support and a relationship with their children, women close with new babies tended to be more hostile, indifferent, and rejecting. Emotional assistance from members of one's own family was the most important factor, with emotional assistance from partner or spouse next in importance. Collecta notes: Without the capacity to develop supportive emotional relationships she is unable to share ambivalent feelings about motherhood, fails to receive reinforcement for her child-rearing practices, and lacks encouragement for her own fading esteem (p.194). Rossi (1968) proposes that social isolation may be one factor in new mothers' experience of postpartum distress.

Rhodes (1977) states that parents' capacity to give to young children depends on a responsive caring environment to "refuel" the adults. *her psychiatric population, Brown and Hart* Thus, on both theoretical and empirical levels, social support has been positively related to well-being for a number of different sample populations. Operational definitions of social support vary greatly, however, and there are major questions which remain unanswered regarding the definition of social support, and the nature of the relationship between stress, support, and adjustment (Andrews, Tennant, Hewson, & Vaillant, 1978; Schaefer, Coyne, & Lazarus, 1981; Thoits, 1982).

Not all research findings posit "positive" results from the presence of "helpful" others. Literature investigating the relationship between social support and schizophrenia indicates that the presence of others may constitute stress for the individual. Some early family theorists studied families of schizophrenics and noted overinvolvement and intrusiveness by certain family members that inhibited the schizophrenic patient from disengaging from the family and establishing a separate identity (Brown, Birley, & Wing, 1972; Wynne, Ryckoff, Day, & Hirsch, 1958). Vaughn and Leff (1981) more recently found the best single predictor of the schizophrenic's relapse within nine months after hospital discharge to be the extent to which a key relative with whom the patient was living was overinvolved, intrusive, and made

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repeated attempts to establish contact and offer unsolicited advice. becomes clear that adjustment may occur in a number

of areas. Looking at another psychiatric population, Brown and Harris (1978) studied the relationship between social support and depression in women. They found that social support appeared to "protect" women against depression, however, these "supported" women also tended to experience symptoms of anxiety which the depressed, less supported women tended not to have. Thus, the impact of social support on adjustment may be multidimensional.

The simplistic notion of social support as helpful, or that more support is better, is being reevaluated (McFarlane, Norman, Streiner, & Ray, 1984). The focus of research is shifting from the simple study of social support to the general study of one's social connectedness, one's social network (Hammer, 1981; Mitchell & Trickett, 1980; Wellman, 1981). There has been an increased interest in studying the constraints and stresses associated with network ties, that is, the dysfunctional influences. Horowitz and Wolock (1981) cite issues of obligation, guilt, and dependence as being possible costs involved in relationships. Social network analysis provides a means to operationalize and empirically investigate an individual's social connections and the ways in which they may help or hinder positive adjustment.

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Adjustment

It becomes clear that adjustment may occur in a number of areas, as well as at varying times. In general, most parents experience the transition to parenthood as stressful at times, but find new ways to adjust to the changes, and the family establishes a new equilibrium (Campbell, 1975; Harry, 1976).

Power and Parke (1978) review a number of longitudinal studies investigating the transition to parenthood. They report that mothers' anxiety and depression increased in the first postpartum month until the seventh month at which time symptoms decreased. Husband's conciliatory behavior was also found to lessen at four months postpartum, a time when wives' dependency needs were increasing.

Thus, maladjustment can be defined in a number of ways. On the individual level, it may be the presence of emotional upset (Gordon, Kapostins, & Gordon, 1965), or depression (Colletta, 1981), or anxiety (Fein, 1976). On the interpersonal level, it can be defined as parental rejection (Colletta, 1981), marital maladjustment (Belsky, Spanier, & Rovine, 1983; Campbell, 1974; Nock, 1981; Waldron & Routh, 1981), poor parent-child relationship (Belsky, Gilstrap, & Rovine, 1984). Thus, in assessing maladjustment, it is important to consider the multidimensional nature of the concept, and exactly which dimensions are being selected and examined among individual characteristics for which individuals.

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Thus, adjustment may be defined in a number of ways. On the individual level, it may be the presence of emotional upset (Gordon, Kaperstein, & Gordon, 1985), or depression (Colletta, 1981), or anxiety (Elin, 1975). On the interpersonal level, it can be defined as parental rejection (Colletta, 1981), marital maladjustment (Belsky, Spitzer, & Rovine, 1981; Campbell, 1974; Hock, 1981; Waldron & Routh, 1981), poor parent-child relationship (Belsky, Gilkerson, & Rovine, 1984). Thus, in assessing maladjustment, it is important to consider the multidimensional nature of the concept, and exactly which dimensions are being selected and for which individuals.

As noted above, social network analysis may provide a methodological approach to investigate both the supportive as well as the stress-inducing social influences on a couple as it moves through the transition to parenthood. A brief review of the social network literature will follow with a discussion of specific network variables that may be especially relevant.

Social Network Theory

Social network theory and research was initially carried on in the fields of anthropology and sociology (Barnes, 1954; Mitchell, 1969). Relatively recently, network theory has been used more extensively in social psychology, psychology, and psychiatry (Beels, 1981; Cohen & Sokolovsky, 1980; Gottlieb, 1981; Henderson, 1977; Llamas, Pattison, & Hurd, 1981).

The definition of a social network ranges from the inclusion of all persons an individual may possibly contact/know of by name, to a more limited range of intimates or confidants. In this paper, a social network will refer to those persons with whom an individual reports engaging in activities or exchanges.

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(e.g., SES, sex), types of crises or problems, and network characteristics.

Social network theory describes network variables that are both internal to and external to the system. Internal network characteristics include: structural properties, interactional properties, linkage functions, and subjective qualities. External characteristics include developmental changes in networks over time. These variables will be discussed below.

Internal Network Characteristics

A. Structural Properties

Structural properties or characteristics provide information on the interaction potential within a network. Five characteristics will be discussed: size, density, clusters, network composition, and geographic proximity.

1. Size. Network size, typically the number of persons in contact with the individual, has been the primary focus of social network research. The operational definition of a network contact, as well as data collection methods vary a great deal. The type of contact may be face to face, by telephone, or by written message. The subject may be asked to specify only those persons of importance to him/her, or to list everyone known by name.

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Internal Network Characteristics

A. Structural Properties
 Structural properties of a network provide information about the organization of a network. Five characteristics are used to describe a network: size, density, clustering, network centrality, and geographic proximity. Size is the number of persons in contact with the individual. The operational focus of social network research. The operational definition of a network contact, as well as data collection methods vary a great deal. The type of contact may be face-to-face, by telephone, or by written message. The subject may be asked to specify only those persons of importance to himself, or to list everyone known by name. Research in the fields of psychiatry and psychology have compared the network size of psychiatric clients

populations with that of control groups. In general, size diminishes as severity of emotional impairment increases (Cohen & Sokolovsky, 1978; Froland, Brodsky, Olson, & Stewart, 1979; Hammer, 1980; Henderson, 1977; Mitchell & Trickett, 1980; Sokolovsky, Cohen, Berger, & Geiger, 1978).

In a study comparing networks of normals (lacking psychiatric treatment involvement), neurotics, and schizophrenics, Pattison, DeFrancisco, Wood, Frazier, and Crowder (1975) found psychotics' intimate personal networks to average 4-5 persons, neurotics' networks 10-12 persons, and normals' networks 20-30 persons.

Methodologically, many questions can be raised about the validity and reliability of these findings. Paper and pencil tests were often used to determine the size of the network from self-report. Only on occasion have attempts been made to cross validate information by sampling network persons listed. In addition, many studies have only been interested in the mere existence of a relationship, ignoring its affective quality. Emotional impairment has usually been defined by an individual's participation in a treatment program, thus involving a process of selection. These are just a few of the methodological questions that arise. In addition, there are issues of instrumentation, and interviewer bias (see Abbey, Abramis, & Caplan, 1981, and Sokolovsky & Cohen, 1981, for further discussion of these issues).

populations with that of control groups. In general, size diminishes as severity of emotional impairment increases (Cohen & Sokołowsky, 1978; Froland, Brodsky, Olson, & Stewart, 1979; Hammer, 1980; Henderson, 1977; Mitchell & Trickett, 1980; Sokołowsky, Cohen, Berger, & Geiger, 1978). In a study comparing networks of normals (lacking psychiatric treatment involvement), neurotics, and schizophrenics, Patterson, DeFries, Wood, Frazier, and Crowder (1975) found psychotics' private personal networks to average 4-5 persons, neurotics' networks 10-12 persons, and normals' networks 12-15 persons. Methodologically, this question can be raised about the validity and reliability of these findings. Paper and pencil tests were used to determine the size of the network from self-reports. On no occasion have attempts been made to cross validate information by sampling network persons listed. In addition, many studies have only been interested in the mere existence of a relationship, ignoring its affective quality. Emotional impairment has usually been defined by an individual's participation in a treatment program, thus involving a process of selection. These are just a few of the methodological questions that arise. In addition, there are issues of instrumentation, and interviewer bias (see Abbey, Abramis, & Caplan, 1981, and Sokołowsky & Cohen, 1981, for further discussion of these issues).

2. Density. Density refers to the degree to which members in a network know each other. This variable implies a communication potential within the network. This potential may have either a positive or negative impact. Density is calculated by the formula:

$$\text{Density} = \frac{\# \text{ actual linkages (pairs of people in network that know each other)}}{\# \text{ total possible linkages (maximum number of pairs in network)}}$$

(see Boissevain, 1974; Cubitt, 1973; and Niemeijer, 1973, for more detailed discussions of the density variable). Other terms that have been used synonymously with density are: tightly vs. loosely knit, open vs. closed mesh (Barnes, 1972).

Studies examining density have studied it both at the individual as well as at the dyadic level. On the individual level, Craven and Wellman (1973) found that as density of an individual's network increased, the availability of support and affective, intangible resources from close friends and relatives also increased. This was true especially when trust was an important issue. They speculated that higher density led to increased communication about the concerns and problems of the subject; thus, aid and support were more readily available.

Further studies suggest that the effects of density may be multidimensional. Hirsch (1979) looked at network density for college students taking final exams and found

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Research has shown that density is both at the individual as well as at the group level. On the individual level, Cohen and Williams (1977) found that as density of an individual's network increased, the availability of support and affective, intangible resources from close friends and relatives also increased. This was true especially when trust was an important issue. They speculated that higher density led to increased communication about the concerns and problems of the subject, thus, aid and support were more readily available. Further studies suggest that the effects of density may be multidimensional. Hirsch (1973) looked at network density for college students taking final exams and found

that denser networks were associated with greater quantities of support, but with less satisfying emotional support than the emotional support associated with less dense networks. In subsequent studies, Hirsch (1980) found that high density networks might also be experienced as stressful, or *ant of* unsupportive of change. He looked at two groups of women undergoing major life transitions - recent younger widows, and women over 30 resuming full-time undergraduate studies. In both groups, he found higher density networks to be *st* associated with lower self-esteem, less perceived support and less successful adaptation. He speculated that there was normative pressure to maintain existing roles in highly dense networks, thus making them less supportive in some situations demanding major role changes. Thus, the nature of the role changes and demands may influence the extent to which a dense network is experienced as supportive or *st* stressful.

When the crisis involves a major psychosocial transition in which the individual loses his capacity to fulfill... role obligations (as in long-term unemployment) or loses a crucial member of his support network (as in bereavement of a spouse), a small dense network may entrap the individual within a limited set of normative expectations, information, and social contacts, rather than fulfill his need to make a transition to new social roles (Walker, MacBride, & Vachon, 1977, p. 26).

Bott (1957) was one of the first researchers to look at the combined social network of the marital couple and to use the network concept analytically. She examined the

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When the crisis involves a major psychosocial transition in which the individual loses his capacity to fulfill... role obligations (as in loss of employment) or loses a crucial member of his support network (as in bereavement of a spouse), a small dense network may entrap the individual within a limited set of normative expectations, information, and social contacts, rather than fulfill his need to make a transition to new social roles (Wasker, MacKibben, & Vachon, 1977, p. 36).

Bott (1937) was one of the first researchers to look at the combined social network of the marital couple and to use the network concept analytically. She examined the

relationship between network density of the dyad and conjugal role performance. She found that marital couples with highly connected, close knit social networks had a higher degree of separateness in married role patterns than those in networks that were loose knit and independent of each other. Results of this study have since been questioned (Kapferer, 1973; Turner, 1967).

Kapferer (1973) examined the separate networks of spouses in two urban African families. Despite the fact that the size of the networks and joint densities were roughly comparable, the pattern of role relationships was different. This difference was explained by other network features: the degree of clustering, and the degree of cross-linkages (extent to which the spouses were directly linked to the same individuals in the other's networks, and the extent to which network members in one spouse's network were linked to those in the other's network).

Several researchers have further differentiated density into measures that describe densities of different areas of the family's network. In Hirsch's study of women in role transition (1980), he examined a density factor termed the nuclear family-friendship (NF:F) boundary. This is the number of friends outside the family known by a spouse and/or child in the family as a proportion of the total number of possible relationships. (Oliveri and Reiss (1981) called this the degree of shared connection.) Hirsch found

relationship between network density of the dyad and conjugal role performance. She found that marital couples with highly connected, close knit social networks had a higher degree of separateness in married role patterns than those in networks that were loose knit and independent of each other. Results of this study have since been questioned (Kapler, 1973; Turner, 1987).

and Kapler (1973) examined the separate networks of spouses in two urban African families. Despite the fact that the size of the networks and their densities were roughly comparable, the degree of role relationships was different. The degree of role relationships was directly related to the degree of network density. Spouses were directly cross-linked in the network of one spouse's network, and the extent of role relationships in one spouse's network were linked to the degree of network density.

Several researchers have further differentiated density into measures that describe families of different sizes of the family's network. In Nirsch's study of women in role transition (1980), he examined a density factor formed the nuclear family-friendship (NFF) boundary. This is the number of friends outside the family known by a spouse and/or child in the family as a proportion of the total number of possible relationships. (Oliver and Nirsch 1987) called this the degree of shared connection. Nirsch found

that women with denser NF:F boundaries had greater symptomatology, poorer mood, and lower self esteem than those with less dense NF:F boundaries. He explained this relationship by referring to the problems the women in his samples were facing. They were looking to the establishment of new roles outside the family sphere, and thus, the lower density boundary may have been more supportive, or less constraining, as they made that transition.

For the individual making the transition to parenthood, the focus of the tasks is primarily within the family, thus, a denser NF:F boundary may be more beneficial. Moos and Mitchell (1982) suggest that support may be needed where the source of stress is; thus, familial stresses and strains may be most affected by sources of support in the family, or extended family.

Hirsch (1981) comments that major life changes call for developing reinforcing social roles and activities that are appropriate to the current life circumstances. For persons experiencing the transition to parenthood, networks that are shared by family members may be more supportive of the new family-oriented task demands. This idea is supported in research by Fein (1976) where he found that after the birth of children men became more family centered and saw the family as the primary source of happiness.

13. Clusters. A structural variable closely related to density is number of clusters. A cluster is a group of

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For the individual making the transition to parenthood, the focus of the tasks is primarily within the family, thus, a denser N:F boundary may be more facilitative. Macc and Mitchell (1983) suggest that support may be needed where the source of stress is within the family and retains may be most affected by support in the family, or extended family.

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individuals in one's network having a greater density of interconnections with each other than any of them has with others (Hammer, 1980). Clusters are often found in particular activity fields, for example, at work, or in voluntary associations. Hammer (1981) notes that a typical network has 5-6 clusters.

In general, research findings point to a positive association between involvement in many clusters outside the family and a high level of functioning in daily life. Hammer found schizophrenics' networks to have fewer clusters, fewer connections between members of different clusters (spans), and more members supported only by the subject when compared with normals' networks.

Straus (1980) looked at persons from the general population experiencing high levels of stress and studied rate of child abuse. He found that those participating in a number of different activities had average or lower than average rates of abuse than those who did not.

In a study of networks of the general population, Phillips (1981) found the number of activities in which subjects were involved was the best predictor of well being (avowed happiness) for women. (Network size was the best predictor for men.) She also called this variable, "range of socializing." Gove and Geerken (as quoted in Phillips, 1981) found that women with young children tended to have higher levels of psychiatric symptomatology than women

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In general, research findings point to a positive association between involvement in many clusters outside the family and a high level of functioning in daily life. Hammer found that individuals who are active in different clusters, have more positive mental health than those who are not. This finding is consistent with the idea that clusters (apart from the family) are important only by the subject who participates in them.

Stress is also related to involvement in the general population. In a study of networks of the general population, Phillips (1981) found the number of activities in which subjects were involved was the best predictor of well-being (adjusted happiness) for women. (Network size was the best predictor for men.) She also called this variable "range of socializing." Gove and Gesken (as quoted in Phillips, 1981) found that women with young children tended to have higher levels of psychiatric symptomatology than women

without young children. They suggest that having more than one social context in which an individual participates, such as work in addition to home, provides alternative sources for rewarding social interactions.

4. Network Composition. Two structural variables that also merit attention concern the composition of the network: the kin:non-kin ratio, and the presence of peers in the same family life cycle stage.

Kin:Non-Kin Ratio. The ratio of kin:non-kin has been examined in several social network analyses. Pattison, DeFrancisco, Wood, Frazier, and Crowder (1975) found schizophrenics' networks to be composed primarily of family members. Straus (1980) found that among persons experiencing a high level of stress, those whose networks were comprised primarily of kin had a high probability of severe domestic violence.

Often, network density and kin ratio are confounded, given the fact that family members are apt to know one another. Network size may also affect the ratio, in particular, as size decreases. It is important to keep in mind that these studies report associations between factors and do not imply causation. Given the obligatory nature of kinship ties, family may be the only network members who are available to provide long-term assistance. Richardson and Kagan (1979 APA paper cited in Gottlieb) and Belsky and

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Rovine (1984) found greater contact with families of origin around the onset of the parenting experience.

Peer Group/Same Family Life Cycle Stage. Network members who are also experiencing the transition to parenthood, or who have preschool children, may provide important, supportive network functions for new parents.

Litwak and Szelenyi (1969) comment that friendship is often based on similarities in sex, age, stage of the family life cycle, income, and education. They see the role of friends as helping persons to cope with changing life conditions.

Theoretically, the literature on social support suggests that for persons undergoing transitions, social support may be limited by the extent to which others in their networks can identify with and empathize with their situation (White, 1974, as cited in Wandersman, Wandersman, & Kahn, 1980).

New parents need a reference group to provide information, skills and appropriate norms. This is most easily found in one's own extended family or in a peer group of other parents. While other parents may be similarly stressed, the perception of one's own experiences as normative helps affirm one's self-esteem and identity as a parent.

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Theoretical models of social support suggest that in addition to family, friends, social support may be important in the transition to parenthood. Their networks can identify with and negotiate with their situation (White, 1978; Litwak and Szelenyi, 1989; Wundersman, Kahn, 1980).

New parents need a reference group to provide information, skills and appropriate norms. This is most easily found in one's own extended family or in a peer group of other parents. While other parents may be similarly assessed, the perception of one's own experiences as normative helps affirm one's self-esteem and identity as a parent. In the studies reported above, Richardson and Kagan (1979) and Belsky and Kovine (1984) found changes in network

composition towards those persons with similar experiences and families with preschool children.

Gladieux (1978) reports that satisfaction with the pregnancy experience for mothers in their second trimester was associated with networks comprised of other pregnant mothers. In the third trimester, of importance were persons who had already gone through the birth experience, other parents who could serve as role referents. For men, other parents were important network members throughout the three trimesters of pregnancy.

Thus, it would be expected that presence of others in the same family life cycle stage would be experienced as supportive and would facilitate adjustment for new parents.

5. Geographic Proximity. Geographic proximity refers to the actual distance between residences of network members. This variable assumes importance in conjunction with a consideration of: (a) type of need (emergent, long or short term); (b) availability of resources to contact members (money, time, effort); and (c) availability of means of communication and transportation.

For the new parent, a number of different demands may face him/her ranging from the concrete tasks of feeding, cleaning diapers, to intangible issues such as loss of one's sense of freedom, independence, or feeling older.

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Thus, it would be expected for members of others in the same family to be experienced as supportive and helpful in adjusting to the new parents.

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As related to above, Gladieux and Stelmach (1978) found that in general, neighbors or family were utilized for short

term emergencies with family being relied upon for long term problems. Proximity of family and close friends may be important for new parents who are in need of respite child care, day to day emotional support, and opportunities to socialize that do not require much effort (time, energy), given the continual drain on the parents' resources by the infant.

Neighbors and relatives in the area may be particularly important for the new parent who may be confined to the house to accommodate the infant's eating and sleeping schedule. This becomes especially true for families with minimal financial resources with which they can hire caretakers, or access other social and material resources that are available farther away.

Belsky and Rovine (1984) looked at proximity of a new parent's family of origin in relation to the provision of childcare services, material and emotional support, and quantity of contact. They found services and contact affected by proximity, but not material and emotional support. Their sample population was predominantly white, middle class with an average family income of \$20,560. The provision of material or financial support may have enabled the young family to acquire child care services through other means. Clearly, the socioeconomic status of the family is an important factor influencing network involvement.

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Neighbors and relatives in the area may be particularly important for the new parent who may be confined to the house to accommodate the infant's eating and sleeping schedule. This becomes especially true for families with minimal financial resources with which they can hire caretakers, or even afford out of pocket material resources that are available locally.

