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PARENTING STRESS AND SOCIAL SUPPORT AMONG
MARRIED AND DIVORCED AT-RISK MOTHERS

by

Sondra Moe

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Family Life/Family and Human Development

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1999

ABSTRACT

Parenting Stress and Social Support Among
Married and Divorced At-Risk Mothers

by

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Utah State University, 1999

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Department: Family and Human Development

The stress parents feel affects how they fulfill their roles as parents and their own psychological well-being. Social support has been shown to help parents deal with the demands of their parenting roles while maintaining psychological health. Compared to married parents, divorced mothers are most at risk for parenting stress and negative feelings of well-being. Low-income can add further to the levels of stress in parenting and increase the need for sources of social support.

This study compared low-income divorced mothers to low-income married mothers. It explored mothers' perceptions of the stresses of parenting and feelings of well-being in relation to their use of social support resources. Results indicated that divorced mothers who used informal sources of social support (i.e., relatives or friends) were more likely to feel in control of their lives and have a more positive perception of their preschool child. On the other hand, married mothers who used formal sources of social support (i.e.,

agencies or professionals) felt more positive about interactions with their children and felt less distress in their parenting roles.

This study also looked at social support as a moderating variable interacting with marital status to affect feelings of well-being and parenting stress. Social support as a moderating variable was not supported for this sample. It was concluded that researchers must be careful in selecting an instrument used to measure the concept of social support. To assist in clarification of the effects of social support on stress and psychological well-being, measures should encompass not only how often social support is used and the sources of support but also the types and quality of the support received.

(87 pages)

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CHAPTER I

INTRODUCTION AND PROBLEM STATEMENT

Any parent can tell you that parenting is stressful, but some parents experience more stress than others. The stress parents feel affects how they interact with their child, the relationship between parent and child, and the child's behavior (Abidin, 1986; Huyck, 1991; Jarvis & Creasy, 1991; Lavee, Sharlin, & Katz, 1996; Mash & Johnston, 1983; Mash, Johnson, & Kovitz 1983; McDowell, Saylor, Taylor, & Boyce, 1995; Quittner, Glueckauf, & Jackson, 1990; Shaw & Burns, 1993; Simoni, 1991; Simons, Lorenz, Wu, & Conger, 1993; Winslow & Shaw, 1993).

Parents under stress feel less in control of their actions and are more likely to exhibit stress in their parenting behaviors (Maccoby, 1980). Research has shown that stress from parenting is related to negative parenting, less secure attachment between parent and child, and child behavior problems (Abidin, 1986; Jarvis & Creasy, 1991; Lavee et al., 1996; Mash & Johnston, 1983; Mash et al., 1983). The stress parents feel is also related to their psychological well-being. Parenting stress has been found to be related to symptoms of depression (Quittner et al., 1990), and less satisfaction with parenting has been found to be related to a feeling of lack of "mastery" or self-confidence and control over one's life (Huyck, 1991).

Both the stress of parenting and the psychological well-being of parents are related to the amount of social support available to parents and the amount of social support used by parents (Albrecht & Adelman, 1984; Cassel, 1974; Cobb, 1976; Sanson & Farnell,

1997). Social support also has been found across many fields of study to facilitate adaptation to life stress, crises, transitions, mental health, and parenting (Caplan, 1976; Gore, 1978; Hammer, 1981; Henderson & Bryne, 1977; Hirsch, 1980; House, 1981; Kahn, 1981; LaRocco, House, & French, 1980; Mitchell & Trickett, 1980). Although, overall, women have been found to possess wider support networks than men (Chiriboga, Coho, Stern, & Roberts, 1979), mothers with children under the age of 6 are at greater risk for depression than mothers with older children (Barnett & Baruch, 1987; Campbell, 1997), suggesting that they may not be making effective use of these social support resources or that social support resources are less available for that group.

Another group that may have a greater than usual need for social support is divorced mothers. One source of social support for many parents is their spouse. Belsky (1981) proposed that the marital relationship serves as the principal social support system for parents and thus may have a profound influence on the stress parents experience. The dissolution of a marriage represents not only a loss of this social support but also new sources of stress. Many researchers have concluded that divorce can be one of the most stressful variables in contemporary life. As divorce is viewed more as a process by those who study it and not just as a one-time crisis, the resulting stress is seen not just as an acute reaction but also as a chronic long-term outcome (Hutchinson & Spangler-Hirsch, 1989; McLannahan & Booth, 1991; O'Leary, Franzoni, Brack, & Zirpa, 1996; Plunkett, Sanchez, Henry, & Robinson, 1997; Stirtzinger, 1987). Although some of the stressors for divorced mothers tend to be short-term or acute stressors, such as adapting to the marital separation, redefining roles, disrupting parenting skills, and changing work status,

many become long-term or chronic stressors, such as ex-spousal conflicts, visiting schedules, child support payments, and income adjustments (Ahrns, 1980; Day & Bahr, 1986; Glover & Steele, 1989; Issacs, 1988; Johnston & Campbell, 1988; Oppawsky, 1991; Tschann, Johnston, & Wallerstein, 1990).