Feisky and Wolf (1971) looked at proximity of a new parent's family in relation to the provision of childcare services, material and emotional support, and quantity of contact. They found services and contact affected by proximity, but not material and emotional support. Their sample population was predominantly white, middle class with an average family income of \$20,260. The provision of material or financial support may have enabled the young family to acquire child care services through other means. Clearly, the socioeconomic status of the family is an important factor influencing network involvement. The network of family and friends may be particularly important for families with low socioeconomic status.

B. Interactional Properties

Two interactional characteristics will be discussed below - single vs. multi-stranded relationships, and reciprocity/directional flow. These characteristics provide information on the nature of the linkage itself.

1. Single-stranded vs. Multi-stranded Linkage. This variable refers to the number of role relations an individual holds with another person (Boissevain, 1974). For example, an individual may relate as a co-worker, a friend, and cousin to the same person. This would be a multi-stranded linkage.

Kapferer (1973) used the terms uniplex vs. multiplex relations. He focused on a slightly different aspect of the exchange, namely, the variety of exchange contents present in an interaction, for example, conversation, joking behavior, job, or cash assistance. While this variable differs slightly from the concept focusing on the role relations, functionally they may operate in similar ways. Often, the particular exchange reflects the role relationship assumed by the individuals.

Hirsch (1980) used a definition of multidimensionality that referred to the number of different types of activities the subject engaged in with a particular person. He found multidimensionality of friendships to be significantly associated with better mental health in his studies of recent widows and older women returning to college. He also

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Kaplan (1971) distinguished between two types of relationships. He referred to the relationship aspect of the exchange as the "role" and the relationship as the "person" in an individual's life. In this sense, the relationship is behavior, and the role is the person. While this variable differs slightly from the concept of linkage on the role relations, functionally they may operate in similar ways. Often, the particular exchange reflects the role relationship assumed by the individuals.

Hirsch (1980) used a definition of multidimensionality that referred to the number of different types of activities the subject engaged in with a particular person. He found multidimensionality of relationships to be significantly associated with better mental health in his studies of recent widows and older women returning to college. He also

found it to be an important source of network satisfaction in his earlier study of college students taking finals (1979). Thus, the concept of range of a relationship has yet to be consensually defined.

Theoretically, researchers have speculated on other aspects of this variable:

There is a tendency for single-stranded relations to become many-stranded if they persist over time, and for many-stranded relations to be stronger than single-stranded ones, in the sense that one strand-role-reinforces the others ... where a many-stranded relationship exists between two persons, there is greater accessibility, and thus response to pressure, than is the case in a single-stranded relation (Boissevain, 1974, pp. 30, 32).

Kapferer suggests that multiplex relationships tend to be more friendly and confidential than uniplex relationships; however, he provides no supporting evidence.

Relationships that involve a number of role relations or a variety of contents may exert pressures of a stressful nature in certain circumstances, as Boissevain (1974) suggests, and they may also be helpful or supportive in other circumstances, as Hirsch (1980) suggests. For the individual entering parenthood, a multi-stranded relationship may be experienced as supportive during the transition, due to the fact that the relationship is not based solely on one activity field, and thus it may support one's self-esteem in other roles. However, once the parental role is assumed, the new demands and obligations may require different types of support. If a parent feels

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There is a tendency for single-stranded relations to become many-stranded if they persist over time, and for many-stranded relations to be interpreted as single-stranded ones. In the sense that one strand-reinforces the others... while a many-stranded relationship exists between two persons, there is greater accessibility and the response to pressure than in the case of a single-stranded relation (Borzevskii, 1974, p. 10).

Earlier studies have shown that relationships tend to

be more costly in terms of time and energy for single-stranded relationships than for many-stranded relationships, and that the latter are more resilient to supporting evidence.

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may require different types of support. If a parent feels

impulses to beat the child, and would like to talk about the anger and frustrations, the parent may not want to contact a friend who, for example, is also a member of the same church that the parent attends, for fear that such information would be passed on, and/or one's reputation in this other setting might be affected. A friend who has never parented a child may be perceived as less helpful than one who has shared similar experiences. Couples in the prebirth period and the postbirth period may experience different types of linkages as supportive.

More research is needed on the impact of multidimensional relationships and the nature of the role strands involved. A particular linkage may have positive effects on adjustment if one role strand is congruent with the new primary role which is being adopted.

2. Reciprocity/Directional Flow of the Exchange. This variable has been used to refer both to the initiator of the exchange as well as to the flow of the exchange content. The directional flow may be reciprocal, of an even or complementary nature, or non-reciprocal/unidirected. This variable gives information on the equality of power or prestige, which might be assumed to be linked to the flow of the exchange.

As individuals move into the new role of parent, the extent to which reciprocity in support is available from family, advice, help, and assistance may be available from family, professionals and friends. The new parent is often the

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As individuals move into the new role of parent, advice, help, and assistance may be available from family, professionals and friends. The new parent is often one

recipient. At some point, however, it may be important for the new parent to experience a sense of competence in parenting, and to share her own advice and skills. This demands greater reciprocity in relationships. It is here where peer groups may be most functional. (See literature on self-help groups, and literature on competence development, White (1979)).

Theoretically, the growth of competence demands interactions of a reciprocal nature:

One of the most consistent findings in this as yet small literature is that persons lacking reciprocal relationships are less likely to experience satisfaction and to function effectively. Not only do individuals need to have support available from their peers, they also need to feel as if they are important providers of social support to others within their networks (Mitchell & Trickett, 1980, p. 39).

Tolsdorf (1976) found psychiatric subjects' network members to be in more controlling and dominant positions, whereas those in medical patients' networks tended to be on equal standing in the exchange of support, advice, and feedback. Froland, Brodsky, Olson, and Stewart (1979) also found increasingly less mutuality in helping exchanges as psychiatric impairment increased. Cohen and Sokolovsky (1981) found reciprocity in relationships to be positively associated with feelings of life satisfaction among indigent elderly and ex-mental patients.

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Tolson (1979) found reciprocal subjects' network members to be in more controlling and dominant positions, whereas those in reciprocal patients' networks tended to be on equal standing in the exchange of support, advice, and feedback. Froland, Brodsky, Olson, and Stewart (1979) also found increasingly less mutuality in helping exchanges as psychiatric impairment increased. Cohen and Sokolovsky (1981) found reciprocity in relationships to be positively associated with feelings of life satisfaction among indigent elderly and ex-mental patients.

The extent to which reciprocity in relationships is positively associated with an individual's feelings of

adjustment in the transition to parenthood needs to be further explored.

C. Linkage Function.

Linkage function refers to the content exchange and the value of that content for a particular individual. The content may be material or non-material. The exchange may be positively or negatively valued. Often the definition of the content has been confounded with the value that the content may have for the individual. For example, a mother-in-law's advice on how to care for the infant may be considered helpful and supportive, or it may also be seen as critical and meddling. This introduces a strong subjective element into the definition of a particular function. Greater clarity of terms is needed in studies looking at functions with an acknowledgement of the values implied.

Theorists have posited varying numbers of functions. Some positive functions include: support, advice, feedback (Tolsdorf, 1976); emotionally sustaining behaviors, problem solving, indirect personal influence, environmental action (Gottlieb, 1976); emotional, esteem, and instrumental support (Wandersman, Wandersman, & Kahn, 1980); social companionship, emotional support, cognitive guidance, material aid and services, social regulation, reaffirmation of role obligations (Moos & Mitchell, 1982).

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Hirsch (1980) looked at five different functions in his studies of women undergoing life transitions: cognitive

guidance (information, advice, explanation), social reinforcement (praise or criticism), tangible assistance (provided or denied), socializing, and emotional support (made one feel better or worse when already feeling upset or under pressure). Although these categories may imply positive functions, he attempted to include negative functions as well in the operational definitions employed. He found cognitive guidance to be the most significant function associated with better mental health for these women.

Very little has been written on negative linkage functions per se, although some researchers have attempted to include negative aspects of exchanges in the functions, as described above. As noted above, family theorists studying schizophrenics and their families have identified negative interactions that are covert, subtle, and often idiosyncratic to particular families (Vaughn & Leff, 1981). Other more ostensible functions would include overt aggressive behaviors, either physically or emotionally, and exchanges that clearly devalue, undermine, and lower one's sense of self-esteem and level of competence.

While it would appear unlikely that individuals would choose to maintain a relationship that functioned primarily in a negative fashion, there may be other benefits not readily discernible. Oftentimes, network members are not freely chosen nor excluded, and contact with them is often

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unavoidable. Family members are a prime example. They are often persons upon whom one may be highly dependent in times of extreme need or stress. Although the interaction may function negatively during a particular period of time, it may be difficult to terminate due to the "positive" functions provided at other times (e.g., financial loans, sense of belonging to a family, avoidance of a situation that is perceived as more painful, such as loss of love). During the transition to parenthood, extended family members often become more involved in the couple's lives (Belsky & Rovine, 1984). While this may be experienced as supportive, there is also the potential for more negative interactions or stress at this time.

In Pattison, DeFrancisco, Wood, Frazier, and Crowder's (1975) study comparing controls, neurotics, and schizophrenics, differences were found in affective ratings attributed to network relationships. The control group gave positive affective ratings to all network members; the neurotic group rated members lower in general, including several negative relationships in their networks; the psychotic group assessed their network relationships as uniformly ambivalent (both positive and negative). The extent to which relationships are experienced as positive or negative by the subject may be influenced by the individual's present state of adjustment and his/her attitude about network support as well as by others'

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behaviors. This will be discussed more fully in the next section. In studying the tasks facing couples becoming parents, it would appear that tangible assistance in the form of childcare advice and respite childcare would be important, as well as emotional support for the parent in the new role. The relative importance of each type of support for new, or parents remains to be assessed.

D. Subjective/Attitudinal Factors

This variable refers to the individual's attitude towards help seeking in general, as well as to the specific norms of behavior regarding social relationships at particular life cycle stages (Garrison, 1978). New parents may have general attitudes about help seeking - when and from whom they may seek help, and the obligations that inhere in that assistance. They may also have specific attitudes about help seeking during the transition to parenthood, for example, the roles of grandparents and in-laws, how much help, advice, or visiting is expected and experienced as supportive and how much may be experienced as intrusive or overinvolved. Each individual may come into the parenting experience with a different set of values and attitudes. Lack of congruence of such attitudes between the spouses may create another source of stress (as noted above under congruence of network styles).

Sex and socioeconomic status are two factors that may influence one's attitudes and expectations regarding social relationships. These variables will be discussed below under a separate section.

One question that arises is whether an individual's attitudes about social relationships constitute a general perspective that remains constant over one's life course, or whether they are highly changeable, reactive to other variables, both intrapersonal as well as environmental. Of interest with this sample population is whether the parenthood transition affects one's general level of network needs, and feelings about different types of contacts.

Tolsdorf (1976) described two basic network orientations in his study comparing networks of psychiatrically and medically hospitalized patients. He found the psychiatrically hospitalized sample to have a negative network orientation, that is, "a set of expectations or beliefs that it is inadvisable, impossible, useless or potentially dangerous to draw on network resources" (p. 413). On the other hand, the medically hospitalized patients had a positive orientation, "a set of beliefs or expectations held by the subjects that it is safe, advisable, and in some cases necessary to confide in the social network and draw on it for advice, support, and feedback in a stress situation" (p. 413).

Tolsdorf noted that the negative orientation appeared to precede the onset of psychiatric symptoms, often to early childhood, and was thus a general orientation that was relatively stable.

Maluccio (1979) studied clients in a family service agency and compared their perceptions of available network support and help at the beginning and at the end of treatment. He found that clients' evaluations changed from one of dissatisfaction with their networks to a more positive perception of them, as well as of the help that they had received from them previously. These results lend support to the notion that network orientations may fluctuate over time. In a national survey of families at seven different family life cycle stages (ranging from single or married adults to parents of children over age 17), Tamir and Antonucci (1981) found adults in the early stages of the family life cycle to use social supports more frequently than at other stages; however, they were less satisfied with their social support. Further research is needed on changes in attitudes towards networks as they relate to the match of needs with resources.

The temporal factor will be the next social network variable to be addressed. This variable differs from the previously discussed factors in that it is exogenous to the network system itself.

External Network Characteristics

A. Temporal Factors

In some of the studies reported above examining attitudinal factors, it appeared that perceptions of network support and attitudes about networks changed over time. Some researchers have studied network changes over time.

Pattison, DeFrancisco, Wood, Frazier, and Crowder (1975) found the schizophrenic's network to shrink about the time of the first psychotic episode and to become increasingly smaller until it was very dense and heavily composed of family members.

Lipton, Cohen, Fischer and Katz (1981) compared networks of schizophrenics at their first hospital admission with those who had had multiple admissions, and found the former to have larger more interconnected networks with a greater percentage of multiplex and nondependent links. They concluded that major network changes came after hospitalization and that small impoverished networks were not necessarily a stable network type for the schizophrenic.

These studies support the notion that networks may change over time, depending on other variables, such as crises or transitions. The exact nature of those changes remains to be investigated. In studying the networks of couples experiencing the transition to parenthood at two points in time (prior to the infant's birth, and following birth), information on different network configurations may

be gained. Given the cross-sectional design of the present study, inferences about such changes are limited, but may point to areas for further longitudinal research.

Intervening Variables Affecting Social Networks

The following two variables to be discussed - sex and socioeconomic status - are independent variables that have been found to influence network needs and involvement.

Socioeconomic Status (SES). There is evidence that different socioeconomic classes have different network structures and/or patterns of relating. Poole and Kochen (1978) compared blue collar workers, white collar workers, and professionals, and found blue collar workers to have small, compact networks with considerable stability, while professionals tended to have networks scattered over a large geographical area with a small core of persons with whom they were in frequent contact. White collar workers had network structures between those two models. These findings are similar to those of Litwak and Szelenyi (1969).

Litwak and Szelenyi (1969) found that persons who were highly educated, managerial, or professional, were most likely to use neighbors for short term emergencies and family for long term problems. Other occupational groups used family and neighbors equally for short term problems and family more often for long term.

Thus, it may be expected that for those persons in high SES groups, network support around the parenthood transition may be less available and/or of shorter duration than for persons in lower SES groups. It is also expected that upward mobility may be associated with conflicting values and attitudes regarding network utilization, resulting in greater stress and difficulty in adjustment.

Sex. One's sex also appears to influence one's network style and needs. Phillips (1981) found network size to be the best predictor of well being for men while range of socializing/clusters was the best predictor for women.

Tamir and Antonucci (1981) found sex differences in self-perception, motivation, and social support at different family life cycle stages.

Ryder (1973), Waldron and Routh (1981), and Steffensmeier (1982) found that women experienced more difficulty in the transition to parenthood than men. Fein (1976) found that men experienced the prebirth period with greater anxiety and desire for emotional support than the newborn period, suggesting the possibility that degree of difficulty may vary for the sexes within the transition itself.

Summary of Network Variables

A brief summary of some of the findings on social network variables follows. Looking at network size,

researchers have generally found emotional dysfunction to be negatively correlated with network size - the greater the impairment, the smaller the network.

Studies of network density have found conflicting results. In some studies, as individual network density increased, support and affective, intangible resources increased. In other studies, high density networks were associated with lower self-esteem, less perceived support, and less successful adaptation. Variables such as type of problem, type of role change, and sample population were hypothesized to be important factors influencing study results. A dense nuclear family:friendship boundary (one density measure) was proposed as being beneficial to supporting roles within the family.

In research on network clusters, a positive association was found between number of clusters in one's network (involvement in different social contexts) and level of functioning.

In regards to network composition, studies looking at kin:non-kin ratio point to a positive association between dysfunction and kin ratio, such that persons with a high level of dysfunction also tended to have networks with a high kin:non-kin ratio. However, in studies of families in the parenthood transition, increased contact with kin during the transition period was characteristic and was associated

with an increase in material and emotional support. There is also evidence suggesting a positive contribution to adjustment by the presence of peers/persons in the same family life cycle stage in one's social network.

Geographic proximity of network members appears to be important when considering needs that may be emergent or immediate in nature, and/or limited financial resources and means of communication and transportation. Close proximity appears critical when means of contacting network members are limited.

Multidimensionality of relationships has been positively associated with adjustment. However, age of the relationship and focus of role change appear to be intervening variables.

Low levels of reciprocity in relationships have been associated with greater psychiatric impairment, while higher levels have been associated with feelings of life satisfaction in some studies.

Linkage functions include material and non-material exchanges and may impact positively or negatively on the individual.

Research on individuals' attitudes about help-seeking and network resources point to an association between emotional impairment and negative attitudes about network resources and utilization. There are conflicting views on

whether these attitudes are relatively stable over time, or fluctuate in response to other factors.

STATEMENT OF PROBLEM AND HYPOTHESES

The transition to parenthood was defined in this study as that period during which a couple prepares for the birth of their first child and adjusts to the addition of the new family member. The period was divided into two phases: the pregnancy phase which is preparatory, and the newborn/infant phase which involves active adjustment to the new family member. This is a period of time during which the couple experiences increased stress, demanding an increase in coping skills and resources.

Inadequate coping during this transition might result in mood changes (postpartum depression, anxiety), lowered self-esteem, marital dissatisfaction, and dissatisfaction with one's relationships with others.

The purpose of this study was to examine the role that social network variables played in mediating between stress and adjustment during both phases of the transition to parenthood. Stress was measured in four areas: anticipatory stress, stress specific to the new demands and changes related to the addition of the baby, general life event stress, and role stress (those specific changes in role expectations and behaviors, both for one's self and one's spouse).

Adjustment was evaluated for the individual and the couple. On the individual level, self-esteem, depression, anxiety, and network satisfaction were the primary dependent variables. On the dyadic level, marital adjustment was the primary dependent variable. It was hypothesized that adjustment on both the individual and the dyadic level would be dependent on the number and types of stressors as well as on resources available to meet the specific needs.

It was hypothesized that the role transition to new parent would require network support by role models and/or peers experiencing similar situations who would help the individual to both function in the new role as parent and to feel affirmed in that role. They would also assure the provision of material aid and emotional support. Other network needs would depend on other roles the subject held, and other conflicts or transitions that were being experienced.

It was hypothesized that the phase following the infant's birth would require qualitatively different and quantitatively more network resources than those needed prior to the infant's birth. It was also hypothesized that women would experience the transition more intensely than men. It was expected that those individuals involved in more role changes would have greater difficulty adjusting. The specific hypotheses that were tested follow.

HypothesesSTRESSAnticipatory Stress

1. It was hypothesized that:
the prebirth sample would experience greater anticipatory stress than the postbirth sample;
 - a) males would experience greater anticipatory stress than females;
 - b) prebirth males would experience greater anticipatory stress than prebirth females;
 - c) postbirth males would experience greater anticipatory stress than postbirth females;
 - d) prebirth males would experience greater anticipatory stress than postbirth males;
 - e) prebirth females would experience greater anticipatory stress than postbirth females.

Phase Specific Stress

2. It was hypothesized that:
the postbirth sample would experience greater phase specific stress than the prebirth sample;
 - a) females would experience greater phase specific stress than males;
 - b) prebirth females would experience greater phase specific stress than prebirth males;
 - c) postbirth females would experience greater phase specific stress than postbirth males;
 - d) postbirth females would experience greater phase specific stress than prebirth females;
 - e) postbirth males would experience greater phase specific stress than prebirth males.

General Life Stress

3. It was hypothesized that:
the postbirth sample would experience greater general life stress than the prebirth sample;

- a) females would experience greater general life stress than males;
- b) postbirth females would experience greater general life stress than postbirth males;
- c) there would be no difference in general life stress between prebirth males and prebirth females;
- d) postbirth males would experience greater general life stress than prebirth males;
- e) postbirth females would experience greater general life stress than prebirth females.

Role Stress

- 4. It was hypothesized that:
 - the postbirth sample would experience greater role stress than the prebirth sample;
 - a) females would experience greater role stress than males;
 - b) postbirth females would experience greater role stress than postbirth males;
 - c) there would be no differences in role stress between prebirth males and prebirth females;
 - d) postbirth females would experience greater role stress than prebirth females;
 - e) postbirth males would experience greater role stress than prebirth males.
- 5. It was hypothesized that there would be a negative correlation between the total amount of stress experienced (anticipatory, phase specific, general life, role) and individual adjustment for both prebirth and postbirth samples, males and females.
 - a) The specific contribution of each type of stress to individual adjustment for prebirth males, prebirth females, postbirth males, and postbirth females was examined.
- 6. It was hypothesized that individual adjustment would be positively correlated with marital adjustment. This would hold true for both prebirth and postbirth groups, male and female.

Social Networks

7. It was hypothesized that:
social networks of the postbirth sample would be significantly different along the following dimensions from the prebirth sample.

Structural properties:	smaller size fewer clusters greater density
Composition:	higher proportion kin:non-kin higher proportion same family life cycle
Geographic proximity:	closer proximity
Interactional:	more child care functions lower degree of reciprocity fewer multidimensional relationships

a) any differences between postbirth females' social networks and postbirth males' social networks on these variables were examined;

b) postbirth males' social networks would be significantly different from prebirth males' social networks in the direction as stated above;

c) postbirth females' social networks would be significantly different from prebirth females' social networks in the direction as stated above.

8. It was hypothesized that:
general life stress and phase specific stress would be positively correlated;

a) among high stress individuals, the following network variables would be associated with better adjustment than high stress persons without these variables:

- larger size
- higher density
- denser NF:F boundary
- higher number of clusters
- same family life cycle
- high kin:non-kin ratio
- close geographic proximity
- multidimensionality of relationship including
 - new parent role
- high degree of reciprocity
- more positive network attitudes

b) This relationship (stated above) would be stronger for high stress postbirth individuals than for high stress prebirth individuals.

c) This relationship (stated above) would be stronger for high stress postbirth females than for high stress postbirth males.

9. It was hypothesized that for couples experiencing stress in their relationship (dissimilar perceptions of role performance, dissimilar expectations of parental role), scores would be lower on marital adjustment and satisfaction with spouse's help than for couples with similarities on these variables.
10. It was hypothesized that for couples with high stress scores (anticipatory stress summed, general stress summed, phase specific stress summed, relationship stress summed), the presence of the following social network variables would be positively correlated with marital adjustment and satisfaction with network:

Variables:

high degree of shared connection (# linkages reported
(how much have same network) $\frac{\text{in common}}{\text{total \# linkages}}$)

presence of same family life cycle members in
combined network

high kin:non-kin ratio

a) This relationship would be stronger for high stress postbirth couples than for high stress prebirth couples.

11. It was hypothesized that for individuals experiencing a large number of role changes (high role change stress), the following social network variables would be positively associated with better adjustment and higher network satisfaction than for those individuals with high role change stress without those network variables:

many different clusters
multidimensional relationships
cluster of same family life cycle
low density
large network

METHODS

Subjects

Fifty couples comprised the study population, 25 couples in the prebirth sample (wife 6-9 months pregnant), and 25 couples in the postbirth sample (3-6 months following delivery of first-born child). In the prebirth sample, mean number of months pregnant was eight, and in the postbirth sample, mean age of the baby was 4 1/2 months.

Forty one couples were recruited from Health Central (a local health maintenance organization), five couples came from Expectant Parent Organization, and four couples were from other sources. The use of alternative sources of volunteers beyond Health Central was necessitated by a diminished response rate after a few months of recruitment solely at Health Central. There were no significant differences between prebirth and postbirth groups with regards to source of participants.

In general, the total sample was young, white, and middle class in status. Of 100 participants, 99 were white, and 1 was Hispanic. The groups differed significantly on age, income, and socioeconomic status score (see Table 1). The postbirth group had a mean age that was slightly higher than that for the prebirth group, and males were generally two years older than females. The postbirth group also had

Table 1

Mean Group Differences on Demographic Variables

Variables	Group		
	Prebirth ^a	Postbirth ^a	<u>F</u> ^b
Age (years)	27.12	28.86	4.28 [*]
Living together (years)	3.52	3.92	.87
Socioeconomic status (two factor score)	35.08	27.48	6.12 [*]
Yearly income	\$24,920	\$31,960	6.40 [*]

^an = 50. ^bdf = 1, 98.

^{*}p < .05.

a significantly lower socioeconomic status score than the prebirth group indicating slightly higher social status (Hollingshead & Redlich, 1958). However, both group's scores fell within the same social class (Class III).

Couples had lived together, on the average, for 3 1/2 years, and there were no group differences on this factor. Nearly all families had at least one phone and one car, and lived in areas that they rated as urban or suburban.

Interviewers

Nine interviewers collected all of the data, four men, and five women (including the primary researcher). Aside from the primary researcher, all interviewers were undergraduate students electing this experience for psychology credits. There were no significant differences between groups in the assignment of interviewers.

Procedure

Prebirth couples were initially contacted at one of their birth preparation classes, or through information sheets that were distributed at Health Central. (See Appendix A.) They were informed of the study, its purpose, and invited to participate. For those who volunteered (either at that time or through subsequent phone calls), an appointment time was set up. Following that contact, a phone call was made to confirm the appointment, and to answer any questions the couple may have had. During the interview appointment at the participant's home, consent

forms were signed, and interview items and questionnaires were administered by an interviewer of the same sex. (Copies of the informed consent form and the interview schedule may be found in Appendices B and C.) Interviews of each spouse were conducted in separate rooms to assure privacy and confidentiality, and lasted approximately one to two hours. All couples were offered the book, Infants and Mothers (Brazelton, 1983) for their participation in this study.

Postbirth couples were volunteers recruited from families at Health Central who were informed of the study through available information sheets, other families who were not Health Central members who obtained information on the study through word of mouth or through a newspaper advertisement, or they were families who had volunteered for the prebirth sample but had not been available at that time for the interview. After they contacted the researcher, they were informed of the study, its purpose, and were invited to participate. For those who volunteered, the procedure that followed was identical to that specified above for the prebirth sample population.

Instruments

(Instruments may be found in Appendices D through J.)

The State-Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch, & Lushene, 1970) was used to measure trait anxiety over the previous three month period of time. The STAI-A

scale consists of 20 statements that ask respondents how they have generally felt over the previous period of time. Subjects rate each question on a four point scale. This scale has been found to correlate with other anxiety measures ranging from .75 to .80 for college students.

The Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff, 1977). The CES-D Scale was used to measure symptoms characteristic of depression (sleep and eating disorders, feelings of powerlessness, sadness). There are 20 items which the individual rates on a four point scale reflecting frequency of these symptoms. These items were originally taken from previously developed depression scales. Pilot studies using several different sample groups found high construct validity, and concurrent validity with more lengthy self report scales and clinical ratings. High levels of internal consistency were found with split-half correlations about .77. Test-retest correlations were lower, ranging from .51-.59 with two to eight week intervals between interviews and self-administered retests. This lower correlation may be expected given the fact that the scale is designed to assess current depressive state.

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) was used to measure self-esteem, or self-acceptance. This is a 10 item Guttman scale to which the individual responds on a four point continuum of agreement. This scale has a

coefficient of reproducibility of 92% and a scalability coefficient of 72%. The scale has construct validity as measured by conformity of responses with depressive affect, anxiety, and peer group reputation (high self-esteem associated with high peer group reputation, low depression and low anxiety).

Social Readjustment Rating Scale (Holmes & Rahe, 1967). This scale was used to measure stress in response to general life events over the previous three month period. It consists of 43 events reflecting life changes that have been found to evoke coping or adaptive behavior. Scoring was based on the number of events that were checked by the respondent as having occurred. These items were empirically derived from clinical experience and have been found to be significantly associated with illness onset. They have also been found useful in predicting illness onset (Holmes & Masuda, 1974). As noted earlier, some researchers have questioned the validity of the measure, the undifferentiated nature of the items regarding positive or negative valences, the comprehensiveness of the scale, and the exact nature of the relationship between the events and symptomatology (Brown, 1974). However, life change events measures have previously been used in other studies investigating the stress associated with the transition to parenthood, and therefore this measure was included to provide comparative results (Gorsuch & Key, 1974; Gordon, Kapostins, and Gordon,

1965). Correlations of this measure with the other stress scales were analyzed and will be reported below.

Pregnancy/Postbirth Questionnaire. This questionnaire was used to measure the degree to which an individual was experiencing stress specifically related to the transition to parenthood. This is referred to as phase specific stress. This instrument was based on several items taken from Hobbs' Index of Difficulty in Adjusting to First Child (Hobbs, 1965) and consists of 16 items to which the individual responds on a five point scale reflecting degree to which he/she has been concerned about the area. Four additional items of concern related to the infant's behavior were asked of the postbirth sample. Analyses comparing groups on this particular stress were restricted to using scores only from the 16 item scale.

Hobbs reported a split-half reliability coefficient of .62 for each sex on the original measure. Examining the ability of individual items to discriminate parents who had been independently rated as being in crisis or not, discrimination index values ranged from .25 to 1.00, with items differing greatly for the sexes. Index scores have also been positively correlated with interviewer ratings of parents' adjustment to their child, with correlations of .54 ($p < .003$) for men, and .64 ($p < .006$) for women. The Index has been used by several investigators who have reported findings consistent with those of Hobbs with regards to the

proportion of parents experiencing little, moderate, or severe difficulty in adjusting to their newborn (see Hobbs & Cole, 1976 for a review of studies.)

The Anticipatory Stress Scale. The anticipatory stress measure was designed to obtain information on the extent to which individuals were concerned about changes in the following six month period. This measure consists of a list of six general areas of life to which the individual responds on a five point scale, ranging from no concern to very much concern. This scale was created for the purpose of this study and appears to have face validity as a measure of self reported concern (Appendix C, Question 12).

The Role Stress Scale. This scale was designed to assess the extent to which the individual was experiencing strain due to the different roles occupied, as well as that experienced between self and spouse. The role stress measure was designed to be a composite score reflecting three subscale scores: the number of primary roles the individual occupied (houseperson, worker, student), and the extent of involvement in each (part or fulltime); the degree of role conflict that was reported between real and ideal concepts of self and spouse in these roles; and the difference between spouses on their ideal role concepts. This scale was not a previously researched and standardized instrument and its use was thus subject to preliminary

analyses regarding its validity (Appendix C, Questions 6, 13).

Role Change Stress. This measure was comprised of 14 items from the Social Readjustment Rating Scale which specifically involved changes in family, school, job, community and other social roles (Appendix E, Items 16, 19, 21, 22, 23, 24, 25, 27, 30, 35, 37, 40, 41, 42). While it is subject to the same issues raised with regards to the general life events measures, it was hoped that this score would provide a more specific measure of the range of role changes experienced over the previous three month period.

The Spanier Dyadic Adjustment Scale. This scale was used to measure marital adjustment. There are 32 items, each of which has a six point response scale. The scale has been found to differentiate between married and divorced couples, and has been found to correlate positively with other marital adjustment scales (Spanier, 1976). The total scale has an internal consistency reliability of .96 as ascertained by Cronbach's coefficient alpha.

Relationship Stress. For the purposes of this study, relationship stress was operationalized as difference scores between the spouses on perceptions of present role sharing relationships (child care, housekeeping, employment), and ideal role sharing relationships (Appendix C, Question 13).

Composite Maladjustment and Composite Stress. The maladjustment measure was a composite score comprised of the

following scores: the STAI, the CES-D and the Rosenberg Self Esteem scale. The stress measure was a composite score comprised of the following scores: anticipatory stress, phase specific stress, and general life events stress. To standardize scores and to guard against greater weights granted to some subscales based on number of items, or range of possible responses, each stress and maladjustment subscale score reflected the proportion of score received over total possible score. The composite score was computed by then simply adding the proportions.

Overall Stress Score. The overall stress score was a measure of both the individual's composite stress score and the relationship stress score.

The Social Network Questionnaire. This questionnaire was designed to gather information on the social networks of the sample participants. The items were taken from a number of self-report, interview format questionnaires. Operational definitions of the social network variables that were assessed follow.

Size: the number of network members listed by the respondent and for whom network data were gathered;

Clusters: the number of groups within a network that were comprised of at least three members and within which members had at least 50% of their linkages with other members of the same group; (The Negopy network analysis program was used to assess this variable.)

Density: the proportion of all possible ties that network members were reported to have with each other;

Kin:non-kin ratio: this was the proportion of relatives to non-relatives in the respondent's network;

Proportion of members in the same family life cycle stage: the proportion of members in the same family life cycle stage as listed by the respondent based on the total network size;

Proximity score: the mean score of the proximity ratings of the individual's network members;

Degree of reciprocity: this measure reflected the proportion of the network in which there was shared initiation of the exchanges;

Multidimensionality of the network: this measure reflected the proportion of network members having two or more role relationships with the respondent.

Hypothesis

Anticipated

prebirth scores

than the postbirth

variance, $F(1, 96) = 1.0$

the prebirth scores

postbirth scores

$df=1, 96, p < .05$

were significant.

Tables 2 and 3

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Hypothesis

Phase

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RESULTS

Hypothesis 1

Anticipatory stress. It was hypothesized that the prebirth sample would experience greater anticipatory stress than the postbirth sample. Using a two-way analysis of variance, results tended to support this hypothesis, with the prebirth anticipatory stress scores ($\bar{M}=7.38$) higher than postbirth anticipatory stress scores ($\bar{M}= 5.62$), $F=3.88$, $df=1, 96$, $p=.052$. In particular, prebirth males' scores were significantly higher than postbirth males' scores. Tables 2 and 3 present stress and maladjustment scale mean scores, and significant findings using one-way analyses of variance for all four subgroups and for both sexes. The hypothesis stating that males' scores would be greater than females' scores was not supported.

Hypothesis 2

Phase specific stress. It was hypothesized that the postbirth sample would experience greater phase specific stress than the prebirth sample. This hypothesis was not supported by the data. The hypothesis that females would experience greater phase specific stress than males was supported. There were no significant differences in phase specific stress scores between males and females by group.

Table 2

Means and Standard Deviations of Scores for All Groups^a

Stress Score	Group						Source of Variation	F ^b
	Prebirth		Postbirth		Females	Males		
	Males	Females	Males	Females				
Anticipatory stress	M	7.20	7.56	4.68	6.56		PreM-PostM	4.58*
	<u>SD</u>	3.92	4.73	4.39	4.78			
Phase specific stress	M	12.16	15.76	12.12	18.12			
	<u>SD</u>	6.60	6.92	5.95	9.67			
General life events stress	M	6.60	8.80	6.28	9.68		PostM-PostF	8.04**
	<u>SD</u>	3.32	4.90	3.71	4.71			
Role change stress	M	1.60	1.88	1.76	2.56			
	<u>SD</u>	1.29	1.92	1.42	1.71			
Composite stress	M	.31	.39	.28	.42		PostM-PostF	8.41**
	<u>SD</u>	.12	.16	.14	.20			

Table 2 (cont'd.)

Stress Score	Group						Source of Variation	F ^b
	Prebirth		Postbirth		Males	Females		
	Males	Females	Males	Females				
Adjustment Scale								
Anxiety (STAI)	M	12.56	17.16	14.20	18.68		PreM-PreF	6.26*
	SD	6.83	6.15	6.46	9.18			
Depression (CES-D)	M	8.12	13.72	8.40	12.20		PreM-PreF	16.06***
	SD	3.77	5.88	6.96	7.33			
Rosenberg Self esteem	M	1.16	1.36	.72	1.08			
	SD	1.82	1.25	1.10	1.50			
Marital adjustment (DAS)	M	114.60	114.68	113.92	115.92			
	SD	8.63	9.89	12.11	10.67			
Composite Maladjustment	M	.36	.54	.39	.53		PreM-PreF	10.04**
	SD	.19	.20	.21	.26		PostM-PostF	4.60*

^a $n = 25$. ^b $df = 1, 48$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3
Sex Differences

Stress
Anticipation
Phase specific
General life stress
Role change
Composite
Adjustment
Anxiety (
Depression
Rosenberg Self esteem
Marital adjustment (DAS)
Composite Maladjustment

^a
 $n = 50.$
^{*}
 $p < .01.$

Table 3
Sex Differences in Means and Standard Deviations of Scores

Stress Score		Males ^a	Females ^a	F ^b
Anticipatory stress	<u>M</u>	5.94	7.06	1.53
	<u>SD</u>	4.31	4.73	
Phase specific stress	<u>M</u>	12.14	16.94	10.54 [*]
	<u>SD</u>	6.22	8.40	
General life events stress	<u>M</u>	6.44	9.24	11.21 ^{**}
	<u>SD</u>	3.49	4.77	
Role change stress	<u>M</u>	1.68	2.22	2.82
	<u>SD</u>	1.35	1.83	
Composite stress	<u>M</u>	.30	.41	12.34 ^{**}
	<u>SD</u>	.13	.18	
<u>Adjustment Scale</u>				
Anxiety (STAI)	<u>M</u>	13.38	17.92	9.87 [*]
	<u>SD</u>	6.83	7.77	
Depression (CES-D)	<u>M</u>	8.26	12.96	14.82 ^{**}
	<u>SD</u>	5.54	6.62	
Rosenberg Self esteem	<u>M</u>	.94	1.22	.94
	<u>SD</u>	1.50	1.37	
Marital adjustment (DAS)	<u>M</u>	114.26	115.30	.25
	<u>SD</u>	10.41	10.20	
Composite Maladjustment	<u>M</u>	.38	.54	13.68 ^{**}
	<u>SD</u>	.20	.23	

^an = 50. ^bdf = 1, 98.

^{*}p < .01. ^{**}p < .001.

Hypothesis

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Hypothesis 3

General life stress. It was hypothesized that the postbirth sample would experience greater general life event stress than the prebirth sample. This hypothesis was not supported. The hypothesis that females would experience greater general life stress than males was supported. Furthermore, postbirth females' general life events scores were significantly higher than postbirth males' scores.

Hypothesis 4

Role stress. It was hypothesized that the postbirth group would experience greater role stress than the prebirth group. It was also hypothesized that females would experience greater role stress than males.

As mentioned earlier, this scale was comprised of data from three fairly different types of questions addressing different aspects of role status, and therefore, this scale was subjected to some preliminary analyses to assess its validity as a measure of role stress. An initial attempt was made to factor analyze this measure in order to ascertain if, indeed, it would provide a reasonable measure of a unitary concept of role stress. Using the multiple groups program and entering the predetermined nine role stress items with the other stress and adjustment scores, the role stress factor had a negative alpha and was difficult to interpret. When a blind multiple groups program was run, seven of the nine items formed a group;

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however, only a small proportion of variance was accounted for (.07). Therefore, further analyses using this role stress measure were not performed. Of note is the fact that the anticipatory stress scale, the phase specific stress scale, and the general life events scale, all had fairly high loadings on the stress factor.

Differences between prebirth and postbirth groups on number of primary roles occupied and extent of involvement in them (role demand) were assessed using analysis of variance. There were no significant differences between groups on role demand ($F=2.62$, $df=1$, 96). See Table 4. Table 23 in Appendix K presents data on employment and school status of sample participants.

Hypothesis 5

Stress and maladjustment. A positive correlation was hypothesized between total stress (anticipatory stress, phase specific stress, general life event stress) and total individual maladjustment (anxiety, depression, self esteem) for all subjects. Table 5 displays the results for this hypothesis. Total stress and maladjustment scores were positively correlated for the entire group, $r=.55$ ($p=.001$). This relationship was stronger for the postbirth than the prebirth group, and, within each group, stronger for females than for males. There was a clear progression from a nonsignificant relationship of $r=.20$ for prebirth males to a significant correlation of $r=.74$ for postbirth females.

Table 4
Group Differences

Males
Females
Total^b (Grand Total)

Note. A score was calculated for each of the two groups.

^an = 25 for each group.

Table 5
Correlations

Males
Females
Total^b (Grand Total)

^an = 25 for each group.

^cn = 100 for total.

*p < .05.

Table 4
Group Differences in Role Demand Means

	Group ^a		
	Prebirth	Postbirth	Total ^b (sex)
Males	2.48	2.84	2.66
Females	2.52	2.76	2.64
Total ^b (Group)	2.50	2.80	

Note. A score of 1 = part-time, 2 = full-time status for each of three primary roles.

^a_n = 25 for each subgroup. ^b_n = 50 for each group total.

Table 5
Correlations of Stress with Maladjustment^a

	Prebirth	Postbirth	Total ^b (Sex)
Males	.20	.39 [*]	.30 [*]
Females	.41 [*]	.74 ^{**}	.61 ^{**}
Total ^b (Group)	.39 [*]	.66 ^{**}	.55 ^{c**}

^a_n = 25 for each subgroup. ^b_n = 50 for each group total.

^c_n = 100 for total sample.

^{*}p<.05. ^{**}p<.001.

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Variance of stress measures on maladjustment. Table 6 illustrates the proportion of variance contributed by each stress subscale to the dependent variable of individual maladjustment for the total sample as well as for each subgroup. Anticipatory stress, phase specific stress and general life stress were entered hierarchically in that order in multiple regression analyses. Table 7 displays the intercorrelations among the variables for each subgroup. Table 24 in Appendix K displays the intercorrelations among all the stress and maladjustment subscales for all four subgroups.

Looking at the total group, both anticipatory stress and phase specific stress made significant contributions to the total variance on maladjustment ($R^2 = .40$), with phase specific stress the largest contributor. General life event stress contributed the least.

Examining the subgroups of prebirth males, prebirth females, and postbirth males, total variance accounted for by these three variables was about the same, at $R^2 = .28$ or .29. This doubled for postbirth females, however, with total $R^2 = .59$. Among prebirth males, anticipatory stress appeared to contribute the most variance, however some of this may be shared by phase specific stress, given their relatively high intercorrelation, and comparable correlations with maladjustment. Among prebirth females and

Table 6
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p<.05.

Table 6
Multiple Regression Analysis: Relationship of Stress
Variables to Maladjustment

Group	Stress Measure			
	Anticipatory R ² change	Phase specific R ² change	General life R ² change	Total R ²
Total Group	.16 ^{***}	.23 ^{***}	.00	.40 ^{***}
Prebirth				
Males	.18 [*]	.04	.06	.28
Females	.07	.20 [*]	.02	.29
Postbirth				
Males	.08	.19 [*]	.01	.28
Females	.33 ^{**}	.24 ^{**}	.01	.59 ^{***}

* p<.05. ** p<.01. *** p<.001.