Divorce also results in long-term stress because it abruptly thrusts many mothers and their children into a low-income category which they did not occupy before the divorce occurred (Bird, 1997; Bradley, 1987; McLannahan & Booth, 1991; McLannahan & Sandefur, 1994; Thabes, 1997). Factors often associated with low-income add further stress for mothers lower education levels and fewer job skills, high mobility rates, less favorable perceptions of their children and depression (Bird, 1997; Jackson, 1993; Lavee et al., 1996; Whitbeck et al., 1997).

Previous empirical research focusing on divorce has not looked specifically at low-income populations. Nor has previous research compared low-income divorced mothers with married mothers in the same income category. The purpose of this study was to compare low-income divorced mothers and married mothers of preschool children. It explored mothers' perceptions of parenting stress in relation to their use of social support resources. The psychological well-being (feelings of happiness and confidence) of both groups of mothers was also compared in association with parenting stress and social support.

Parenting stress was assessed by exploring mothers' feelings of parenting distress, their perceptions of their interactions with their children, and their perceptions of the difficulty of their children's characteristics. Well-being measures were derived by asking

mothers about their feelings of self-confidence and symptoms of depression. The use of social support was assessed by asking how often subjects turn to various sources of social support when they have a problem (i.e., friends, neighbors, or doctors).

Research questions for this study are: (a) What is the effect of divorce as a stressor on the feelings of well-being and stress in parenting? (b) Does the use of social support moderate the effects of divorce on feelings of parenting stress and well-being for low-income mothers of preschool children? and (c) Does well-being act as a mediating variable between the interactive effects of social support and marital status on perceptions of parenting stress?

CHAPTER II

LITERATURE REVIEW

For this review of literature, previous research was reviewed in the following manner. First, studies and theoretical papers focusing on the general theories of stress were discussed. Next, research focusing specifically on the stress related to the role of being a parent was outlined. The literature regarding social support was then considered, followed by a review of studies considering social support and divorce. Finally, low-income and its relationship to parenting were presented.

General Stress Theory

The study of stress allows researchers to discern the degree to which structures and experiences affect feelings of well-being (Pearlin, 1989). General stress theory, according to Pearlin, includes three major concepts: stressors, stress mediators, and stress outcomes.

Stressors are defined as enduring experiences which precipitate the exhibited stress outcomes. Pearlin (1989) placed stressors into three categories: life events, acute stressors, and chronic stressors. Life events relate to "normal" developmental changes in the conditions of the individual such as high school graduation or marriage. Acute stressors appear abruptly and are present on a short-term basis, for example, an exam or a project at work. Chronic stressors tend to accumulate gradually and remain present over long periods of time. These stressors may produce stress outcomes which can accumulate

until an individual is overwhelmed (Devoss & Newton, 1986; Pearlin & Schooler, 1978). Examples of chronic stress might be caring for a handicapped child or living in a dangerous urban environment. In addition, Pearlin (1989) stated that the most detrimental stressors are those which are unexpected, atypical, and uncontrollable. These stressors are not part of the "normal" developmental changes that are expected in the lives of individuals (life events) and may also, in some cases, be categorized as chronic stressors.

Divorce can be one of those very stressful unexpected or atypical events (Pearlin, 1983). Researchers have also concluded in previous studies that the many stressors related to divorce tend to fit both the acute and chronic stressors categories (Hutchinson & Spangler-Hirsh, 1989; McLannahan & Booth, 1991; O'Leary et al., 1996; Plunkett et al., 1997; Stritzinger, 1987).

Pearlin (1986) defined stress mediators as intervening agents which tend to influence stress outcomes for individuals. Pearlin discussed two categories of mediators: coping techniques and social support. Coping techniques include internal skills and processes an individual has available to handle stressors. Social support includes the resources available to an individual from other people with whom they might interact and from the institutional resources available in their community.

A body of research supported Pearlin's hypothesis that social support acted as a stress mediator (Brown, Bhrolchain, & Harris, 1975; Dean & Ensel, 1982; Fleming, Baum, Gisriel, & Gatchel, 1982; Kessler & McLeod, 1985; Mitchell & Trickett, 1980; Paykel Emms, Fletcher, & Rassaby, 1980; Pearlin, Menaghan, Lieberman, & Mullan, 1981; Simons, Beaman, Conger, & Chao, 1993). Other researchers publishing during the

same period argued that the stress mediator concept was being applied too broadly (Baron & Kenny, 1986; Folkman & Lazarus, 1988). They concluded that another type of variable may function when dealing with stress: a moderating variable. Moderating variables were seen to specify the conditions under which stressors affect stress outcomes rather than intervening between stressors and outcomes. In this case, social support was considered one of the variables which may be a moderator rather than a mediator (Quittner et al., 1990; Simons, Lorenz, et al., 1993; Thoits, 1982). Pearlin saw social support as providing direct effects on the number, intensity, and diffusion of stressors and indirect influences affecting the extent and intensity of stress outcomes (Pearlin, 1989). Social support seen as a moderating variable would interact with other situational variables (independent variables) producing lower stress outcomes than in the absence of social support (Thoits, 1982).

Stress outcomes are the evidence of stress for the individual. These outcomes manifest themselves on many levels: physically, emotionally, and in interaction patterns with others. According to Pearlin (1993), social support may reveal why some individuals adapt to stress more successfully than others. In this study, sources of stress were divorce and negative feelings about parenting, referred to as parenting stress. Parenting stress included mothers' feelings of distress in their parenting role, dysfunctional interactions with their preschool child, and negative perceptions of their child's behavior and characteristics.

Divorce is a stressor that influences the ability to parent. Parents experiencing stressful situations such as divorce feel less in control of their actions and are more likely to exhibit changes in their parenting techniques (Maccoby, 1980). The day-to-day interactions between parent and child produce a unique variety of feelings of stress related to parenting. Parenting stress has been defined as a parent's perception of their relationship with their child (the "health" of the parent-child relationship). Parenting stress has been found to be related to less secure parent-child attachment, less satisfaction with parenting, possible symptoms of depression, and lack of mastery (feelings of self-confidence) in parents (Abidin, 1986; Huyck, 1991; Jarvis & Creasy, 1991; Lavee et al., 1996; Mash & Johnston, 1983; Mash et al., 1983; McDowell et al., 1995; Quitnner et al., 1990; Shaw & Burns, 1993; Simoni, 1991; Simons, Lorenz, et al., 1993; Winslow & Shaw, 1993).

Parenting stress has also been found to be related to the amount of assistance parents receive in fulfilling their parenting roles. The isolation of the nuclear family from sources of social support which were more readily available in the past may limit its ability to function effectively today (Campbell, 1997; Parsons, 1949; Parsons & Bales, 1955). In the nuclear family, the marital relationship tends to serve as the principal support system for parents (Belsky, 1981; Crnic, Greenberg, Robinson, & Ragozin, 1984; Flowers, Schneider, & Ludtke, 1996; Owen, Lewis, & Henderson, 1989). Divorce would be likely

to increase stressful feelings about parenting and dramatically increase the need for other sources of social support for parents.

In a review of the gender and stress literature, Barnett and Baruch (1987) concluded that motherhood in itself is often associated with psychological distress. Society's assumption of success in mothering and innate abilities of mothers to nurture with no negative consequences makes individual mothers less willing to admit to concerns or problems. Furthermore, the amount of stress mothers experience is influenced by the ages and the number of children in the family (Barnett & Baruch, 1987; Campbell, 1997). Mothers with children under the age of 6 are at greater risk for depression. Belle (1987) found that mothers with young children were more likely to report that parenting entailed too many demands. Therefore, it would follow that the divorced mother with a preschool child may be at-risk to experience higher levels of parenting stress.

Bronfenbrenner's theoretical ecological model addresses this issue. Bronfenbrenner believed that the roles individuals fulfill are carried out in the context of various "nested structures" each inside the other which include outer layers of community, society, and culture, and inner layers of the nuclear family and the parent-child relationship. These nested structural layers, later called exosystems and mesosystems, make up the total context or ecology for the parenting process (Bronfenbrenner, 1979a, 1979b, 1979c; Bronfenbrenner, 1986). He also felt that the availability of support structures facilitates the effective functioning of individuals in roles such as parenting (Bronfenbrenner, 1979a). These concepts set up a theoretical basis for the importance of social support and its influence on parenting stress (Crnic et al., 1983).

Social Support

Social support has been defined as assistance that is received from a collection of individuals among whom there are varying degrees of sociometric connections (Cobb, 1976; Lee, 1979). Ties to the social environment stem from this support, and its influence allows individuals to relate positively to their environments (Caplan, 1981). Moss (1973) believes social support received in the context of mutual support gives a feeling of belonging, being loved, cared for, accepted, and needed. A sense of mastery, control, and esteem for self is also believed to result from this kind of support (Cobb, 1976; Keating, 1987; O'Leary et al., 1996; Tolsdorf, 1976).

A variety of aspects of social support have been defined in the literature. The Carolina Parent Support Scale (Bristol, 1979) denoted two types of social support which appear often in the social support literature: informal (e.g., parents, friends) and formal (e.g., physicians, counselors). Cobb (1976) outlined three dimensions for social support: instrumental assistance (e.g., money, services); informational assistance (e.g., helping to define, understand, and cope with problems); and emotional assistance (e.g., empathy and understanding). The dimension of support received may vary with the type of relationship between the individuals involved (Kitson, Robin, & Mason, 1982; Weiss, 1974). Dunst and Trivett (1990) operationalized further dimensions and terminology used to evaluate social support including four dimensions: (a) relational support, marital and work status, network size; (b) structural support, the physical proximity of the support, its duration and

stability; (c) functional support, the type, quantity, and quality of support; and (d) satisfaction with received support.