Table 7
Intercorrelations Among Stress Scores and Maladjustment for all Groups

Measure

Table 7
Intercorrelations Among Stress Scores and Maladjustment for all Groups

		Measure		
		Phase specific Stress	General life Stress	Maladjustment
		Prebirth Postbirth	Prebirth Postbirth	Prebirth Postbirth
Anticipatory Stress	Males	.68***	.37*	.09 .20 .42* .28
	Females	.44*	.52**	.41* .71*** .27 .58***
Phase specific Stress	Males		.18	.57*** .43* .51**
	Females		.21	.69*** .52** .72***
General life Stress	Males			-.17 .22
	Females			.25 .66***

* $p < .05$. ** $p < .01$. *** $p < .001$.

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postbirth males, phase specific stress was the primary contributor.

Postbirth females exhibited the most distinct pattern, with the largest proportion of variance accounted for, and high correlations between each measure and maladjustment as well as amongst the measures themselves. It would appear that for postbirth females, anticipatory stress, phase specific stress and general life event stress all contributed substantially to maladjustment.

Hypothesis 6

Individual maladjustment and marital adjustment.

Individual maladjustment and marital adjustment were hypothesized to be negatively correlated for all persons. This hypothesis was supported for the total group ($r = -.31$, $p < .001$). (See Table 8.) Broken down by group, the correlation between maladjustment and marital adjustment was not significant for the prebirth group but moderately strong for the postbirth group ($r = -.41$, $p < .05$). Within the postbirth group, this relationship was stronger for females. A similar pattern is found when the relationship between stress and marital adjustment is examined (Table 9), revealing a significant negative correlation for postbirth females.

Hypothesis 7

Social network variables. It was hypothesized that the social networks of the postbirth sample would be

Table 8
Correlation

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^a_n = 25 for

^c_n = 100 for

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p < .05.

Table 9
Correlation

Males

Females

Total^b (G

^a_n = 25 for

^c_n = 100

*
p < .05.

Table 8
Correlations of Marital Adjustment with Maladjustment^a

	Prebirth	Postbirth	Total ^b (Sex)
Males	-.26	-.43 [*]	-.36 ^{**}
Females	-.13	-.50 ^{**}	-.34 ^{**}
Total ^b (Group)	-.17	-.41 ^{**}	-.31 ^{c***}

^a_n = 25 for each subgroup. ^b_n = 50 for each group total.

^c_n = 100 for total sample.

*_p<.05. **_p<.01. ***_p<.001.

Table 9
Correlations of Stress with Marital Adjustment^a

	Prebirth	Postbirth	Total ^b (Sex)
Males	-.12	-.31	-.23
Females	-.04	-.55 ^{**}	-.29 [*]
Total ^b (Group)	-.02	-.36 ^{**}	-.23 ^{c*}

^a_n = 25 for each subgroup. ^b_n = 50 for each group total.

^c_n = 100 for total sample.

*_p<.05. **_p<.01.

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characterized by: smaller size, fewer clusters, greater density, higher proportion kin:non-kin, higher proportion same family life cycle, closer proximity of members, more informational and emotional child care functions, lower degree of reciprocity, and fewer multidimensional relationships, than networks of the prebirth sample.

Employing two-way analyses of variance, only 3 of the 10 variables assessed differentiated the groups in the predicted direction (see Table 10). The postbirth group's networks were marked by a higher proportion of members in the same family life cycle stage, a greater degree of proximity to network members, and by more exchanges involving praise or criticism related to parenting or child care when compared with the prebirth group's networks. Contrary to prediction, comparisons on network density tended towards the opposite direction, with the prebirth group's mean reflecting greater density than the postbirth group's mean ($F=3.90$, $df=1, 96$, $p=.051$).

Data on sex differences in social network variable mean scores from two-way analyses of variance are displayed in Table 11. Of the three variables showing main effects by group, only the emotional exchange variable also showed significant differences by sex, with females in each subgroup involved in more praise and criticism exchanges around parent/child care functions than males. Females also reported significantly more informational exchanges on

Table 10
Group Differences
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Table 10
Group Differences in Social Network Variables' Means
and Standard Deviations

Variable		Group		F ^a
		Prebirth	Postbirth	
Size	<u>M</u>	18.22	19.96	
	<u>SD</u>	7.49	6.52	
Clusters	<u>M</u>	1.18	1.38	
	<u>SD</u>	.69	.70	
Density	<u>M</u>	.57	.51	
	<u>SD</u>	.18	.15	
Kin:Non-kin Ratio	<u>M</u>	1.48	1.20	
	<u>SD</u>	1.83	.98	
% Same family Life cycle	<u>M</u>	.16	.26	18.23**
	<u>SD</u>	.09	.14	
Proximity	<u>M</u>	2.65	2.82	5.88*
	<u>SD</u>	.37	.35	
Parent emotional Exchange	<u>M</u>	.43	.54	5.93*
	<u>SD</u>	.24	.25	
Parent informational Exchange	<u>M</u>	.54	.59	
	<u>SD</u>	.21	.21	
Reciprocity	<u>M</u>	.57	.56	
	<u>SD</u>	.23	.18	
Multidimensional Relationships	<u>M</u>	.47	.45	
	<u>SD</u>	.30	.25	

^adf = 1, 96.

* p<.05. ** p<.001.

Table 11
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Table 11
Sex Differences in Social Network Variables' Means
and Standard Deviations

Variable		Sex		F ^a
		Males	Females	
Size	<u>M</u>	18.28	18.70	
	<u>SD</u>	5.54	6.29	
Clusters	<u>M</u>	1.42	1.14	4.16*
	<u>SD</u>	.78	.57	
Density	<u>M</u>	.52	.56	
	<u>SD</u>	.17	.16	
Kin:Non-kin Ratio	<u>M</u>	1.34	1.34	
	<u>SD</u>	1.78	1.08	
% Same family Life cycle	<u>M</u>	.22	.21	
	<u>SD</u>	.13	.13	
Proximity	<u>M</u>	2.77	2.71	
	<u>SD</u>	.43	.29	
Parent emotional Exchange	<u>M</u>	.44	.68	19.08**
	<u>SD</u>	.15	.20	
Parent informational Exchange	<u>M</u>	.39	.59	46.54**
	<u>SD</u>	.21	.25	
Reciprocity	<u>M</u>	.56	.57	
	<u>SD</u>	.18	.23	
Multidimensional Relationships	<u>M</u>	.45	.46	
	<u>SD</u>	.29	.27	

^adf = 1, 96.

* p<.05. ** p<.001.

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parent/child concerns than males. The only other difference in network characteristics was that males had a slightly higher number of clusters than females.

Hypothesis 8

General life stress and phase specific stress. The hypothesis that general life stress and phase specific stress would be positively correlated for the entire sample was supported by the data, $r=.51$, $p=.001$. This relationship was significant for the postbirth group and stronger for postbirth females than postbirth males.

Buffering network variables and individual maladjustment. It was hypothesized that among high stress persons, the presence of certain social network variables would "buffer" the effect of stress on adjustment, resulting in lower maladjustment, than for those persons without these network variables. These 10 variables were: larger size, greater density, greater shared network by couple, more clusters, higher proportion network members in the same family life cycle, higher kin:non-kin ratio, closer geographic proximity, greater multidimensionality of relationships, higher degree of reciprocity, and positive network attitudes. In examining this hypothesis, multiple regression analyses were used in order to ascertain the contribution of each network variable to adjustment. Where applicable, subsequent computations were performed to determine the direction of the interaction effects. Thirty

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analyses were run on the total group, examining the direct effects of the network variables, their interactions with stress, and the effects of prebirth/postbirth group status.

In general, the hypotheses of the ameliorative effects of specific social network variables on general adjustment under conditions of high stress were not supported. Looking at analyses on the entire group, only one variable, social network size, showed a pure interaction effect (no significant main effect) in the predicted direction. See Table 12. (These results remained unchanged when further analyses were run, breaking down the composite scales and using the phase specific stress scale as the independent variable, and the subscale scores of anxiety and depression as dependent variables.) Looking at direct effects, only density contributed significantly to the variance, however this was in a direction contrary to that predicted.

It was also hypothesized that the above buffering relationships would be stronger for high stress postbirth persons than for high stress prebirth persons. See Table 13 for these results. Again, size was the only variable to demonstrate a pure interaction effect in the predicted direction, and this was only for the postbirth group. Significant main effects in directions consistent with theory were found for size and density in the prebirth group, and proximity for the postbirth group.

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p<.05

Table 12
Multiple Regression Analysis: The Effects of Stress and
 Social Network Variables on Maladjustment

Total Group ^a			
Network Variable	Stress R^2	Effect	
		Direct R^2 change	Interaction R^2 change
Size	.30 ^{***}	.02	.04 [*]
Density	.30 ^{***}	.05 ^{**}	.01
Shared network	.30 ^{***}	.01	.00
Clusters	.30 ^{***}	.03	.01
Same family life cycle	.30 ^{***}	.00	.00
Kin:non-kin ratio	.30 ^{***}	.01	.00
Proximity	.30 ^{***}	.03	.01
Multidimensional Relationships	.30 ^{***}	.00	.00
Reciprocity	.30 ^{***}	.00	.01
Network attitudes	.30 ^{***}	.01	.01

^a $\underline{n} = 100.$

* $p < .05.$ ** $p < .01.$ *** $p < .001.$

Table 13
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Table 13
Group Differences: The Effects of Stress and
Social Network Variables on Maladjustment

Network Variable	Group ^a	Stress R ²	Effect	
			Direct R ² change	Interaction R ² change
Size	Prebirth	.15**	.07*	.01*
	Postbirth	.43***	.00	.07*
Density	Prebirth	.15**	.09*	.00*
	Postbirth	.43***	.02	.06*
Shared network	Prebirth	.15**	.01	.00
	Postbirth	.43***	.00	.00
Clusters	Prebirth	.15**	.06	.05
	Postbirth	.43***	.01	.01
Same family life cycle	Prebirth	.15**	.01	.04
	Postbirth	.43***	.01	.01
Kin:non-kin ratio	Prebirth	.15**	.04	.03
	Postbirth	.43***	.00	.00
Proximity	Prebirth	.15**	.00*	--
	Postbirth	.43***	.07*	.02
Multidimensional Relationships	Prebirth	.15**	.02	.02
	Postbirth	.43***	.02	.00
Reciprocity	Prebirth	.15**	.00	.02
	Postbirth	.43***	.00	.00
Network attitudes	Prebirth	.15**	.03	.00
	Postbirth	.43***	.01	.02

^a_n = 50.

* p<.05. ** p<.01. *** p<.001.

Table 14
Prebirth
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*
 $p < .05$

Table 14
Prebirth Group Differences: The Effects of Stress and
Social Network Variables on Maladjustment

Network Variable	Prebirth Group ^a	Stress R ²	Effect	
			Direct R ² change	Interaction R ² change
Size	Males	.04*	.00**	.08
	Females	.16*	.23**	.04
Density	Males	.04*	.03**	.00
	Females	.16*	.24**	.01
Shared network	Males	.04*	.02	.00
	Females	.16*	.01	.02
Clusters	Males	.04*	.03	.11
	Females	.16*	.08	.00
Same family life cycle	Males	.04*	.03	.21*
	Females	.16*	.00	.00
Kin:non-kin ratio	Males	.04*	.01**	.02
	Females	.16*	.24**	.02
Proximity	Males	.04*	.00	.00
	Females	.16*	.02	--
Multidimensional Relationships	Males	.04*	.03	.08
	Females	.16*	.04	.01
Reciprocity	Males	.04*	.02	.00
	Females	.16*	.00	.00
Network attitudes	Males	.04*	.15	.01
	Females	.16*	.00	.00

^a_n = 25.

* p<.05. ** p<.01.

Table 15
Postbirth
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 $p < .05$

Table 15
Postbirth Group Differences: The Effects of Stress and
Social Network Variables on Maladjustment

Network Variable	Postbirth Group ^a	Stress R ²	Effect	
			Direct R ² change	Interaction R ² change
Size	Males	.15***	.01	.05**
	Females	.55	.00	.18**
Density	Males	.15***	.09	.06
	Females	.55	.00	.07
Shared network	Males	.15***	.06	.13
	Females	.55	.01	.02
Clusters	Males	.15***	.15*	.01
	Females	.55	.03	.00
Same family life cycle	Males	.15***	.02	.10
	Females	.55	.00	.05
Kin:non-kin ratio	Males	.15***	.00	.00
	Females	.55	.00	.00
Proximity	Males	.15***	.21*	.05
	Females	.55	.01	--
Multidimensional Relationships	Males	.15***	.00*	.02
	Females	.55	.07*	.00
Reciprocity	Males	.15***	.02	.00
	Females	.55	.00	.01
Network attitudes	Males	.15***	.00	.03
	Females	.55	.02	.01

^a_n = 25.

* p<.05. ** p<.001. *** p<.001.

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Tables 14 and 15 display results of the regression analyses for the separate subgroups. It was hypothesized that within the postbirth group, the buffering relationships would be stronger for females than for males. The pure interaction effect for size was found only for postbirth females, R^2 change=.18, $p < .001$, and not for postbirth males. There were no other significant interaction results in the predicted direction.

Examining other results of the regression analyses for the four subgroups, the primary factor differentiating the groups was the correlation of stress with maladjustment, accounting for a range in variance from $R^2 = .04$ for prebirth males to $R^2 = .55$ for postbirth females.

Twenty regression analyses were run for each subgroup. For prebirth males, stress demonstrated no significant main effects on maladjustment. There were no significant direct effects for any of the network variables examined, and only one significant interaction effect. For prebirth females, three variables (size, density, and kin ratio) showed a significant direct effect on maladjustment, each accounting for approximately 23-24% of the explained variance, with no significant interaction effects. The effects of density and kin ratio were in directions contrary to those suggested, such that lower density and lower kin ratio were associated with lower maladjustment. For postbirth males, again, stress did not demonstrate any significant main effects on

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maladjustment. There were only two significant direct effects, consistent with theory, demonstrated for the network variables clusters and proximity. And for postbirth females, in addition to the interaction effect for size noted above, there was only one significant direct effect for multidimensionality.

Hypothesis 9

Relationship stress and marital adjustment. The hypothesis predicting a negative correlation between relationship stress and marital adjustment was not supported for the total sample. See Table 16. When subgroups were examined, however, there was a significant, although moderate, negative relationship for the postbirth group ($r = -.28$, $p < .05$). Examining subgroups by sex, only the correlation for postbirth males was significant at $r = -.43$, $p < .05$. There were no other significant correlations for the other three subgroups.

Relationship stress and desire for more help from spouse. The hypothesized positive correlation between desire for more help from spouse and relationship stress was not supported for either the total sample, or for the individual subgroups. See Table 17. In fact, the prebirth group exhibited a slight negative correlation, such that greater relationship stress was associated with less stated desire for help from spouse.

Table 16
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^c_n = 10

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p < .05.

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Males

Females

Total^b

^a_n = 25

^c_n = 10

*
p < .05.

Table 16
Correlations of Relationship Stress with Marital Adjustment^a

	Prebirth	Postbirth	Total ^b (Sex)
Males	.08	-.43*	-.14
Females	.30	-.11	.10
Total ^b (Group)	.20	-.28*	-.02 ^c

^a $\underline{n}$ = 25 for each subgroup. ^b $\underline{n}$ = 50 for each group total.

^c $\underline{n}$ = 100 for total sample.

* $p < .05$.

Table 17
Correlations of Relationship Stress with
Desire for Spouse Help^a

	Prebirth	Postbirth	Total ^b (Sex)
Males	-.21	.10	-.07
Females	-.28	.08	-.15
Total ^b (Group)	-.24*	.06	-.11 ^c

^a $\underline{n}$ = 25 for each subgroup. ^b $\underline{n}$ = 50 for each group total.

^c $\underline{n}$ = 100 for total sample.

* $p < .05$.

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Hypothesis 10

Table 18 presents results from multiple regression analyses for this set of hypotheses for the total group, and Tables 19 and 20 present the results for the prebirth and the postbirth groups.

Buffering network variables and dyadic adjustment. The effects of three joint/couple network variables on marital adjustment were examined. It was hypothesized that among persons experiencing high levels of overall stress (individual stress and relationship stress), those with networks characterized by a high proportion of members common to both spouses, a high proportion of members in the same family life cycle in the joint network, and a high kin:non-kin ratio in the joint network, would report higher marital adjustment than those without these network characteristics.

Examining data for the total group, nine analyses were run, examining main effects, interaction effects and group effects for the three network variables. There was one significant interaction effect in the predicted direction for kin ratio in the joint network, such that under conditions of high stress, a lower ratio was associated with lower marital adjustment. There were no significant differences between groups. Stress did not demonstrate a significant main effect on marital adjustment for the

Table 18
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^a_n = 1

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p < .05

Table 18
Multiple Regression Analysis: The Effects of Couple Stress
and Joint Network Variables

Total Group ^a			
Joint Network Variable	Stress R ²	Effect	
		Direct R ² change	Interaction R ² change
Dependent Variable: Maladjustment			
Shared network	.04 [*]	.00	.01
Same family life cycle	.04 [*]	.00	.02
Kin:non-kin ratio	.04 [*]	.01	.05 [*]
Dependent Variable: Network Dissatisfaction			
Shared network	.01	.01	.01
Same family life cycle	.00	.02	.02
Kin:non-kin ratio	.00	.00	.01

^an = 100.

^{*}p < .05.

Table 19
Prebirth
and Joint

Joint
Network
Variable

Shared

Same fa

Kin:non

Shared

Same fa

Kin:non

^a
n = 2

*
p < .05

Table 19
Prebirth Group Differences: The Effects of Couple Stress
and Joint Network Variables

Joint Network Variable	Prebirth Group ^a	Stress R ²	Effect	
			Direct R ² change	Interaction R ² change
Dependent Variable: Maladjustment				
Shared network				
	Males	.00	.00	.01
	Females	.02	.00	.00
Same family life cycle				
	Males	.00	.06	.22*
	Females	.02	.00	.11
Kin:non-kin ratio				
	Males	.00	.00	.00
	Females	.02	.01	.05
Dependent Variable: Network Dissatisfaction				
Shared network				
	Males	.14	.03	.03
	Females	.00	.06	.07
Same family life cycle				
	Males	.14	.01	.00
	Females	.00	.00	.01
Kin:non-kin ratio				
	Males	.14	.00	.00
	Females	.00	.05	.03

^a_n = 25.

*
p < .05

Table 20
Postbirth
and Joint

Joint
Network
Variabl

Shared

Same fa

Kin:non

Shared

Same fa

Kin:non

^a
n = 2

*
p<.05

Table 20
Postbirth Group Differences: The Effects of Couple Stress
and Joint Network Variables

Joint Network Variable	Postbirth Group ^a	Stress R ²	Effect	
			Direct R ² change	Interaction R ² change
Dependent Variable: Maladjustment				
Shared network				
	Males	.17*	.03	.00
	Females	.31**	.04	.05
Same family life cycle				
	Males	.17*	.03	.04
	Females	.31**	.00	.01
Kin:non-kin ratio				
	Males	.17*	.13	.07
	Females	.31**	.02	.00
Dependent Variable: Network Dissatisfaction				
Shared network				
	Males	.01	.05	.01
	Females	.12	.02	.20*
Same family life cycle				
	Males	.01	.04	.02
	Females	.12	.01	.03
Kin:non-kin ratio				
	Males	.01	.01	.12
	Females	.12	.04	.01

^a_n = 25.

* p<.05 ** p<.01.

prebirth sample, thus precluding any further analyses for that sample.

Analyses on the postbirth group revealed no significant effects for any of the network variables for postbirth males or females.

Buffering network variables and network dissatisfaction. It was hypothesized that among persons experiencing high levels of overall stress, those with networks characterized by a high proportion of members common to both spouses, a high proportion of members in the same family life cycle in the joint network, and a high kin:non-kin ratio in the joint network would report lower network dissatisfaction than those without these characteristics. There were no significant main effects demonstrated for stress with network dissatisfaction for either the total group, or the subgroups. Therefore, these buffering hypotheses could not be adequately tested. There were no significant direct effects for any of the network variables for any group.

Hypothesis 11

Role change stress and individual maladjustment. It was hypothesized that among persons experiencing many role changes, those with networks characterized by more clusters, more multidimensional relationships, a greater proportion of persons in the same family life cycle, low density, and

larger in size, would have less individual maladjustment than those with networks without these characteristics.

Examining regression analyses for the total group, there were no significant interaction effects demonstrated for any of the five network variables (see Table 21). Two direct effects were significant: fewer clusters contributing to the variance on maladjustment, and higher density contributing to maladjustment. Examining the analyses for the subgroups, significant main effects for role change stress with maladjustment were demonstrated only for postbirth females, thus permitting further examination of the buffering hypotheses. As shown in Table 22, network size demonstrated the only significant pure interaction effect for this group. This was in the hypothesized direction, such that under conditions of high stress, low network size was associated with high maladjustment. Table 25 in Appendix K presents the results of the regression analyses for the prebirth subgroups, and Table 26 displays the intercorrelations among the variables for these hypotheses.