Social support has been found across many fields of study to facilitate adaptation to life stress, crises, transitions, and bereavement (Albrecht & Adelman, 1984; Caplan, 1976; Cassel, 1974; Cobb, 1976; Dornsbusch, Ritter, & Steinberg, 1991; Gore, 1978; Hammer, 1981; Henderson & Bryne, 1977; Hirsch, 1981; House, 1981; Kahn, 1981; LaRocco et al., 1980; O'Leary et al., 1996; Mitchell & Trickett, 1980; Sanson & Farnell, 1997). In relation to stress, Pearlin and Aneshensel (1986) outlined four functions of social support: (a) prevention of stress, (b) alteration of stressful events, (c) changing the meaning of stressful events to an individual and thus the consequences, and (d) management of the symptoms of stress. In addition, it has been proposed that these functions of social support decrease the dangers of stress and may increase mastery of stress (Caplan, 1976; Cohen & Wills, 1985; Mueller, 1980; Sanson & Farnell, 1997).

Social support may be found not only outside the marital relationship, but also within it. Belsky (1981) proposed that the marital relationship serves as the principal social support system for parents. Similarly, Cox (1989) postulated that the quality of a marriage not only promotes healthy adjustment to stressors, but also promotes positive parent-child relationships. Divorce may therefore increase the need for social support to prevent parenting problems.

Becoming a parent in itself has an immediate impact on sources of social support. After the birth of the first child, friends are generally replaced by family as the major sources of support (Gottlieb, 1981). Friends can no longer provide the types of support

needed by new parents. Mothers particularly feel isolated as a result of these changes and may experience feelings of anger and resentment, which can add to the stress of being a new parent. For women, simply being in the role of mother has been considered a primary source of stress, and being the mother of young children (age 6 and under) carries with it considerable risk of depression resulting from stress and isolation (Barnett & Baruch, 1987).

Overall, social support, and specifically emotional support, has been found to foster competent parenting (Belsky, 1981, 1984; O'Leary et al., 1996; Vondra & Belsky, 1993). Simons, Lorenz, Conger, and Wu (1992) combined both self-report and observational techniques to measure supportive parenting (defined as concern and interest in the child). Supportive parenting is linked with the amount and types of social support received by parents.

Divorce and Social Support for Mothers

Hetherington, Cox, and Cox (1987, p. 126) view divorce as "one of the most stressful transitions in contemporary American life." The stress from divorce may include all three types of stressors outlined by Pearlin (1989). Atypical and acute stress when the divorce is unexpected and sudden, and chronic stress if there is a extended period of stress before the divorce and a long adjustment period following divorce.

Research has shown social support to be related to successful transitions in the divorce process. Wilcox (1981) interviewed 50 recently divorced women using a self-report measure of mood and symptoms. The women were divided into two groups: one

which had successfully adapted to divorce and another group which had not. Although no differences were found in social support received 6 months before the divorce, the women who were adapted successfully to divorce were more likely after the divorce to have assistance from both types of social support: formal and informal. Also the support that was received came from more dimensions (informational, instrumental, and emotional) than received by the unsuccessful group.

Although social support appears to assist in the adjustment process following divorce, social support networks are likely to change after divorce (Albrecht & Adelman, 1984; Thabes, 1997). Many researchers report that one of the major adjustments necessary following divorce focuses on changed relationships not only with the ex-spouse, but with friends and other family members as well (Goode, 1956; O'Leary et al., 1996; Oppawsky, 1991; Plunkett et al., 1997; Spanier & Thompson, 1984). Support from family and friends may be affected by whether they themselves approve of the decision to divorce and by how they see that decision influencing their own lives (Kitson et al., 1982).

Although Bannon (1981) found number of friends to be positively related to women's adaptations to marital dissolution, other researchers have concluded that many women change their sources of support following divorce and depend on their own families more exclusively for a wider variety of support than before the divorce (Albrecht, Bahr, & Goodman, 1983; Anspach, 1976; Halem, 1982; Kurtz, 1996; McLannahan & Booth, 1991; McLannahan & Sandefur, 1994; Oppawsky, 1991; Thabes, 1997). This change may occur because divorce has also been found to divide loyalties among friends and family, who may feel like they can support either the husband or wife, but not both.

These divisions often result in a loss of some of the predivorce social support network (Plunkett et al., 1997; Rands, 1981; Wilcox, 1981). McLannahan, Wedemeyer, and Adelberg (1981) found a predominantly White divorced sample of women to exhibit rather small informal support networks (systems for acquiring social support). These groups were comprised exclusively of family members living near the divorced individual. Divorced individuals may also intentionally isolate themselves from friends and family, feeling that they no longer belong (Johnson, 1988; Kurtz, 1996; Spanier et al., 1979).

Low-income and Parenting

Low-income can add further to the levels of stress in parenting and increase the need for sources of social support. Income level is related to many key elements in daily life such as: marital status, education level, mobility, and parenting.

Married parents tend to have a higher income than single parents (Thabes, 1997; Zick & Smith, 1991). Divorced parents and especially divorced mothers suffer substantial income loss after the divorce occurs. As a result of no-fault divorce and community property laws throughout the United States, 40% of the children who are eligible to receive child support are not awarded financial help by the courts. Only one quarter of those awarded child support receive payment in full (McLannahan & Sandefur, 1994; Zick & Smith 1991). As a result of these factors, it has been predicted that by the year 2000, most of those living in poverty will be mothers and their children (Bradley, 1987). Low-income parents are also more likely to be depressed and have less than favorable impressions of their children, particularly low-income mothers of preschool children (Bird,

1997; Jackson, 1993; Lavee et al., 1996; Whitbeck et al., 1997). Additional stressors for low-income mothers include less education and higher mobility rates. Parents who do not complete high school earn lower incomes than those with more education (O'Leary et al., 1996; McLannahan & Sandefur, 1994).

The U. S., in general, has a high rate of mobility when compared to other western nations. American families with young children between the ages of 1 and 9 tend to move more often than other families (Long, 1992). Further, single parents relocate at a higher rate than married parents (Long, 1992; McLannahan & Sandefur, 1994). It would seem to follow that this higher mobility rate further taxes already limited resources and requires the establishment of social support in the new location.

This study will focus on a comparison between those groups within a low-income population. Considering the many variables associated with low-income (such as years of education) that may cloud the effects of social support on parenting stress, this study will match the two groups (divorced and married) for income and years of education and control for these variables in its analyses (also using a randomly selected married group).

Summary

Parenting is a stressful role to fulfill. It is a particularly stressful role for the low-income mother of a preschool child (Barnett & Baruch, 1987; Campbell, 1997). Research has shown that stress in parenting is related to the parents' perception of their relationship with their child and their own feelings of well-being (Abidin, 1986; Albrecht & Adelman,

1984; Jarvis & Creasy, 1991; Mash & Johnston, 1983; Mash et al., 1983; O'Leary et al., 1996).

The social support parents receive makes the parenting role easier to carry out and moderates the stressors, such as divorce, which may hinder successfully fulfilling this role. Social support has been found across many fields of study to facilitate adaptation to stress in parenting (Caplan, 1976; Cassel, 1974; Cobb, 1976; Gore, 1978; Hammer, 1981; Henderson & Bryne, 1977; Hirsch, 1980; House, 1981; Kahn, 1981; LaRocco et al., 1980; Mitchell & Trickett, 1980; O'Leary et al., 1996; Sanson & Farnell, 1997). Unfortunately, divorce tends to limit the available sources of social support for mothers (Albrecht et al., 1983; Anspach, 1976; Halem, 1982; McLannahan & Booth, 1991; McLannahan & Sandefur, 1994; O'Leary et al., 1996; Oppawsky, 1991; Plunkett et al., 1997; Rands, 1981; Thabes, 1997; Wilcox, 1981).

Past research has looked at the overall relations of use of social support and feelings of well-being to parenting, but not at specific aspects tied together in a contextual format as they relate to perceived parenting stress. In addition, past work has not focused specifically on low-income populations, particularly when looking at the variable of divorce.

The purpose of this study was to further clarify the effects of use of social support on perceived parenting stress. This study tested the effect of divorce as a stressor on the feelings of well-being and stress in parenting. Use of social support was predicted to moderate the effects of divorce on feelings of parenting stress and well-being for low-income mothers of preschool children. Further, feelings of well-being were tested as a

mediating variable between the interactive effects of use of social support and marital status on perceived parenting stress.

CHAPTER III

METHODS

In the following section the demographic characteristics of the married and divorced samples are compared. Next, the process used to create the married comparison samples is discussed. The procedures used to gather the data and describe the measures used follow. Finally, the definitions of and the procedures used to test moderating and mediating variables are explored.

Sample

The sample for this study included married and divorced mothers who were considered "the hardest to serve" of a local Head Start low-income population. Archival data were available from parents of children 4 years of age enrolled in a special program for the parents of Head Start children, the Family Service Center (FSC), in Cache and Box Elder Counties between 1991 and 1994. The subjects were participants in a local evaluation project studying the effectiveness of the FSC program. The FSC focused on helping parents define problems, set goals, and receive assistance towards achieving their goals from resources available in their community. The program employed a case manager approach to assist parents in achieving their goals. Data were gathered on participants upon enrollment in the FSC program (preservice interview) and as they progressed through the program (postservice interviews). Data utilized by this study were gathered in the preservice interview.

Three groups were created for this study selected from the FSC program evaluation archival data: (a) a group of divorced mothers ($n = 20$), (b) a group of married mothers selected to match demographic characteristics of the divorced mothers ($n = 20$), and (c) a group of married mothers randomly selected from the entire FSC sample ($n = 20$). All divorced participants in the FSC program between 1991 and 1994 were used in the divorced group, excluding three who began in Year 1 but did not continue to Year 2 and therefore did not have available all the necessary data.