Role change stress and network dissatisfaction. It was hypothesized that among persons with high role change stress, the presence of the above stated five network variables would be associated with lower network dissatisfaction than those without these network variables. Regression analyses revealed no significant main effects

Table 21
Multiple
Stress a

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$$a_n = 1$$

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p<.05

Table 21
Multiple Regression Analysis: The Effects of Role Change
 Stress and Social Network Variables on Maladjustment

Total Group ^a			
Network Variable	Stress R^2	Effect	
		Direct R^2 change	Interaction R^2 change
Size	.11**	.01	.00
Density	.11**	.05*	.00
Clusters	.11**	.04*	.00
Same family life cycle	.11**	.00	.00
Multidimensional Relationships	.11**	.00	.00

^a $\underline{n} = 100.$

* $\underline{p} < .05.$ ** $\underline{p} < .001.$

Table 2:
Postbirth
Stress

Network
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Size

Density

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$\bar{a}_n =$
 $\star p < .0$

Table 22
Postbirth Group Differences: The Effects of Role Change
Stress and Social Network Variables on Maladjustment

Network Variable	Postbirth Group ^a	Stress R ²	Effect	
			Direct R ² change	Interaction R ² change
Size	Males	.12*	.01	.00*
	Females	.21	.00	.15*
Density	Males	.12*	.10	.01
	Females	.21	.01	.05
Clusters	Males	.12*	.14	.00
	Females	.21	.00	.02
Same family life cycle	Males	.12*	.02	.13
	Females	.21	.00	.09
Multidimensional Relationships	Males	.12*	.00	.03
	Females	.21	.03	.03

^an = 25.

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p < .05

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demonstrated for role change stress on network dissatisfaction for either the total group or the subgroups; therefore, the buffering hypotheses for the network variables could not be adequately tested. None of the network variables demonstrated significant direct effects for any of the subgroups. Tables 27, 28, and 29 in Appendix K present the results from the multiple regression analyses for these hypotheses.

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DISCUSSION

The transition to parenthood appears to be a period in a family's life which is experienced as stressful at different points in time, and in different ways for males and females. In general, there were fewer differences between prebirth and postbirth groups, as hypothesized, than between males and females, across groups, on both stress and maladjustment scores. Social networks of the two groups were more similar than different and most network variables did not significantly alleviate stress or buffer the impact of stress for this sample population. It is important to remember that this research used a cross-sectional design, which limits the extent to which causal inferences may be made about the differences that were found between prebirth and postbirth groups.

Stress

The prebirth group tended to have higher anticipatory stress scores than the postbirth group. This was particularly true for males, with postbirth males' scores significantly lower than prebirth males' scores. This lends support to Fein's longitudinal study (1976) showing a decrease in infant-related anxiety following the infant's birth.

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There were no differences between prebirth and postbirth groups on phase specific stress or general life event stress. There were significant differences between the sexes, however, with females reporting significantly higher stress scores on both of these measures than males. Furthermore, although not statistically significant, postbirth females' scores were higher than prebirth females' scores on both these measures. This latter finding is consistent with much of the literature that has described this transition period as stressful, particularly for women.

The lack of significant findings between groups on the stress measures may be explained by the recruitment process as well as sample characteristics related to self selection. Participant families were couples who were already engaged in some form of community health service (Health Central, Expectant Parent Organization), and who, as a couple, were willing to engage in the additional activity of this study. As evidenced in the demographic statistics, and marital adjustment scale scores, this was a sample population that had fairly high levels of stability and levels of functioning. It is thus noteworthy that within such a relatively high functioning sample, the findings that are reported did demonstrate some differences: lower anticipatory stress for males postpartum and greater stress and maladjustment for females postpartum.

While the general life events stress measure displayed moderate correlations with the other stress measures, its contribution to the variance on maladjustment was lower than that from the other measures. This leads one to question the exact nature of this stress and its impact on the individual. In the studies by Gorsuch and Key (1974), and Nuckolls, Cassel, and Kaplan (1972) where this type of stress measure was used with women experiencing the transition to parenthood, dependent variables were physiological variables (complications of pregnancy, infant health status). Part of the theoretical basis for this measure is that bodily resistance is lowered when coping demands are made by these life changes, thus resulting in greater vulnerability to illness. Conceivably, the fact that the maladjustment measures used in this study were psychological in nature and did not tap physiological changes directly may account for the different results obtained using this general life events measure. Furthermore, the population samples differed in terms of risk factors, with Gorsuch and Key studying low income clinic patients in comparison to the middle income, intact families of this study.

While anticipatory stress, phase specific stress, and general life events stress appeared to be valid measures of stress as indicated by their factor loadings, the assessment of role stress was elusive, both in terms of operational

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definitions, as well as in its particular impact on adjustment. In this study, several different areas of role stress were included in this measure: role demand, defined as number of primary roles occupied and extent of participation in them; role conflict as reflected in one's individual perceptions of ideal vs. real role sharing in the dyadic relationship; and role conflict between spouses as reflected in differences between the couple in role concepts.

The items used to assess role demand turned out to be unreliable, and highly susceptible to stereotypic responses. Most males who held full time jobs would typically exclude the role of houseperson, regardless of their involvement in house/child care, thus necessitating prompts to consider it. Unfortunately, this did not become evident until midway through the study. Ensuring interviewer consistency prior to that time was thus impossible. Results from these items indicated that there were no significant differences amongst prebirth and postbirth males and females in role demand.

When role conflict was examined, there did not appear to be any meaningful relationship between this subscale and other stress or adjustment measures. Of note is the fact that the items measuring role conflict were very general in nature, and the available range of responses was small, precluding much variation. This was especially true for this sample which was not distinguished by severe

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dysfunction (e.g., families seeking treatment for marital discord). The fact that there were no significant differences between groups on the marital adjustment scale would support this notion. Other future efforts to assess conflict around the role changes experienced in becoming a parent might use items with greater specificity and items that would allow for a greater range of responses, especially when using a similar sample group. Using these measures, role conflict for this sample was low.

Role change stress was assessed through a scale of 14 possible role changes. Again, there were no significant differences by group or sex. The average number of role changes over the previous three month period was two. Given the fact that this measure was taken from the general life events inventory, it is not surprising that analyses using this stress measure on maladjustment resembled those using the composite stress measure. However, its relatively low level of impact on maladjustment, similar to that of the larger scale from which it was taken, leads one to believe that using number of general role changes experienced as an indication of stress is not more powerful than life changes in general for this group.

Given the available information, it would appear that both prebirth and postbirth families were relatively similar and stable, in terms of roles occupied, role changes, and the lack of much role conflict. The items used to assess

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role stress appeared to be too general in nature and thus inadequate to measure more specific conflicts or changes, especially as they related to the incorporation of a new baby in the family. The area of role stress around this transition period would merit a much more thorough investigation than has here been afforded.

Differences between spouses in perceptions of actual role sharing and perceptions of ideal role sharing at home were examined as a stressor affecting the relationship, or marital adjustment. Although the hypothesized negative correlation was not supported for the total group, it was supported for postbirth males. This was one measure which did distinguish this subgroup. Unfortunately, there is little other supplementary data from this study to help elucidate this area of stress. Speculating, however, it may be that following the birth of their infant, fathers may experience greater dyadic maladjustment if the role changes that occur are unexpected or conflicting with their spouses.

Maladjustment

Maladjustment for these couples was measured in four areas: anxiety, depression, self esteem, and marital adjustment. There were no differences between prebirth and postbirth groups on any of these measures. Differences were found, however, between sex groups. Females had significantly higher scores than males on two of the four scales: anxiety and depression. This is consistent with

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reports in the literature of greater experienced strain by women during this period.

On a general level, results from this study provide support to research that shows that persons experiencing high stress are prone to have greater psychological distress than persons with lower levels of stress. On a more specific level, the results also point to the possibility of differential impacts of various stressors, depending on sex and phase of the transition. Examining the intercorrelations among the specific stressors and the specific maladjustment scales in Table 7 and in Table 24 of Appendix K reveals some interesting findings. The general life events scale appeared to have a differential impact on maladjustment for the two sexes. For all males, seven of eight correlations between the general life events stress score and the individual maladjustment measures proved nonsignificant. For females, however, the general life events stress score was a significant stressor in four of eight correlations examined, and this was primarily for the postbirth female group.

Continuing this analysis, anticipatory stress was significantly correlated with anxiety and depression for prebirth males and postbirth females, while phase specific stress was significantly correlated with these variables for all groups.

Breaking down the composite measures in this way elucidates the fact that the Rosenberg self esteem scale as a measure of adjustment was not significantly related with any of the stressors for any of the subgroups. Global self esteem may, in fact, not be affected by the transition to parenthood, at least for comparable sample groups. More specific measures of self esteem in different roles previously as well as presently occupied (e.g., professional, sexual, parental), may measure the actual changes that take place in the course of this transition.

When regression analyses were run using only phase specific stress as the measure of stress, and depression and anxiety scores as separate dependent variables, it became apparent that phase specific stress contributed significantly to variance on depression for both prebirth and postbirth males. This was in contrast to the nonsignificant effects when the composite stress and maladjustment scores were used. Thus, greater specificity of stressors and maladjustment measures help to elucidate the experience of this transition for males.

The magnitude of the significant correlations amongst various subscales were moderate for all groups except postbirth females for whom correlations were much higher, ranging to a high of $r=.7$ between phase specific stress and depression. Thus, for this group, high stress scores and high maladjustment scores were closely related.

The relationship between these stressors and marital adjustment was not as strong. For all males, phase specific stress was significantly correlated with marital adjustment. For females, however, there were differential group effects. Marital adjustment was not significantly correlated with any of the stressors for the prebirth female group, but it was significantly correlated for all stressors for the postbirth female group.

Marital adjustment appears to involve different factors for males and for females. Whether poor marital adjustment is the result of phase specific stress for men, or whether it merely covaries is unclear at this point; however this appears to be consistent across groups for men. Marital adjustment for women, on the other hand, appears to be relatively independent of these stressors prior to the infant's birth. Perhaps, the pregnancy status insulates women to a certain extent from stressors affecting the dyadic relationship, since the baby is the product or expression of the relationship. For postbirth husbands and wives, however, the marital relationship appears to be more vulnerable to stress.

It is difficult to say with certainty that marital adjustment is more sensitive to stress in the postpartum period when compared with the prebirth period, given the cross sectional nature of this study. However, other research reports similar findings, that the transition to

parenthood is accompanied by drops in marital satisfaction (Power & Parke, 1984).

Social Network Characteristics

Social networks of prebirth and postbirth couples tended to be more similar than different. There were no differences between the groups on network size, number of clusters, density, proportion of kin members, degree of reciprocity, or multidimensionality of the linkages. However, there were differences on two structural and one interactional properties. Postbirth networks had a higher proportion of members in the same family life cycle stage, a higher proportion of members who lived geographically closer, and they were characterized by more emotional exchanges around parenting or child care. The most distinctive difference between networks of males and females was the higher proportion of exchanges by women that were either informational or emotional in nature around parenting and child care issues. Networks of males had slightly more clusters than those of females. This could be accounted for by the fact that a greater proportion of men worked outside the home than the women, thus providing an additional source of contacts.

Although the networks of the two groups were very similar, do the different individual network properties help to buffer adjustment under conditions of high stress, and, in particular, for the postbirth group? Network size did

indeed demonstrate a significant and pure buffering effect on maladjustment for postbirth females. This was the case even when specific stressors were used, such as the phase specific stress scale, or the role change stress measure. None of the other network variables, however, demonstrated similar effects in support of the hypotheses.

The fact that only network size demonstrated a pure buffering effect is inconsistent with conclusions reached by Cohen and Wills (1985) based on a comprehensive literature review of research on stress and social support. They found evidence for a main effect model when structural measures of social support were used (e.g., network size), and evidence for a buffering model when functional support measures were used that were well matched to the stressful events themselves. In this study, for postbirth females, not only did size demonstrate a buffering effect, but the other structural variables which were more specific and thus potentially more helpful or functional for this group, did not prove significant. An example of this latter premise would be that a higher proportion of network members in the same family life cycle stage would provide more peer support, and thus alleviate maladjustment.

Amongst prebirth females, however, results were more consistent with Cohen and Wills theory, with significant main effects found for three network variables (larger size,

lower density, and lower kin:non-kin ratio) on maladjustment.

In an effort to more fully understand these conflicting findings, an examination of the interaction effect was performed, comparing maladjustment scores for prebirth and postbirth females under conditions of high and low levels of stress and network size. (See Table 30 in Appendix K.) The most striking finding is the low maladjustment score associated with low levels of stress and network size for postbirth females. For the new mother who is experiencing low levels of stress, adjustment may be highly related to the few people in her nuclear family (her husband and newborn), or a few significant others. A broader range of socializing may be unimportant during this particular phase of the transition (three to six months postpartum) and may, for some persons, be experienced as relatively more stressful. On the other hand, under conditions of high stress, a larger network may be important, providing greater opportunities for supportive functions and resources. For prebirth females, on the other hand, the structural variable network size appears to be facilitative of adjustment, regardless of stress level (consistent with Cohen and Wills' theory). Thus, for postbirth females, under low stress conditions, needs from the extended network may be fewer than at other times, or under other stress conditions.

Of interest would be findings for time periods later in the postpartum period.

Thus, while social support was operationalized along different structural dimensions in this study, most of these alternative measures exerted very little influence on adjustment under conditions of high stress.

An attempt was made to examine the effects of stress and joint/couple network variables on the couple's relationship, or marital adjustment. For the total group, stress directly contributed a small, but statistically significant proportion of variance at $R^2=.04$. On top of this, one of the three variables examined, kin ratio in the joint network, contributed an additional R^2 change=.05. While these findings were statistically significant, their actual meaningfulness appears to be relatively minor given the low proportion of variance accounted for. This is further corroborated by the fact that these findings were not supported by analyses of the postbirth males and females for whom stress contributed a much larger proportion of variance on marital adjustment.

The question remains as to whether the joint network variables are simply unrelated to a couple's dyadic adjustment, whether the dependent variable selected to measure marital adjustment was not sensitive enough to detect changes in this particular transition, or whether this sample was simply too homogeneous in its higher level

of functioning and level of network resources. Given these results, it can be stated that for couples who are not experiencing severe dysfunction in their marriage, joint network characteristics that are structural in nature exert little impact on marital adjustment.

Network dissatisfaction was operationally defined as difference scores reflecting desire for more help from specific others. This measure did not significantly correlate with any of the stress or adjustment measures and thus hypotheses using this measure as an indication of strain remained untested.

In considering the notion of the subjective experience of inadequacy in one's network, other factors need to be considered, factors that perhaps were not adequately assessed in this study. First, the individual's particular network attitude would need to be considered; that is, the extent to which involvement with others is considered important and helpful. Secondly, there is the methodological question of measurement, and whether direct self report is a reliable and valid measure of network dissatisfaction. People may not identify network needs as stressors in their lives, despite an experience of anxiety or depression that may be related to it. In this study, reported network needs were not related to stress. Some of the research examining significant/intimate relationships in networks conclude that the critical linkage is one with an

intimate other. In this sample, the most important network needs may have been met, since they were all married and had a spouse, and had a relationship whereby each was willing to be involved in a study of this type. Thus, any significant level of network need may have been precluded. Furthermore, there is some research indicating that network needs of men are different from that of women.

Conclusions and Recommendations

The sample population in this study was primarily white and middle class in socioeconomic status. The following conclusions and recommendations are thus limited in generalizability to other groups.

Results from this study support findings in the literature that the transition to parenthood may be experienced as stressful, and may also be associated with greater anxiety and depression especially by females following the birth of the infant. Clearly, the relationship between stress and maladjustment was much stronger for the postbirth female group. These results also point to the specific areas of stress that may be experienced by males: in the prebirth period, the uncertainty of the impending birth and changes in roles and responsibilities that may ensue appears to be particularly related to anxiety and depression; and throughout the transition, marital adjustment is one area which is associated with stress. Marital adjustment is more

responsive to stress for postbirth females than their prebirth counterparts, and general life event stress appears to be a more significant stressor associated with depression for women, regardless of group, than for men.

For this particular sample group, social network size acted as an important variable associated with lowered maladjustment for the females. For the prebirth group it acted directly, for the postbirth group, indirectly. This is not inconsistent with the idea that interpersonal relationships and the maintenance of those connections are especially important for women (Gilligan, 1982). There were no network variables that functioned similarly for males. Gilligan suggests that men may experience connectedness as anxiety provoking, or they may fear an experience of entrapment, loss of independence. The data did not support this theory, either. However, the possibility of different network needs for the different sexes warrants further exploration, both in terms of the particular variables that may be relevant as well as in the means to measure them. If, for men, the primary relationship with their wife fills most of their network needs, what are the consequences when she is no longer able to relate in the same manner as prior to the infant's birth? Power and Parke (1984) conclude from their research review that the decline in marital satisfaction is attributable to the lack of congruence between women's heightened dependency needs and men's drop

in levels of support. What appears to be needed is a greater understanding of the stressors on the men during the postbirth period which may result in these observed decreases in support.

The marital relationship, thus, deserves greater attention. Given the findings relating higher role conflict scores with marital adjustment for postbirth males, and the significant relationship between individual maladjustment and marital adjustment in the postbirth group, it is clear that the infant's birth may negatively impact on the dyadic relationship for those under high stress. The extent to which this continues over time cannot be ascertained by this study. Longitudinal research efforts following families through the infancy period would provide answers to this question.

These findings have implications in terms of adjustment by the couple to the transition to parenthood. The wife who is experiencing high stress may look beyond the nuclear family for support, while the husband may look to his wife. The husband may experience anticipatory stress prior to the birth, while the wife may be unaware of the intensity of his concerns and the degree to which they are affecting him. Difficulty in understanding these different experiences may create greater alienation in the dyadic relationship further compounding the stress at that time. Support groups for couples with new babies has very recently become a service

offered by some communities. However, differential attendance rates by males and females offers support to the idea that they may have different network needs. Power and Parke (1984) report on the effectiveness of a short videotape presentation in the early postpartum period in increasing the level of father caretaking involvement with sons (but not daughters). Perhaps opportunities to feed and diaper babies (of both sexes) prior to the infant's birth, (e.g., in birth preparation classes) would alleviate some of the anticipatory stress and increase later involvement by fathers.

Following the infant's birth, mothers with small networks and high stress may benefit from supportive efforts to expand their boundaries. Husbands, however, may need other types of supportive services, options that are more supportive of their dyadic system. Options for "respite care" may be needed. Medical and mental health providers need to validate the importance of nurturing the marital relationship as well as of nurturing the infant. Providing information about the course of adjustment to this transition may help affirm families' experiences.

In an effort to better understand the differential stressors and needs of couples experiencing the transition to parenthood, it appears important to consider the specifics of the marital/dyadic relationship as perhaps

equally important as the larger parameters of the individual's total social network.

APPENDICES

APPENDIX A

APPENDIX A

Transition to Parenthood Study

This is a study of the types of help that young families need during the transition to parenthood. This is a time when couples are preparing for their first child, and, following that, when they are adjusting to the newborn. It is hoped that this study will help us better understand the stresses that couples may experience during this period of change. Results of the study will help us to provide more appropriate services and support for new families.

Your participation will involve an interview by a qualified interviewer about the kinds of help you have needed, the kinds of help you have received, and any needs that have not been met. There will also be questionnaires about general family life and your adjustment to this transition. You and your spouse will be interviewed separately. All responses will remain confidential. At the end of the study, general findings will be made available to you if you wish.

Because this is a study of young families as a system, both partners in a couple must be interested in participating for acceptance into the study. At any point in the study, you are free to discontinue your participation. Your medical care here at Health Central is not affected by your decision to participate.

If you have any questions, you may ask me now, or call me at my home phone number (332-5612). If you are willing to participate, please sign the attached consent form. Thank you for your time and cooperation.

Sincerely,

Kathleen Wong Seitz, M.S.W.

APPENDIX B

APPENDIX B

INFORMED CONSENT

I have freely consented to take part in a scientific study being conducted by Kathleen Wong Seitz, M.S.W. under the supervision of Dr. Robert Caldwell, Assistant Professor of Psychology, Michigan State University.

The study has been explained to me and I understand the explanation. I understand that my participation will involve one 2 hour interview.

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

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

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

I understand that, at my request, I can receive additional explanation of the study after my participation is completed.

Signature

Date

APPENDIX C

APPENDIX C

Social Network, Stress and Adjustment Interview Schedule

INTRODUCTION BY INTERVIEWER

My name is _____ and I am working with Kathy Seitz, a doctoral student in the Psychology Department at Michigan State University. We are interested in the experiences of couples as they become parents for the first time. We hope that the information you provide will help professionals design programs, classes and services that will better meet the needs of families making this transition to parenthood. We have learned that for some couples, this is a time filled with many changes. These changes affect people in different ways. We are interested in learning what your experiences have been, and what types of social contacts you have. We hope that you will enjoy answering these questions. Many couples find it interesting to think about themselves and the changes they are experiencing during this change to parenthood.

I would also like to remind you that your name will not be attached to any of our answers. In addition, the services that you receive at Health Central are in no way affected by your participation in this study.

Would you read over the permission form, stating that you understand what the study is about. The purpose of the form is merely to verify that you are willing to participate. (HAND INTERVIEWEE CONSENT FORM.)

Do you have any questions? (MAKE SURE CONSENT FORM IS SIGNED.)

This interview will take approximately 2 hours. Part of the time, I will ask you questions and I will write down your answers. At other times, I will ask you to fill out the answers. Let's begin.

These initial questions pertain to background information.

1. Could you start by telling me ...

the # of months into the pregnancy you/spouse are _____
OR
how many months old your baby is _____

2. (INTERVIEWER: CHECK SEX) 1 ☐ Female 2 ☐ Male
 (CHECK RACE) 1 ☐ White 2 ☐ Black
 3 ☐ Hispanic 4 ☐ Other
3. How old are you? years
4. How many years have you and your spouse lived together?
 years
5. How many years of school have you completed?
 1 ☐ Graduate degree in professional training
 2 ☐ Four year college degree
 3 ☐ One to three years of college
 4 ☐ High school graduate
 5 ☐ 10th to less than 12th
 6 ☐ 7th to 9th grade
 7 ☐ Less than 7th grade
6. Tell me what your occupation/s is(are) and whether it is
 full or part-time (INTERVIEWER: READ OFF OPTIONS)
- | | Full-time | Part-time |
|-------------|------------------------------------|------------------------------------|
| Houseperson | <input type="text"/> | <input type="text"/> |
| Employment | <input type="text"/>
(describe) | <input type="text"/>
(describe) |
| Student | <input type="text"/> | <input type="text"/> |
7. Approximately how much is your family's total income for
 the year? \$
8. Do you have a telephone?
- 1 ☐ Yes 2 ☐ No
- Is your number listed or unlisted?
- 1 ☐ Listed 2 ☐ Unlisted
9. How many cars does your household have?
- 1 ☐ None
 2 ☐ One car
 3 ☐ More than one car

10. Is your residential area primarily urban, suburban or rural?

1 _____ Urban

2 _____ Suburban

3 _____ Rural

11. How easy do you think it is to obtain services for your family; for example - health care, education, shopping, recreation? (INTERVIEWER: READ RESPONSE CATEGORIES)

1 _____ Very easy

2 _____ Fairly easy

3 _____ Fairly difficulty

4 _____ Very Difficult

(INTERVIEWER: HAND INTERVIEWEE RESPONSE CARD A)

12. Do you expect that in the next 6 months there will be any major changes in any of the following areas? If so, please tell me how concerned you are about this future change - Slightly concerned, Moderately concerned, or Very concerned?

Amount of Concern

<u>Change</u>	<u>No</u>	<u>Yes</u>	<u>None</u>	<u>Slight</u>	<u>Moderate</u>	<u>Very</u>
Living condition	_____	_____	_____	_____	_____	_____
Financial status	_____	_____	_____	_____	_____	_____
Health of close family/friends	_____	_____	_____	_____	_____	_____
Social activities	_____	_____	_____	_____	_____	_____
Work status	_____	_____	_____	_____	_____	_____
Other (specify)	_____	_____	_____	_____	_____	_____

(INTERVIEWER: TAKE RESPONSE CARD A BACK).

13. Becoming parents introduces many new demands, tasks and expectations into a couple's life. Couples may divide these responsibilities in different ways.

(INTERVIEWER: HAND THEM RESPONSE CARD B)

I am going to ask you to tell me how you think certain responsibilities should ideally be divided between you and your spouse; and then I'm going to ask how you and your spouse presently split these responsibilities.

Okay, first of all tell me IDEALLY, who you think should ... (READ OFF RESPONSIBILITY CATEGORIES.)

Take care of the baby? (MARK O)

Do the cooking and housekeeping? (MARK O)

Work a job to earn money, or financial support?
(MARK O)

Now, tell me how these responsibilities are presently split ...

(PREBIRTH) Who do you think will take care of the baby?

(Mark X)

(POSTBIRTH) Who takes care of the baby? (MARK X)

Who does the cooking and housekeeping? (MARK X)

Who works a job to earn money? (MARK X)

	Husband <u>Entirely</u>	Husband More <u>Than Wife</u>	Husband & Wife <u>the Same</u>	Wife More Than <u>Husband</u>	Wife <u>Entirely</u>
Caring for baby	_____	_____	_____	_____	_____
Housekeeping/Cooking	_____	_____	_____	_____	_____
Jobs for Financial Support	_____	_____	_____	_____	_____

(INTERVIEWER: TAKE RESPONSE CARD B BACK.)

14. People differ in how much help they want from others, as well as in how much help they are presently getting. For the different groups of people you know, please mark an "X" on the number that indicates how much help you are presently getting from that person/s. (MARK X)

	Not Applicable	No Help						Very Much Help
Spouse/Mate	NA	1	2	3	4	5	6	7
Other relatives	NA	1	2	3	4	5	6	7
Friends	NA	1	2	3	4	5	6	7
Neighbors	NA	1	2	3	4	5	6	7

	Not Applicable	No Help						Very Much Help
Co-workers	NA	1	2	3	4	5	6	7
Classmates	NA	1	2	3	4	5	6	7
Service/Professional workers	NA	1	2	3	4	5	6	7
Others (describe)	NA	1	2	3	4	5	6	7

Next, using the same charts above, put an "O" over the number that best indicates how much help you would like to get from these people. (MARK O)

15. If you would like more help in certain areas, please tell me what kinds of help you would like, and the different people from whom you would like it. (Check as many as are applicable.)

Type of Help	Spouse	Relatives	Friends	Profes- sionals	Other
Employment oppor- tunities/help	—	—	—	—	—
Medical help	—	—	—	—	—
Financial help	—	—	—	—	—
Child care/ babysitting	—	—	—	—	—
Someone to talk with about problems	—	—	—	—	—
Information/help with the pregnancy/ birth/parenting concerns	—	—	—	—	—
Other (describe)	—	—	—	—	—

Do you have any questions, thoughts or comments at this point? We appreciate your time, and the information you have provided. We'll be sending you a summary of findings when the study is completed. THANK YOU.

APPENDIX D

APPENDIX D

Social Network Questionnaire

The following questions relate to people you know and with whom you have contact. They may be relatives, friends, teachers, doctors, etc. The relationships may not always feel good ... sometimes they may be stressful or troublesome as well. We are interested in who you contact, what you do with them, or what you talk about.

First, you will make a list of your important, regular social contacts, and then I will ask a number of questions about these people. "Important" means they affect your life in some way - it may be helpful or troublesome. "Regular" means at least once a month. Contact may be face to face, by phone or mail. Each question will be answered for every person. Take your time. Relationships are often hard to describe. If you have any questions as we go along, feel free to stop and ask me.

Let's begin. I will read off several categories of people.

A. First of all, on the left side of the answer sheet, I want you to list all the people who live in your home. Use only first names and last initials.

Now, list all relatives that you contact at least once a month and who are important to you.

Now, list all neighbors that you contact at least once a month and who are important to you.

Now list co-workers (if applicable) that you have a regular relationship with. This may be a member of a work team, or your direct supervisor, or a worker you take breaks with.

Now, list classmates (if applicable) that you have a regular relationship with, and who are important to you.

Now, list any other people that you have NOT included thus far, with whom you have a relationship of some importance that you are in contact with at least once a month. Again, let me remind you that this may be a helpful or a troublesome relationship.

APPENDIX D

Social Network Questionnaire

The following questions relate to people you know and with whom you have contact. They may be relatives, friends, teachers, doctors, etc. The relationships may not always feel good... sometimes they may be stressful or troublesome as well. We are interested in who you contact, what you do with them, or what you talk about.

First, you will make a list of your important, regular social contacts, and then I will ask a number of questions about these people. "Important" means they affect your life in some way - it may be helpful or troublesome. "Regular" means at least once a month. Contact may be face to face, by phone or mail. Each question will be answered for every person. Take your time. It takes me often hard to describe. If you have any questions as we go along, feel free to stop and ask me.

Let's begin. I will start with a few questions about the list of people.

A. First of all, on the left side of the sheet ahead, I want you to list all the people who are important to you. Use only first names and last initials.

Now, list all relatives that you contact at least once a month and who are important to you.

Now, list all neighbors that you contact at least once a month and who are important to you.

Now list co-workers (if applicable) that you have a regular relationship with. This may be a member of a work team, or your direct supervisor, or a worker you take breaks with.

Now, list classmates (if applicable) that you have a regular relationship with, and who are important to you.

Now, list any other people that you have NOT included thus far, with whom you have a relationship of some importance that you are in contact with at least once a month. Again, let me remind you that this may be a helpful or a troublesome relationship.

(INTERVIEWER: GO OVER THE LIST AND PROBE FOR ANY OMISSIONS. IF INTERVIEWEE HAS MORE THAN 26 PERSONS, OMIT LEAST IMPORTANT PERSONS UNTIL 26 ARE LEFT.)

I will now ask you several questions about these people you have listed, and about your relationship with them.

B. In Column B next to your list of names, indicate whether this person is a male or a female. Use the code number 1 for female, 2 for male.

C. In Column C, indicate the person's age in years. If you are not sure, make a guess.

D. In Column D, indicate the person's family status, using the following code numbers: (READ OFF)

1. (single, no children)
2. (married, no children)
3. (married, infants and/or children under 5 years)
4. (single, infants and/or children under 5 years)
5. (married, children 5 years or older)
6. (single, children 5 years or older)

E. In Column E, indicate where this person lives, relative to you. (READ OFF)

- 1 - same neighborhood
- 2 - same city
- 3 - same state
- 4 - out of state

F. In Column F, indicate who usually starts the contact first (for example, who calls whom): (READ OFF)

- 1 - you contact him/her first usually
- 2 - equal number of times you and this person initiate contact
- 3 - he/she contacts you first usually

G. In Column G, indicate all the different ways that you and this person communicate. For example, if you write letters as well as talk by phone, put 2 and 3 (READ OFF)

- 1 - face to face
- 2 - telephone
- 3 - mail/letters
- 4 - information or advice on other areas of one's life
- 5 - food, clothes, tools, or money
- 6 - praise or criticism about being a parent
- 7 - praise or criticism about other areas of one's life

INTERVIEWER: GO OVER THE LIST AND PROBE FOR ANY OMISSIONS.
IF INTERVIEWER HAS MORE THAN 20 PERSONS, OMIT AT LEAST
IMPORTANT PERSONS UNTIL 10 ARE LEFT.)

I will now ask you several questions about these people you
have listed, and about your relationship with them.

1. In Column A next to your list of names, indicate whether
this person is a male or a female. Use the code number 1
for female, 2 for male.

2. In Column C, indicate the person's age in years. If you
are not sure, make a guess.

3. In Column D, indicate the person's family status, using
the following code numbers:

- 1 - single, no children
- 2 - married, no children
- 3 - married, 1 child (and 1 child under 5 years)
- 4 - married, 2 children (and 1 child under 5 years)
- 5 - married, 3 children (and 1 child under 5 years)
- 6 - married, 4 children (and 1 child under 5 years)
- 7 - married, 5 children (and 1 child under 5 years)
- 8 - married, 6 children (and 1 child under 5 years)

4. In Column E, indicate the person's relationship to you.
Use the following code numbers:

- 1 - same relationship
- 2 - same type
- 3 - same state
- 4 - out of state

5. In Column F, indicate who usually starts the contact
first (for example, who calls whom): (READ OFF)

- 1 - you contact him/her first usually
- 2 - equal number of times you and this person initiate
contact
- 3 - he/she contacts you first usually

6. In Column G, indicate all the different ways that you
and this person communicate. For example, if you write
letters as well as talk by phone, put 2 and 3 (READ OFF)

- 1 - face to face
- 2 - telephone
- 3 - mail/letters

H. In Column H, indicate how often you and this person will contact each other. (READ OFF)

- all the people on your network list across the top and bottom 1 - daily chart. Now (START ASKING ABOUT WHO KNOWS WHOM)
- 2 - weekly/at least once a week
 - 3 - couple times a month
 - 4 - monthly/at least once a month

I. In Column I, indicate all the different types of relationships that you have with this person. For example, a relative of yours might also be a co-worker, so you would put down 2 and 4. (READ OFF)

- 1 - household member
- 2 - relative
- 3 - neighbor
- 4 - co-worker
- 5 - classmate
- 6 - friend
- 7 - member of same club, church, sports league
- 8 - other

J. In Column J, indicate how you feel about this relationship. (READ OFF)

- 1 - feels good most of the time
- 2 - good at times troublesome at times
- 3 - troublesome or problematic most of the time

K. In Column K, indicate how intense or strong this relationship feels to you (both good and poor relationships can be very intense or very weak) (READ OFF)

- 1 - very intense
- 2 - fairly intense
- 3 - fairly weak
- 4 - very weak

L. In Column L indicate all of the types of exchanges you make with this person.

- 1 - information or advice on babies, childcare, concerns of parents
- 2 - information or advice on other areas of concerns
- 3 - items such as food, clothes, tools, or money
- 4 - social activities, recreational activities
- 5 - work, school-related activities
- 6 - praise or criticism about being a parent, about one's baby
- 7 - praise or criticism about other areas of one's life

H. In Column H, indicate how often you and this person contact each other. (READ OFF)

- 1 - daily
- 2 - weekly/ at least once a week
- 3 - couple times a month
- 4 - monthly/ at least once a month

I. In Column I, indicate all the different types of relationships that you have with this person. (For example, a relative of yours might also be a co-worker, so you would put down 2 and 4.) (READ OFF)

- 1 - household member
- 2 - relative
- 3 - neighbor
- 4 - co-worker
- 5 - classmate
- 6 - friend
- 7 - member of some youth group or sports league
- 8 - other

J. In Column J, indicate the relationship. (READ OFF)

- 1 - least close
- 2 - good
- 3 - friendship or relationship of the time

K. In Column K, indicate how intense the relationship is. (READ OFF)

- 1 - very intense
- 2 - fairly intense
- 3 - fairly weak
- 4 - very weak

L. In Column L, indicate all of the types of exchanges you make with this person.

- 1 - information or advice on babies, childcare, concerns of parents
- 2 - information or advice on other areas of concerns
- 3 - items such as food, clothes, tools, or money
- 4 - social activities, recreational activities
- 5 - work, school-related activities
- 6 - praise or criticism about being a parent, about one's baby
- 7 - praise or criticism about other areas of one's life

Now we are interested in finding out who knows whom. I will help you fill this form out. We will put the initials of all the people on your network list across the top and bottom of this chart. Now(START ASKING ABOUT WHO KNOWS WHOM).

Now we are interested in finding out who knows whom. I will help you fill this form out. We will put the initials of all the people on your network list across the top and bottom of this chart. Now (START ASKING ABOUT WHO KNOWS WHOM).

APPENDIX E

General Life Events Questionnaire

During the previous 3 months, have you experienced any of the following events? Check yes or no.

	Yes	No
1. Troubles with the boss	_____	_____
2. Detention in jail or other institution	_____	_____
3. Major change in sleeping habits (a lot more, a lot less, or change in part of day you sleep)	_____	_____
4. Death of a close family member	_____	_____
5. Major change in work (a lot more or a lot less work, different work hours or surroundings)	_____	_____
6. Foreclosure on a mortgage or loan	_____	_____
7. Revision of personal values, ideas, or goals	_____	_____
8. Death of a close friend	_____	_____
9. Minor violations of law (e.g., speeding ticket, jaywalking)	_____	_____
10. Outstanding personal achievement	_____	_____
11. Major change in the health or behavior of a family member	_____	_____
12. Sexual difficulties	_____	_____
13. In-law troubles	_____	_____
14. Major change in number of family get-togethers	_____	_____
15. Major change in financial state	_____	_____
16. Gaining a new family/household member	_____	_____
17. Change in residence	_____	_____
18. Marital separation from mate	_____	_____

Figure 1

APPENDIX E

19. Major change in activities

General Life Events Questionnaire

20. Marital separation

During the previous 3 months, have you experienced any of the following events? Check yes or no.

	Yes	No
1. Troubles with the boss	—	—
2. Detention in jail or other institution	—	—
3. Major change in sleeping habits (a lot more, a lot less, or change in part of day you sleep)	—	—
25. Change in residence	—	—
4. Death of a close family member	—	—
26. Major change in eating habits (a lot more or a lot less food, different meal hours or surroundings)	—	—
6. Foreclosure on a mortgage or loan	—	—
7. Revision of personal habits (dress, manners, associations)	—	—
29. Death of a close friend	—	—
9. Minor violations of the law (traffic ticket, jaywalking)	—	—
10. Outstanding personal achievement	—	—
47. Taxing or a change in the health or behavior of a family member	—	—
12. Sexual difficulties	—	—
13. In-law troubles	—	—
14. Major change in number of family get-togethers	—	—
home, remodeling, redecoration	—	—
15. Major change in financial state	—	—
37. Retirement from work	—	—
16. Gaining a new family/household member	—	—
38. Vacation	—	—
17. Change in residence	—	—
39. Christmas	—	—
18. Marital separation from mate	—	—
40. Changing to a new school	—	—

APPENDIX E

General Life Events Questionnaire

During the previous 3 months, have you experienced any of the following events? Check Yes or No.

	Yes	No
1. Troubles with the boss		
2. Detention in jail or other institution		
3. Major change in sleeping habits (e.g., not sleeping, or change in kind of sleep)		
4. Death of a close family member		
5. Major change in eating habits (e.g., not eating, or change in kind of food)		
6. Foreclosure of a loan		
7. Revision of health insurance		
8. Death of a close friend		
9. Minor violations of the law (e.g., parking ticket)		
10. Outstanding personal achievement		
11. Major change in the health or behavior of a family member		
12. Sexual difficulties		
13. In-law troubles		
14. Major change in number of family possessions		
15. Major change in financial state		
16. Gaining a new family/household member		
17. Change in residence		
18. Marital separation from mate		

	<u>Yes</u>	<u>No</u>
19. Major change in church/club/organizational activities (join, stopped attending)	—	—
42. Loss of a household member	—	—
20. Marital reconciliation with mate	—	—
43. Problems with alcohol or drugs	—	—
21. Being fired from work	—	—
22. Divorce	—	—
23. Death of a spouse	—	—
24. Marriage	—	—
25. Changing to a different line of work	—	—
26. Major change in the number of arguments with spouse	—	—
27. Major change in responsibilities at work	—	—
28. Spouse beginning or ceasing work outside the home	—	—
29. Major change in working hours or conditions	—	—
30. Major change in usual type and/or amount of recreation	—	—
31. Taking on a mortgage or loan greater than \$10,000	—	—
32. Taking on a mortgage or loan less than \$10,000	—	—
33. Major personal injury or illness	—	—
34. Major business readjustment	—	—
35. Major change in social activities	—	—
36. Major change in living conditions (building home, remodeling, neighborhood change)	—	—
37. Retirement from work	—	—
38. Vacation	—	—
39. Christmas	—	—
40. Changing to a new school	—	—

Yes No

19. Major change in church/city/organizational activities (join, stopped attending) _____
20. Marital reconciliation with mate _____
21. Being fired from work _____
22. Divorce _____
23. Death of a spouse _____
24. Marriage _____
25. Changing to a different form of work _____
26. Major change in the number of children _____
27. Major change in residence _____
28. Spouse beginning or ending work _____
29. Major change in spouse's work or residence _____
30. Major change in spouse's work or residence _____
31. Taking on a mortgage for less than \$10,000 _____
32. Taking on a mortgage or loan less than \$10,000 _____
33. Major personal injury or illness _____
34. Major business readjustment _____
35. Major change in social activities _____
36. Major change in living conditions (moving home, remodeling, neighborhood change) _____
37. Retirement from work _____
38. Vacation _____
39. Christmas _____
40. Changing to a new school _____

	<u>Yes</u>	<u>No</u>
41. Beginning or ceasing formal schooling	___	___
42. Loss of a household member	___	___
43. Problems with alcohol or drugs	___	___

APPENDIX 2

Yes No

41. Beginning or ceasing formal schooling

42. Loss of a household member

43. Problems with alcohol or drugs

44. Divorce

45. Death of a family member

46. Moving

47. Change in religion

48. Change in occupation

49. Change in residence

50. Change in marital status

51. Change in health

52. Change in income

53. Change in education

54. Change in employment

55. Change in residence

56. Change in religion

57. Change in marital status

58. Change in health

59. Change in income

60. Change in education

61. Change in employment

62. Change in residence

63. Change in religion

64. Change in marital status

65. Change in health

66. Change in income

67. Change in education

68. Change in employment

69. Change in residence

70. Change in religion

71. Change in marital status

72. Change in health

73. Change in income

74. Change in education

75. Change in employment

76. Change in residence

77. Change in religion

78. Change in marital status

79. Change in health

80. Change in income

81. Change in education

82. Change in employment

83. Change in residence

84. Change in religion

85. Change in marital status

86. Change in health

87. Change in income

88. Change in education

89. Change in employment

90. Change in residence

91. Change in religion

92. Change in marital status

93. Change in health

94. Change in income

95. Change in education

96. Change in employment

97. Change in residence

98. Change in religion

99. Change in marital status

100. Change in health

APPENDIX F

By: Date:

Pregnancy/Postbirth Questionnaire

This next set of questions pertains to concerns that some families have had as they became parents. Again, you can follow along.

Over the last 3 months, have you been concerned about any of the following areas? If so, please tell me how concerned you have been: Not at all, slightly concerned, moderately concerned, or very concerned.