Following procedures outlined by Bishop, Frazier, Lanza-Kadice, and Winner (1996), the process of creating the married matched comparison group began with a review of past research focusing on marital status, the use of social support, and perceptions of parenting stress (the research variables). Demographic variables that showed statistically significant relations with the research variables in past research, which were available in this archival data set, were selected in a hierarchical fashion. The matching process focused first on the variables that showed the highest statistical significance in the greatest number of empirical studies found in the literature review for this study. Variables selected, in order, as a result of this process included: (a) years of education, (b) income, (c) number of children in the home, and (d) receipt of government assistance.

Next, the entire FSC data set ($N = 214$) was subjected to several types of statistical analyses to determine if these variables were indeed the best matching variables: (a) correlational analyses, (b) cluster analysis, and (c) discriminant analysis. Correlational analyses were used to determine if the selected demographic matching variables and the

research variables showed statistically significant relations in the entire FSC data set, as in past research. As seen in Table 1, results indicated at least two statistically significant bivariate relations between the variables used to match the two groups and each of the variables used to test the research questions. Further, years of education (the first variable matched) showed a statistically significant relation with all of the research variables except depression (a component variable of total well-being) and difficult child (a component variable of parenting stress).

When using all of the demographic variables and the entire FSC evaluation sample ($N = 214$), cluster analysis determined that only the use of these four demographic variables divided the original sample into two distinct groups. The canonical stack histogram output of discriminant analysis also showed two distinct groups only when these four matching variables were used. Thus, both cluster and discriminant analyses suggested that the use of all four selected matching variables resulted in the most similarity between the groups.

Chi-square analyses and t tests using the match variables were used in order to ensure that there were no statistically significant differences between the divorced group and the married matched group. No significant differences were found between the two groups for the match variables--years of education, income, number of children in the home, and receipt of government assistance--indicating an effective match procedure.

In order to further clarify results of this study, and the relative importance of the demographic variables used to match the divorced sample with the married matched

Table 1

Intercorrelations Between Match Variables and Research Variables (N = 214)^a

	1	2	3	4	5	6	7	8	9	10
A.	.18*	.28**	.25**	-.12	.21*	.19*	-.46**	-.39**	-.23	-.43**
B.	-.04	-.18*	.12	-.01	.04	.04	-.26	-.35*	-.16	-.34
C.	.09	.07	.10	-.18*	.08	.16	-.06	-.22	-.41**	-.30
D.	.16	.17	.19*	.22*	.10	-.06	-.03	.00	.26	.08

A = Years of education

1 = Informal social support

5 = Mastery

9 = Difficult child

B = Income

2 = Formal social support

6 = Total well-being

10 = Total parent stress

C = Number of children

3 = Total social support

7 = Parent child interactions

D = Government assistance

4 = Depression

8 = Parent distress

^a Entire FSC archival sample used.* $p < .05$.** $p < .01$

sample, a randomly selected married group was created. The random married comparison group ($n = 20$) was selected from the entire FSC data set using a random number table and the FSC participant's identification number.

Table 2 shows the typical mother in the divorced group had taken some college classes, had an income of between \$3,001 and \$6,000, had three children, and had received government assistance from three sources. The typical married mother in the matched group had taken some college courses, had a family income of \$6,001 to \$9,000 per year, had three children, and had received government assistance from two sources. The typical married mother in the randomly selected comparison group had completed the 11th grade, had a family income of \$12,001 to \$15,000 per year, had four children, and had received government assistance from two sources.

Table 2

Match Variable Frequencies and Demographics

<u>Variable</u>	<u>Divorced</u> (n = 20)	<u>Matched married</u> (n = 20)	<u>Random married</u> (n = 20)
<u>Years of education</u>	<u>M</u> = 12.94 <u>SD</u> = 2.18	<u>M</u> = 12.65 <u>SD</u> = 2.41	<u>M</u> = 11.27 <u>SD</u> = 3.15
6	-	-	2
7	-	-	1
8	1	1	-
9	-	1	3
10	2	2	1
11	1	1	1
12	3	6	4
13	3	2	1
14	2	2	2
15	5	2	1
16	1	2	2
17	-	1	-
Missing	2	-	2
 <u>Income</u>	 <u>M</u> = 2.80 <u>SD</u> = 2.04	 <u>M</u> = 3.36 <u>SD</u> = 1.85	 <u>M</u> = 5.27 <u>SD</u> = 2.39
less than \$3,000	4	-	1
\$3,001 - \$6,000	9	2	1
\$6,001 - \$9,000	3	6	1
\$9,001 - \$12,000	1	4	4
\$12,001 - \$15,000	1	3	4
\$15,001 - \$20,000	-	2	2
\$20,001 - \$30,000	-	1	3
\$30,001 - \$40,000	2	-	-
\$40,001 - \$50,000	-	2	1
Don't Know	-	-	1
Missing	-	-	2

(table continues)

Variable	Divorced (n = 20)		Matched married (n = 20)		Random married (n = 20)	
<u>Number of children</u>	<u>M</u> = 3.00	<u>SD</u> = 1.02	<u>M</u> = 3.42	<u>SD</u> = 1.21	<u>M</u> = 3.75	<u>SD</u> = 1.16
1	1		1		-	
2	6		3		2	
3	6		7		8	
4	6		3		5	
5	1		5		3	
6	-		-		2	
9	-		1		-	
<u>Government assistance</u>	<u>M</u> = 2.78	<u>SD</u> = 1.27	<u>M</u> = 2.15	<u>SD</u> = 1.53	<u>M</u> = 1.65	<u>SD</u> = 1.30
0	2		2		5	
1	2		6		5	
2	4		5		3	
3	6		4		6	
4	5		-		-	
5	1		3		-	

* A composite variable of total yes responses for receiving services from AFDC, Unemployment, Food Stamps, SSI, SS, Medicaid, or Housing. Families may have received more than one type of assistance or no assistance.

Procedures

Head Start parents enrolled in the FSC program participated in two 30-40 minute interviews each year. One was conducted upon initial enrollment, or at the beginning of each service year, and one at the end of the year (preservice and postservice interviews). Interviews were conducted by telephone to ensure confidentiality. The interviews were conducted by trained interviewers who thoroughly reviewed the forms and then role-

played interviews with each other before conducting actual interviews with the subjects.

Data for this study were taken from the initial enrollment interview conducted with mothers enrolled in the program before services were received from the program.

Measures

Parenting Stress

Parenting stress was measured in the FSC evaluation project by the Parenting Stress Index (PSI; Abidin, 1986). The index was designed to identify families with children under 10 years of age whose parent-child systems are under stress and to give an indication of the "health" of those systems. The test was developed as a self-report pencil and paper inventory using a Likert-type scale ranging from 1 to 5 (strongly agree to strongly disagree). Examples include: "I often have the feeling that I cannot handle things very well," "Since having this child I have been unable to do new and different things," and "My child doesn't seem to learn as quickly as most children." Overall, parenting stress in this instrument is a parent's perception of their feelings of irritation, frustration, inadequacy, annoyance, and distress resulting from the daily tasks of parenting (Ventura, 1987).

There are two versions of the PSI: the original form including 101 items and a short form with 36 of these items. In the original version two domains are measured : (a) the child domain, with 47 items examining child adaptability, acceptability, demandingness, mood, distractibility, and reinforcement of parents; and (b) a parent domain, with 54 items

exploring parental depression, attachment, restrictions of roles, sense of competence, social isolation, spousal relationship, and health.

Content validity of the original version of PSI was established by the instrument's author through a literature review of the field and a professional prioritization process to establish ratings of that information. Concurrent and construct validity are stated in the manual to be established by score correlation with 17 instruments measuring similar constructs (i.e., Child Behavior Problem Checklist, and the State-Trait Anxiety Scale); correlation coefficients ranged from .32 to .83 (Abidin, 1986). Predictive validity was established by a standardization sample with both families with problematic parent-child systems and those labeled as "normal" families. The PSI displayed an ability to predict current or future status of "normal" families with 100% accuracy and problematic families with 60% accuracy (Abidin, 1986). Discriminant validity was also stated as being established by 24 studies whose results found PSI scores to be significantly correlated with similar constructs but not correlated with constructs viewed to be different (i.e., abusive parents vs. nonabusive parents). Factor validity of the instrument was also established utilizing a sample of 534 mothers recruited at a well-baby clinic (Abidin, 1986). Mothers' responses for each domain were analyzed (child and parent domains). The items of each domain tended to load according to the scale in which they were originally designated.

This study and the FSC evaluation used data from the Parenting Stress Index Short Form (PSI/SF; Abidin, 1986), which includes 36 of the 101 items from the original version. The pencil and paper inventory was adapted to be used in an interview format. Three subscales of parents' perceptions are found in the Short Form: parental distress,

parent-child dysfunctional interaction, and the parents' perceived difficulty of the child.

The subscales contain items from both the parent and child domains of the original version.

Factor analysis, used in comparison with the original version, was used to create the short form (36 items) of the PSI (Ventura, 1987). This version was developed to be administered in less than 10 minutes. The total score for this short form provided a .91 reliability coefficient (parent distress .85, parent-child interaction .68, and difficult child .78) and a test-retest coefficient of .84 (parent distress .87, parent-child interaction .80, and difficult child .75). Pearson correlations between the long form and the short form ($N = 530$) ranged from .18 to .94 (Abidin, 1986).

Social Support

The use of social support was measured in the FSC evaluation project by using items from the Family Coping Strategies scale (F-COPES; McCubbin & Patterson, 1982). This instrument views the family as a reactor to stress and as a manager of the resources in a system. This measurement tool was based on Hill's theories of family crisis resolution (Hill, 1949) and was created to identify effective problem-solving approaches and behaviors within a family. It was designed to measure family strategies for using their resources in response to stress.