No Yes Slight Moder- Very
 ate

APPENDIX F: problems

- | | | | | |
|-------|-------|-------|-------|--|
| _____ | _____ | _____ | _____ | 1. Space in home/apartment (for
cribbles, car enough, poor
lighting) |
| _____ | _____ | _____ | _____ | 2. Agency relationship with mate
in-laws |
| _____ | _____ | _____ | _____ | 3. Interference from your family
(mother, brothers, sisters) |
| _____ | _____ | _____ | _____ | 4. Lack of housekeeping |
| _____ | _____ | _____ | _____ | 5. Lack of work |
| _____ | _____ | _____ | _____ | 6. Change in routines (eating,
sleeping, socializing) |
| _____ | _____ | _____ | _____ | 7. Not enough contact with
friends/relatives |
| _____ | _____ | _____ | _____ | 8. Not enough time for yourself |
| _____ | _____ | _____ | _____ | 9. Not enough time for you and
your mate as a couple |
| _____ | _____ | _____ | _____ | 10. Your personal appearance |
| _____ | _____ | _____ | _____ | 11. Your knowledge about how to
care for your baby |

1. The first of these is the

2. The second is the

3. The third is the

4. The fourth is the

5. The fifth is the

6. The sixth is the

7. The seventh is the

8. The eighth is the

9. The ninth is the

10. The tenth is the

11. The eleventh is the

12. The twelfth is the

13. The thirteenth is the

14. The fourteenth is the

15. The fifteenth is the

16. The sixteenth is the

17. The seventeenth is the

18. The eighteenth is the

APPENDIX F

Mod-
No Yes Slight ate Very

Pregnancy/Postbirth Questionnaire

This next set of questions pertains to concerns that some families have had as they became parents. Again, you can follow along.

Over the last 3 months, have you been concerned about any of the following areas? If so, please tell me how concerned you have been: Not at all, slightly concerned, moderately concerned, or very concerned.

Mod-
No Yes Slight ate Very

- | | | | | | |
|---|---|---|---|---|---|
| — | — | — | — | — | 1. Money problems |
| — | — | — | — | — | 2. Space in home/apartment (for example: not enough, poor layout) |
| — | — | — | — | — | 3. Sexual relationship with mate |
| — | — | — | — | — | 4. Interference from in-laws |
| — | — | — | — | — | 5. Interference from your family (parents, brothers, sisters) |
| — | — | — | — | — | 6. Neatness of housekeeping |
| — | — | — | — | — | 7. Extra work |
| — | — | — | — | — | 8. Change in routines (eating, sleeping, socializing) |
| — | — | — | — | — | 9. Not enough contact with friends/relatives |
| — | — | — | — | — | 10. Not enough time for yourself |
| — | — | — | — | — | 11. Not enough time for you and your mate as a couple |
| — | — | — | — | — | 12. Your personal appearance |
| — | — | — | — | — | 13. Your knowledge about how to care for your baby |

APPENDIX F

Pregnancy/Postbirth Questionnaire

This next set of questions pertains to concerns that some families have had as they became parents. Again, you can follow along.

Over the last 3 months, have you been concerned about any of the following areas? If so, please tell me how concerned you have been: Not at all, slightly concerned, moderately concerned, or very concerned.

	Moderately concerned	Very concerned	No	Yes	Slightly	Are	Very
1. Your knowledge about how to care for your baby							
2. Your personal appearance							
3. Your mate as a couple							
4. Not enough time for you and your mate							
5. Not enough contact with friends/relatives							
6. Change in routines (eating, sleeping, socializing)							
7. Extra work							
8. Worsening of housekeeping							
9. Disturbance from your family (parents, siblings, sisters)							
10. Worsening from in-laws							
11. Relationship with mate							
12. Not enough time for yourself							
13. Not enough time for you and your mate as a couple							

Moder-

No Yes Slight ate Very

- | | | | | | |
|---|---|---|---|---|--|
| — | — | — | — | — | 14. Whether you are a good parent |
| — | — | — | — | — | 15. Physical tiredness and fatigue |
| — | — | — | — | — | 16. Other physical problems related to pregnancy/delivery (if yes, please specify) |

Postbirth Sample

Moder-

No Yes Slight ate Very

- | | | | | | |
|---|---|---|---|---|----------------------------------|
| — | — | — | — | — | 17. Infant's general health |
| — | — | — | — | — | 18. Infant's temperament or need |
| — | — | — | — | — | 19. Infant's feeding |
| — | — | — | — | — | 20. Infant's sleeping |

Model-
No Yes Slight etc Very

14. Whether you are a good parent
 15. Physical fitness and
 16. Other physical problems
 related to pregnancy/delivery
 (if yes, please specify)

Forbirth Sample

Model-
No Yes Slight etc Very

17. Infant's medical health
 18. Infant's development or need
 19. Infant's feeding
 20. Infant's sleeping

APPENDIX G

Almost never

Sometimes

Often

Almost always

State-Trait Anxiety Inventory

DIRECTIONS: A number of statements which people have used to describe themselves are given below. I'll read each statement and then I want you to tell me how you have generally felt over the last 1 month. There are no right or wrong answers. Use the following scale to indicate your responses:

1 2 3 4
Almost never Sometimes Often Almost always

- | | 1 | 2 | 3 | 4 |
|---|-----|---|---|---|
| 1. I feel pleasant | 1. | — | — | — |
| 2. I tire quickly | 2. | — | — | — |
| 3. I feel like crying | 3. | — | — | — |
| 4. I wish I could be as happy as others seem to be | 4. | — | — | — |
| 5. I am feeling that I cannot because I can't shake up my mind | 5. | — | — | — |
| 6. I feel restless | 6. | — | — | — |
| 7. I am "calm, cool, and collected" | 7. | — | — | — |
| 8. I feel that difficulties are piling up so that I cannot overcome them. | 8. | — | — | — |
| 9. I worry too much over something that really doesn't matter | 9. | — | — | — |
| 10. I am happy | 10. | — | — | — |
| 11. I am inclined to take things hard. | 11. | — | — | — |
| 12. I lack self-confidence | 12. | — | — | — |
| 13. I feel secure | 13. | — | — | — |
| 14. I try to avoid facing a crisis or difficulty | 14. | — | — | — |

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1 2 3 4
 Almost never Sometimes Often Almost always

1 2 3 4
 State-Trait Anxiety Inventory

15. I feel blue 15. - - - -
 DIRECTIONS: A number of statements which people have used to describe themselves are given below. I'll read each statement and then I want you to tell me how you have generally felt over the last 3 months. There are no right or wrong answers. Use the following scale to indicate your responses: disappointments so keenly that I

1 2 3 4
 Almost never Sometimes Often Almost always

19. I am a steady person 19. - - - -

20. I get in a state of tension or turmoil 1 2 3 4

1. I feel pleasant 1. - - - -

2. I tire quickly 2. - - - -

3. I feel like crying 3. - - - -

4. I wish I could be as happy as others seem to be 4. - - - -

5. I am losing out on things because I can't make up my mind soon enough. 5. - - - -

6. I feel rested 6. - - - -

7. I am "calm, cool, and collected" 7. - - - -

8. I feel that difficulties are piling up so that I cannot overcome them. 8. - - - -

9. I worry too much over something that really doesn't matter. 9. - - - -

10. I am happy 10. - - - -

11. I am inclined to take things hard. 11. - - - -

12. I lack self-confidence 12. - - - -

13. I feel secure 13. - - - -

14. I try to avoid facing a crisis or difficulty 14. - - - -

APPENDIX C

State-Trait Anxiety Inventory

DIRECTIONS: A number of statements which people have used to describe themselves are given below. I'll read each statement and then I want you to tell me how you have generally felt over the last 7 months. There are no right or wrong answers. Use the following scales to indicate your responses:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. I feel pleasant	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2. I live quickly	1	2	3	4	5	6	7	8	9	10	11	12	13	14
3. I feel like crying	1	2	3	4	5	6	7	8	9	10	11	12	13	14
4. I wish I could be as happy as I feel now	1	2	3	4	5	6	7	8	9	10	11	12	13	14
5. I am looking forward to the future	1	2	3	4	5	6	7	8	9	10	11	12	13	14
6. I feel rested	1	2	3	4	5	6	7	8	9	10	11	12	13	14
7. I am "calm, cool, and collected"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
8. I feel that difficulties are piling up so that I cannot overcome them	1	2	3	4	5	6	7	8	9	10	11	12	13	14
9. I worry too much over something that really doesn't matter	1	2	3	4	5	6	7	8	9	10	11	12	13	14
10. I am happy	1	2	3	4	5	6	7	8	9	10	11	12	13	14
11. I am inclined to take things hard	1	2	3	4	5	6	7	8	9	10	11	12	13	14
12. I lack self-confidence	1	2	3	4	5	6	7	8	9	10	11	12	13	14
13. I feel secure	1	2	3	4	5	6	7	8	9	10	11	12	13	14
14. I try to avoid facing a crisis or difficulty	1	2	3	4	5	6	7	8	9	10	11	12	13	14

	1	2	3	4
	Almost never	Sometimes	Often	Almost always
				1 2 3 4
15. I feel blue				15. _ _ _ _
16. I am content.				16. _ _ _ _
17. Some unimportant thought runs through my mind and bothers me.				17. _ _ _ _
18. I take disappointments so keenly that I can't put them out of my mind.				18. _ _ _ _
19. I am a steady person				19. _ _ _ _
20. I get in a state of tension or turmoil as I think over my recent concerns and interests.				20. _ _ _ _

	1	2	3	4
	Almost never	Sometimes	Often	Almost always
1. I feel blue	—	—	—	4
2. I am content	—	—	—	4
3. Some unpleasant thought runs through my mind and bothers me	—	—	—	4
4. I take disappointments so keenly that I can't put them out of my mind	—	—	—	4
5. I am a steady person	—	—	—	4
6. I get in a state of	—	—	—	4
7. I think over my	—	—	—	4
8. I am interested	—	—	—	4
9. I am	—	—	—	4
10. I am	—	—	—	4
11. I am	—	—	—	4
12. I am	—	—	—	4
13. I am	—	—	—	4
14. I am	—	—	—	4
15. I am	—	—	—	4
16. I am	—	—	—	4
17. I am	—	—	—	4
18. I am	—	—	—	4
19. I am	—	—	—	4
20. I am	—	—	—	4
21. I am	—	—	—	4
22. I am	—	—	—	4
23. I am	—	—	—	4
24. I am	—	—	—	4
25. I am	—	—	—	4
26. I am	—	—	—	4
27. I am	—	—	—	4
28. I am	—	—	—	4
29. I am	—	—	—	4
30. I am	—	—	—	4
31. I am	—	—	—	4
32. I am	—	—	—	4
33. I am	—	—	—	4
34. I am	—	—	—	4
35. I am	—	—	—	4
36. I am	—	—	—	4
37. I am	—	—	—	4
38. I am	—	—	—	4
39. I am	—	—	—	4
40. I am	—	—	—	4
41. I am	—	—	—	4
42. I am	—	—	—	4
43. I am	—	—	—	4
44. I am	—	—	—	4
45. I am	—	—	—	4
46. I am	—	—	—	4
47. I am	—	—	—	4
48. I am	—	—	—	4
49. I am	—	—	—	4
50. I am	—	—	—	4
51. I am	—	—	—	4
52. I am	—	—	—	4
53. I am	—	—	—	4
54. I am	—	—	—	4
55. I am	—	—	—	4
56. I am	—	—	—	4
57. I am	—	—	—	4
58. I am	—	—	—	4
59. I am	—	—	—	4
60. I am	—	—	—	4
61. I am	—	—	—	4
62. I am	—	—	—	4
63. I am	—	—	—	4
64. I am	—	—	—	4
65. I am	—	—	—	4
66. I am	—	—	—	4
67. I am	—	—	—	4
68. I am	—	—	—	4
69. I am	—	—	—	4
70. I am	—	—	—	4
71. I am	—	—	—	4
72. I am	—	—	—	4
73. I am	—	—	—	4
74. I am	—	—	—	4
75. I am	—	—	—	4
76. I am	—	—	—	4
77. I am	—	—	—	4
78. I am	—	—	—	4
79. I am	—	—	—	4
80. I am	—	—	—	4
81. I am	—	—	—	4
82. I am	—	—	—	4
83. I am	—	—	—	4
84. I am	—	—	—	4
85. I am	—	—	—	4
86. I am	—	—	—	4
87. I am	—	—	—	4
88. I am	—	—	—	4
89. I am	—	—	—	4
90. I am	—	—	—	4
91. I am	—	—	—	4
92. I am	—	—	—	4
93. I am	—	—	—	4
94. I am	—	—	—	4
95. I am	—	—	—	4
96. I am	—	—	—	4
97. I am	—	—	—	4
98. I am	—	—	—	4
99. I am	—	—	—	4
100. I am	—	—	—	4

APPENDIX H

g. I enjoyed life.

Center for Epidemiologic Studies Depression Scale

Now I'm going to read you some statements that describe other ways that you may have felt or behaved. Please tell me how often you felt this way during the previous 3 month period.

0 = I didn't feel this way "at all"

Rarely Some Moderate All
0 1 2 3

- | | | | | |
|--|-------|-------|-------|-------|
| a. I was bothered by things that usually don't bother me. | _____ | _____ | _____ | _____ |
| b. I did not feel like eating; my appetite was poor. | _____ | _____ | _____ | _____ |
| c. I felt that I could not shake the blues even with my usual family or friends. | _____ | _____ | _____ | _____ |
| d. I felt like I had lost all my energy. | _____ | _____ | _____ | _____ |
| e. I lost trouble sleeping. | _____ | _____ | _____ | _____ |
| f. I felt sad. | _____ | _____ | _____ | _____ |
| g. I felt that everything I did was an effort. | _____ | _____ | _____ | _____ |
| h. I felt hopeless about the future. | _____ | _____ | _____ | _____ |
| i. I thought my life had been a failure. | _____ | _____ | _____ | _____ |
| j. I felt fearful. | _____ | _____ | _____ | _____ |
| k. My sleep was restless. | _____ | _____ | _____ | _____ |
| l. I was happy. | _____ | _____ | _____ | _____ |
| m. I talked less than usual. | _____ | _____ | _____ | _____ |
| n. I felt lonely. | _____ | _____ | _____ | _____ |
| o. People were unfriendly. | _____ | _____ | _____ | _____ |

APPENDIX H

1-5-1944

APPENDIX H

p. I enjoyed life.

q. Center for Epidemiologic Studies Depression Scale

Now I'm going to read you some statements that describe other ways that you may have felt or behaved. Please tell me how often you felt this way during the previous 3 month period.

t. I could not get "going".

	Rarely 0	Some 1	Moderate 2	All 3
a. I was bothered by things that usually don't bother me.	—	—	—	—
b. I did not feel like eating; my appetite was poor.	—	—	—	—
c. I felt that I could not shake the blues even with help from family or friends.	—	—	—	—
d. I felt that I was just as good as other people.	—	—	—	—
e. I had trouble keeping my mind on what I was doing.	—	—	—	—
f. I felt depressed.	—	—	—	—
g. I felt that everything I did was an effort.	—	—	—	—
h. I felt hopeful about the future.	—	—	—	—
i. I thought my life had been a failure.	—	—	—	—
j. I felt fearful.	—	—	—	—
k. My sleep was restless.	—	—	—	—
l. I was happy.	—	—	—	—
m. I talked less than usual.	—	—	—	—
n. I felt lonely.	—	—	—	—
o. People were unfriendly.	—	—	—	—

APPENDIX H

Center for Epidemiologic Studies Depression Scale

Now I'm going to read you some statements that describe other ways that you may have felt or behaved. Please tell me how often you felt this way during the previous 1 month period.

Rarely/Some Moderate All

- | | | | | |
|---|-------|-------|-------|-------|
| a. I was bothered by things that usually don't bother me. | _____ | _____ | _____ | _____ |
| b. I did not feel like eating. My appetite was poor. | _____ | _____ | _____ | _____ |
| c. I felt that I could not get the blues even with help from family or friends. | _____ | _____ | _____ | _____ |
| d. I felt that I was just as lonely as other people. | _____ | _____ | _____ | _____ |
| e. I had trouble keeping a warm on what I was doing. | _____ | _____ | _____ | _____ |
| f. I felt depressed. | _____ | _____ | _____ | _____ |
| g. I felt that everything I did was an effort. | _____ | _____ | _____ | _____ |
| h. I felt hopeful about the future. | _____ | _____ | _____ | _____ |
| i. I thought my life had been a failure. | _____ | _____ | _____ | _____ |
| j. I felt fearful. | _____ | _____ | _____ | _____ |
| k. My sleep was restless. | _____ | _____ | _____ | _____ |
| l. I was happy. | _____ | _____ | _____ | _____ |
| m. I talked less than usual. | _____ | _____ | _____ | _____ |
| n. I felt lonely. | _____ | _____ | _____ | _____ |
| o. People were unfriendly. | _____ | _____ | _____ | _____ |

	Rarely 0	Some 1	Moderate 2	All 3
p. I enjoyed life.	—	—	—	—
q. I had crying spells.	—	—	—	—
r. I felt sad.	—	—	—	—
s. I felt that people disliked me.	—	—	—	—
t. I could not get "going".	—	—	—	—

Rarely Some Moderate All
0 1 2 3

p. I enjoyed life. _____
 d. I had crying spells. _____
 r. I felt sad. _____
 s. I felt that people disliked me. _____
 t. I could not get "going". _____

1. I am a student of the

2. I am a student of the

3. I am a student of the

4. I am a student of the

5. I am a student of the

6. I am a student of the



APPENDIX I

Rosenberg Self-Defense Scale

Now I want you to tell me how much you agree or disagree with the following statements about yourself. Use the following code numbers:

1-Strongly agree 2-Agree 3-Disagree 4-Strongly disagree

1. I feel that I'm a person of worth at least on an equal plane with others.
2. I feel that I have a number of good qualities.
3. All in all, I am proud of my life. I am a failure.
4. I am able to do things that other people cannot do.
5. I feel I do not have any special skills.
6. I take a positive attitude toward myself.
7. On the whole, I am not filled with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all.

APPENDIX J

Always	Always	Almost	Always	Always
Always	Always	Almost	Always	Always
Always	Always	Almost	Always	Always

Spanier Dyadic Adjustment Scale

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

Always	Always	Occa-	Fre-	Almost	Always	Always
Agree	Agree	Disagree	Disagree	Disagree	Disagree	Disagree

1. Handling family finances

APPENDIX J

2. Matters of sex/marriage

3. Religious beliefs

4. Demonstrations of affection

5. Sex relations

6. Friends

7. Conventionality (correct or proper behavior)

8. Philosophy of life

9. Ways of dealing with parents or in-laws

APPENDIX

Notes on the Appendix

How I want you to tell me what you think of the following with the following a summary of the following notes:

1. Firstly, what is the main point of the following notes?

1. I think

2. I think

3. I think

4. I think

5. I think

6. I think

7. I think

8. I think

9. I think

10. I think

APPENDIX J

Spanier Dyadic Adjustment Scale

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always <u>Agree</u>	Almost Always <u>Agree</u>	Occa- sionally <u>Disagree</u>	Fre- quently <u>Disagree</u>	Almost Always <u>Disagree</u>	Always <u>Disagree</u>
1. Handling family finances	—	—	—	—	—	—
2. Matters of recreation	—	—	—	—	—	—
3. Religious matters	—	—	—	—	—	—
4. Demonstrations of affection	—	—	—	—	—	—
5. Sex relations	—	—	—	—	—	—
6. Friends	—	—	—	—	—	—
7. Conventionality (correct or proper behavior)	—	—	—	—	—	—
8. Philosophy of life	—	—	—	—	—	—
9. Ways of dealing with parents or in-laws	—	—	—	—	—	—

APPENDIX J

Spitzer Dyadic Adjustment Scale

Most persons have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

Always Agree Always Disagree
Almost Always Agree Almost Always Disagree
Always Agree Always Disagree
Almost Always Agree Almost Always Disagree

1. Handling family finances

2. Matters of recreation

3. Religious matters

4. Demonstrations of affection

5. Sex relations

6. Friends

7. Conventionality (correct or proper behavior)

8. Philosophy of life

9. Ways of dealing with parents or in-laws

	Almost	Occa-	Fre-	Almost	
Always	Always	sionally	quently	Always	Always
<u>Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Disagree</u>	<u>Disagree</u>	<u>Disagree</u>

10. Aims, goals, and things believed important

11. Amount of time spent together

12. Making major decisions

13. Household tasks

14. Leisure time interests and activities

15. Career decisions

14. Do you and your mate have a stimulating exchange of ideas?

	All	Most of	More	Occa-	
the time	the time	than not	sionally	Rarely	Never

16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?

17. How often do you or your mate leave the house after a fight?

25. Have a stimulating exchange of ideas?

18. In general, how often do you think that things between you and your partner are going well?

27. Calmly discuss something

Less than Often Once or
 All Most of often Occa-
the time the time than not sionally Rarely Never

19. Do you confide in your mate?

20. Do you ever regret that you married?
 and sometimes disagree. Indicate if either item below
 caused differences of opinions or were present in your
 relationship in the past few weeks. _____

21. How often do you and your mate quarrel?
 Yes No _____

22. How often do you and your mate "get on each other's
 nerves?"
 Not showing love. _____

23. The dots on the following line represent different
 degrees of happiness in a relationship. The middle
 point, "happy" Every Almost Occa-
day every day sionally Rarely Never

23. Do you kiss your mate?

24. Do you and your mate engage in outside interests
 together?

How often would you say the following events occur between
 you and your mate?

Less than Once or Once or
 once a twice a twice a
Never month month week day often

25. Have a stimulating exchange of ideas

26. Laugh together

27. Calmly discuss something

	Less than once a <u>month</u>	Once or twice a <u>month</u>	Once or twice a <u>week</u>	Once a <u>day</u>	More <u>often</u>
<u>Never</u>					

28. Work together on a project

These are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship in the past few weeks. (Check yes or no.)

Yes No

29. _____ Being too tired for sex.

30. _____ Not showing love.

31. The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy", represents the degree of happiness of most relationships. Please circle the dot which best describes the degree of happiness, all things considered, of your relationship.

<u>Extremely</u>	<u>Fairly</u>	<u>A little</u>	<u>Happy</u>	<u>Very</u>	<u>Extremely</u>	<u>Perfect</u>
Unhappy	Unhappy	Unhappy		Happy	Happy	

32. Which of the following statements best describes how you feel about the future of your relationship?

- _____ I want desperately for my relationship to succeed, and would go to almost any lengths to see that it does.
- _____ I want very much for my relationship to succeed, and will do all I can to see that it does.
- _____ I want very much for my relationship to succeed, and will do my fair share to see that it does.
- _____ It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.
- _____ It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
- _____ My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Never _____ once a _____
 month _____ twice a _____
 week _____ twice a _____
 day _____ once a _____
 more _____

28. Work together on a project

There are some things about which couples sometimes agree and sometimes disagree. Indicate if either of you believe caused differences of opinions or were problems in your relationship in the past few weeks. (Check yes or no.)

Yes _____ No _____

29. _____

Being too tired for sex.

30. _____

Not knowing how.

31. The dots on the following line represent different degrees of happiness in your relationship. The middle point, "happy", represents the highest happiness of most relationships. Please circle the dot which best describes the degree of happiness you feel in your relationship.

Extremely _____ Very _____ Very _____
 unhappy _____ unhappy _____ happy _____ extremely happy _____

32. Which of the following statements best describes how you feel about the future of your relationship?

_____ I want desperately for my relationship to succeed, and would go to almost any lengths to see that it does.
 _____ I want very much for my relationship to succeed, and will do all I can to see that it does.
 _____ I want very much for my relationship to succeed, and will do my fair share to see that it does.
 _____ It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.
 _____ It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
 _____ My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Table 23
Employment and School Status

Males			
	None	Employment	
		Part-time	Full-time
None	3	2	34
School	Part-time	0	5
	Full-time	2	1

APPENDIX K

Females			
	None	Employment	
		Part-time	Full-time
None	0	0	22
School	Part-time	0	4
	Full-time	0	0

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1950-1951

1950-1951

1950-1951

1950-1951

1950-1951

1950-1951

1950-1951

1950-1951

1950-1951

Table 23
Employment and School Status

Males			
Stress			
	Anticipate	Employment	
	None	Part-time	Full-time
None	3	2	34
School			
Part-time	0	0	5
Full-time	2	3	1
Anxiety	.38*	.25*	-.16
Depression	.45*	.37*	-.18
Self Esteem	.24		-.23
Females			
	None	Employment	
		Part-time	Full-time
None	11	9	22
School			
Part-time	2	2	4
Full-time	0	0	0
Anxiety			.15
Depression			.12
Self Esteem			-.22
Marital Adjustment			-.27

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 13
Employment and School Status

Males			
School	Employment	None	
		Part-time	Full-time
Full-time	0	3	2
Part-time	0	1	2
None	0	0	0
School	Employment	None	
		Part-time	Full-time
Full-time	0	0	0
Part-time	0	0	0
None	0	0	0

Table 24 (cont'd.).

Table 24

Intercorrelations Among Stress and Maladjustment Scores

Maladjustment	Stress		
	Anticipatory	Phase Specific	General Life
	Anticipatory	Phase Specific	General Life
Prebirth Males			
Maladjustment			
Anxiety	.38*	.35*	-.14
Depression	.45*	.52**	-.16
Self Esteem	.26	.32	-.24
Marital Adjustment	-.31	-.37*	.19
Prebirth Females			
Maladjustment			
Anxiety	.28	.59***	.18
Depression	.25	.38*	.36*
Self Esteem	-.02	.19	-.23
Marital Adjustment	-.17	.15	.07

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 24
Intercorrelations Among Stress and Maladjustment Scores

Stress			
Anticipatory Phase Specific General Life			
Predicted Maladjustment		Predicted Maladjustment	
Anxiety	.38*	.38*	.14
Depression	.45*	.45*	.18
Self Esteem	.35	.35	-.24
Marital Adjustment	-.11	-.11	-.13
Predicted Maladjustment		Predicted Maladjustment	
Anxiety	.38	.38***	.18
Depression	.35	.35*	.38*
Self Esteem	-.02	.19	-.23
Marital Adjustment	-.17	.15	.07

* p<.05. ** p<.01. *** p<.001.

Table 24 (cont'd.).

Prebirth Group Differences: The Effects of Role Change
Stress and Social Network Variables on Maladjustment

		Stress		Effect	
Network Variable	Prebirth Group ^a	Anticipatory	Phase Specific	General Life	
		Stress	Direct	Interaction	
Postbirth Males					
Maladjustment					
Size					
Anxiety	Males	.23	.01	.53**	.35*
	Females		.04	.24	.05
Depression	Males	.30	.01	.40*	.06
	Females		.04	.19	.01
Self Esteem	Males	-.05	.04	.30	.12
	Females		.01	.07	.02
Marital Adjustment	Males	-.04	.04	-.34*	-.30
	Females		.01	.03	.01
Postbirth Females					
Maladjustment					
Size					
Anxiety		.55**		.67***	.61***
Depression		.56**		.70***	.64***
Self Esteem		-.06		-.02	.04
Marital Adjustment		-.40*		-.44*	-.56**

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 24 (cont'd.).

Series		Anticipatory Phase Specific General Life		Post-Phase Specific		Maladjustment	

Table 25
Prebirth Group Differences: The Effects of Role Change
 Stress and Social Network Variables on Maladjustment

Network Variable	Prebirth Group ^a	Stress R ²	Effect	
			Direct R ² change	Interaction R ² change
Size	Males	.01	.00*	.00
	Females	.04	.24*	.05
Density	Males	.01	.03*	.00
	Females	.04	.18*	.01
Clusters	Males	.01	.03	.02
	Females	.04	.09	.02
Same family life cycle	Males	.01	.03	.01
	Females	.04	.01	.01
Multidimensional Relationships	Males	.01	.04	.01
	Females	.04	.03	.04

^an = 25.

* p < .05

Table 2
Prebirth Group Differences: The Effects of Role Change
 Stress and Social Network Variables on Male's Postnatal

Network Variable	Prebirth Group	Stress β	Direct β	Interaction β
Size				
	Male	.01	.01	.01
	Female	.01	.01	.01
Density				
	Male	.01	.01	.01
	Female	.01	.01	.01
Clusters				
	Male	.01	.01	.01
	Female	.01	.01	.01
Same family life cycle				
	Male	.01	.01	.01
	Female	.01	.01	.01
Multidimensional Relationships				
	Male	.01	.01	.01
	Female	.01	.01	.01

$n = 32$

* $p < .05$

Table 26
Intercorrelations Among Stress Scores and Dependent Variables for all Groups

		Dependent Variable			
		Maladjustment	Marital Adjustment	Network Dissatisfaction	
		Prebirth Postbirth	Prebirth Postbirth	Prebirth Postbirth	Prebirth Postbirth
Role Change Stress	Males	.08	.34*	-.29	.02
	Females	.20	.46**	-.08	.32
Couple Stress	Males		-.06	-.42*	.11
	Females		.14	-.55**	.35*

* $p < .05$. ** $p < .01$.

* $P < .02$, ** $P < .01$.

Women

Men

Gender Effect

Effect
Main Effects

Women

Men

Effect Size η^2 = 0.12, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.29, 0.30, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, 0.37, 0.38, 0.39, 0.40, 0.41, 0.42, 0.43, 0.44, 0.45, 0.46, 0.47, 0.48, 0.49, 0.50, 0.51, 0.52, 0.53, 0.54, 0.55, 0.56, 0.57, 0.58, 0.59, 0.60, 0.61, 0.62, 0.63, 0.64, 0.65, 0.66, 0.67, 0.68, 0.69, 0.70, 0.71, 0.72, 0.73, 0.74, 0.75, 0.76, 0.77, 0.78, 0.79, 0.80, 0.81, 0.82, 0.83, 0.84, 0.85, 0.86, 0.87, 0.88, 0.89, 0.90, 0.91, 0.92, 0.93, 0.94, 0.95, 0.96, 0.97, 0.98, 0.99, 1.00

Effect Size η^2 = 0.12, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.29, 0.30, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, 0.37, 0.38, 0.39, 0.40, 0.41, 0.42, 0.43, 0.44, 0.45, 0.46, 0.47, 0.48, 0.49, 0.50, 0.51, 0.52, 0.53, 0.54, 0.55, 0.56, 0.57, 0.58, 0.59, 0.60, 0.61, 0.62, 0.63, 0.64, 0.65, 0.66, 0.67, 0.68, 0.69, 0.70, 0.71, 0.72, 0.73, 0.74, 0.75, 0.76, 0.77, 0.78, 0.79, 0.80, 0.81, 0.82, 0.83, 0.84, 0.85, 0.86, 0.87, 0.88, 0.89, 0.90, 0.91, 0.92, 0.93, 0.94, 0.95, 0.96, 0.97, 0.98, 0.99, 1.00

Effect Size η^2 = 0.12, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.29, 0.30, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, 0.37, 0.38, 0.39, 0.40, 0.41, 0.42, 0.43, 0.44, 0.45, 0.46, 0.47, 0.48, 0.49, 0.50, 0.51, 0.52, 0.53, 0.54, 0.55, 0.56, 0.57, 0.58, 0.59, 0.60, 0.61, 0.62, 0.63, 0.64, 0.65, 0.66, 0.67, 0.68, 0.69, 0.70, 0.71, 0.72, 0.73, 0.74, 0.75, 0.76, 0.77, 0.78, 0.79, 0.80, 0.81, 0.82, 0.83, 0.84, 0.85, 0.86, 0.87, 0.88, 0.89, 0.90, 0.91, 0.92, 0.93, 0.94, 0.95, 0.96, 0.97, 0.98, 0.99, 1.00

Effect Size η^2 = 0.12, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.29, 0.30, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, 0.37, 0.38, 0.39, 0.40, 0.41, 0.42, 0.43, 0.44, 0.45, 0.46, 0.47, 0.48, 0.49, 0.50, 0.51, 0.52, 0.53, 0.54, 0.55, 0.56, 0.57, 0.58, 0.59, 0.60, 0.61, 0.62, 0.63, 0.64, 0.65, 0.66, 0.67, 0.68, 0.69, 0.70, 0.71, 0.72, 0.73, 0.74, 0.75, 0.76, 0.77, 0.78, 0.79, 0.80, 0.81, 0.82, 0.83, 0.84, 0.85, 0.86, 0.87, 0.88, 0.89, 0.90, 0.91, 0.92, 0.93, 0.94, 0.95, 0.96, 0.97, 0.98, 0.99, 1.00

Effect Size η^2 = 0.12, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.29, 0.30, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, 0.37, 0.38, 0.39, 0.40, 0.41, 0.42, 0.43, 0.44, 0.45, 0.46, 0.47, 0.48, 0.49, 0.50, 0.51, 0.52, 0.53, 0.54, 0.55, 0.56, 0.57, 0.58, 0.59, 0.60, 0.61, 0.62, 0.63, 0.64, 0.65, 0.66, 0.67, 0.68, 0.69, 0.70, 0.71, 0.72, 0.73, 0.74, 0.75, 0.76, 0.77, 0.78, 0.79, 0.80, 0.81, 0.82, 0.83, 0.84, 0.85, 0.86, 0.87, 0.88, 0.89, 0.90, 0.91, 0.92, 0.93, 0.94, 0.95, 0.96, 0.97, 0.98, 0.99, 1.00

Table 3a
Intercorrelations among stress scores and dependent variables for all groups

Table 27
Multiple Regression Analysis: The Effects of Role Change
Stress and Network Variables on Network Dissatisfaction

		Total Group ^a		
Network Variable	Prebirth Group ^a	Stress	Effect	
		R ²	Direct	Interaction
Variable		Stress	Direct	Interaction
Size		R ²	R ² change	R ² change
	Males	.09	.09	.09
	Females	.01	.07	.02
Density				
Size	Males	.00	.00	.05*
	Females	.01	.03	.01
Density				
	Males	.00	.01	.00
	Females	.00	.00	.00
Clusters				
	Males	.00	.00	.00
	Females	.00	.02	.00
Same family life cycle				
	Males	.00	.00	.00
	Females	.00	.00	.00
Multidimensional Relationships				
	Males	.00	.00	.00
	Females	.00	.00	.00

^a n = 100.

* p < .05.

Table 17
Multiple Regression Analysis: The Effects of Role Change
Stress and Network Variables on Network Dissolution

Network Variable	Stress R^2	Effect Size	Effect Density	Effect Clusters	Same family life cycle	Multidimensional Relationships	Total Group ^a
Size	.17	.10	.10	.10	.10	.10	.10
Density	.10	.10	.10	.10	.10	.10	.10
Clusters	.10	.10	.10	.10	.10	.10	.10
Same family life cycle	.10	.10	.10	.10	.10	.10	.10
Multidimensional Relationships	.10	.10	.10	.10	.10	.10	.10

^a $n = 100$.

* $p < .05$.

Table 28
Prebirth Group Differences: The Effects of Role Change
Stress and Network Variables on Network Dissatisfaction

Network Variable	Prebirth Group ^a	Stress R ²	Effect	
			Direct R ² change	Interaction R ² change
Size	Males	.09	.00	.00
	Females	.01	.07	.02
Density	Males	.09	.02	.00
	Females	.01	.03	.01
Clusters	Males	.09	.00	.00
	Females	.01	.16	.01
Same family life cycle	Males	.09	.00	.08
	Females	.01	.00	.00
Multidimensional Relationships	Males	.09	.00	.02
	Females	.01	.00	.00

^a $\bar{n} = 25$.

* p < .01.

Table 18
 Prebirth Group Differences: The Effects of Role Change
 Stress and Network Variables on Network Dissatisfaction

Network Variable	Prebirth Group	Stress R^2	Direct R^2 change	Interaction R^2 change
Size				
	Male	.08	.78	.00
	Female	.02	.17	.00
Density				
	Male	.00	.13	.00
	Female	.00	.11	.00
Clusters				
	Male	.00	.00	.00
	Female	.00	.00	.00
Same family little contact				
	Male	.00	.00	.00
	Female	.00	.00	.00
Multidimensional relationships				
	Male	.00	.00	.00
	Female	.00	.00	.00

$\bar{n} = 12$.

Table 29
Postbirth Group Differences: The Effects of Role Change
Stress and Network Variables on Network Dissatisfaction

		Effect		
Network Variable	Postbirth Group ^a	Stress R ²	Direct R ² change	Interaction R ² change
Network Size				
Size	Males	.00	.01	.06
	Females	.10	.02	.08
Density	Males	.00	.00	.19*
	Females	.10	.01	.06
Clusters	Males	.00	.03	.03
	Females	.10	.01	.00
Same family life cycle	Males	.00	.03	.08
	Females	.10	.01	.00
Multidimensional Relationships	Males	.00	.09	.13
	Females	.10	.00	.01

^a $n = 25$.

* $p < .01$.

Table 29
Postbirth Group Differences: The Effects of Role Change
 Stress and Network Variables on Network Dissolution

Network Variable	Postbirth Group	Stress R^2	Direct R^2 Change	Indirect R^2 Change	Effect
Size					
	Male	.00	.07	.00	
	Female	.10	.00	.00	
Density					
	Male	.10	.00	.00	
	Female	.10	.00	.00	
Clusters					
	Male	.00	.00	.00	
	Female	.00	.00	.00	
Same family life cycle					
	Male	.00	.00	.00	
	Female	.00	.00	.00	
Multidimensional Relationships					
	Male	.00	.00	.00	
	Female	.00	.00	.00	

^a $n = 25$.

* $p < .01$.

Table 30
Maladjustment Scores at High and Low Levels of Stress and
Network Size

Prebirth Females			
Network Size	Stress		
	Low	High	
Low	.60	.73	
High	.45	.58	
Postbirth Females			
Network Size	Stress		
	Low	High	
Low	.14	.81	
High	.39	.35	

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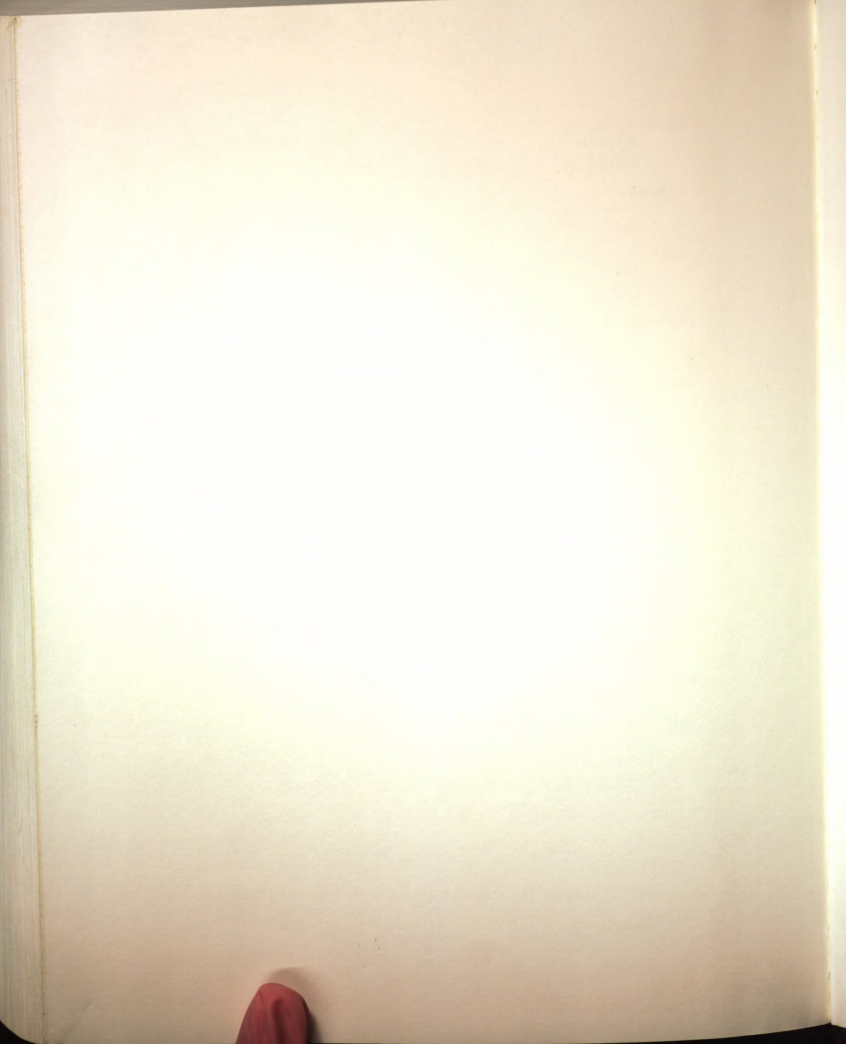
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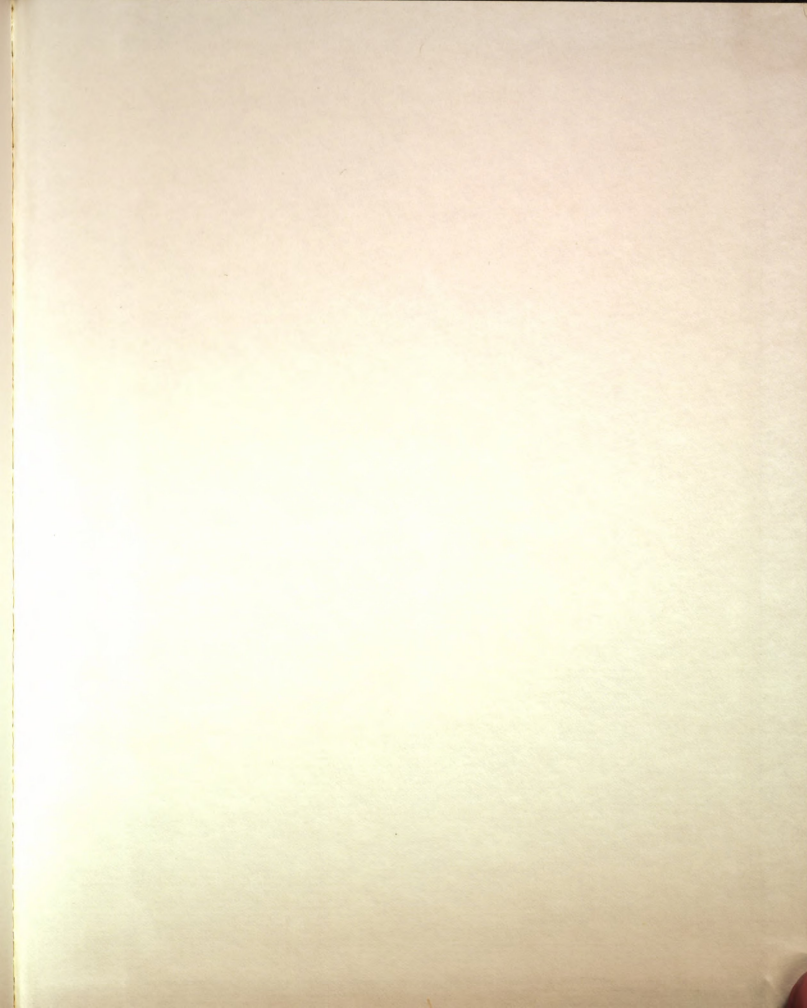
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