F-COPES is composed of two dimensions: (a) internal family strategies and (b) external family strategies. Internal family strategies include ways family members use resources to deal with difficulties: confidence in problem solving, reframing family

problems, and passive appraisal of situations. Seeking assistance from outside the family, external family strategies, includes seeking assistance from church or religious resources, extended family, friends, neighbors and community resources.

The F-COPES was developed after an extensive literature review regarding the ways families deal with stress and problems. A list of 49 coping strategies was gleaned from the review information and a Likert-type scale was developed ranging from 1 to 5 (strongly agree to strongly disagree). Graduate and undergraduate students at a midwestern university (most of whom were human services professionals) dispersed the test among friends and family. Retesting was done after one month. Factor analyses derived eight factors from the original list of 49 items and allowed the test to be reduced to the 30 items. Cronbach's alpha ranged from .62 to .84 for each subscale with an overall alpha of .87 (McCubbin & Patterson, 1982).

The FSC evaluation project used 21 of the 30 questions, in order to allow the telephone interview to be completed in less than one hour and to focus on questions related to the FSC program objectives. Items selected focused on the use of formal support from the community, informal support from family, friends, and neighbors, and use of reframing as a coping strategy. These questions were modified to use less difficult language and to ask how frequently the mother is likely to use these sources of social support (always, usually, sometimes, not very often, never) rather than whether she agrees or disagrees that she responds to problems in this way. For example, each was asked: "When there is a problem do you: talk about it with relatives?" This study used items from the external dimension of the F-COPES used in the FSC evaluation in order to

measure perceived use of social support. The items selected refer to active behaviors on the part of the individual to secure resources from extended family and neighbors (informal sources of support), and community (formal sources of support). Thirteen of the 21 items used in the FSC evaluation were used to answer these research questions. Questions focusing on reframing, a coping strategy but not a type of social support, were not used for this study.

Three of the 13 questions used for this study focused on formal support. Unfortunately, the questions were not written in a way that could help researchers discern the dimensions of the assistance received (informational, instrumental or emotional) but simply to determine if that assistance was sought. Ten of the questions addressed the use of informal social support but tended to focus more on the emotional dimension of social support (4 questions) than informational (2 questions) or instrumental assistance (2 questions).

Psychological Well-being

Two measures of psychological well-being were obtained by using the Pearlin Mastery Scale (Pearlin & Schooler, 1978) and the Center for Epidemiological Studies Depression Scale (CES-D) in the interview. Data from the Pearlin Mastery Scale (Pearlin & Schooler, 1978) were used in this study to assess mothers' mastery or self-confidence in their ability to solve life's problems and their feelings of control in their lives. The scale includes seven items to which individuals respond whether they agree or disagree somewhat or strongly. Statements include both positive and negative items such as

"Sometimes I feel that I'm being pushed around in life," "I have little control over the things that happen to me," or "I can do anything I really set my mind to do."

Depression was assessed by the Center for Epidemiological Studies Depression Scale (CES-D) a series of 20 questions. Although it has been reported that the instrument has established reliability and validity for assessing depressive symptoms in the general population, actual assessments of reliability and validity are not available in the literature (Radloff, 1977). Questions inquire as to how often in the past week the individual has experienced emotions associated with depression, such as "I felt fearful" or "I felt lonely."

Reliability and Descriptives of Measures

As shown in Table 3, reliability of each measure used in this study and its subscales was estimated by coefficient alpha, which ranged from .79 (social support) to .91 (mastery and parenting stress). Comparisons were made with coefficient alpha from the original FSC data set ($N = 214$) and all three groups used for this study ($n = 60$).

One way of interpreting the strength of reliability of these measures is through statistical power, or more specifically, the standard error of these reliability coefficients (Cohen, 1988). Using Cohen's definition of standard error statistical power of the instruments used with this sample indicates that statistically significant results would be found by chance 5% of the time for total social support and total well-being and by chance 3% of the time for total parenting stress. As is intuitively obvious, the standard error of statistical power is inversely related on sample size. Less obvious, however, but also

Table 3

Reliability of Measures

Measure	Number of items	n	Alpha
Informal social support	9	213 ^a	.81
		60 ^b	.78
Formal social support	4	214	.64
		60	.71
Total social support	13	213	.82
		60	.79
Depression	7	211	.73
		60	.73
Mastery	20	213	.89
		60	.91
Total well-being	27	211	.78
		60	.79
Parent distress	12	207	.80
		60	.79
Parent child interactions	12	210	.80
		58	.79
Difficult child	12	209	.79
		60	.72
Total parenting stress	36	204	.91
		58	.87

^a Entire FSC sample. ^b Divorced and married groups used in this sample.

intuitively evident, is that the precision of these Cronbach alphas is related to the probability of detecting a "nonnull state of affairs" (Cohen, 1988, p. 7), that is, statistically significant differences.

Mediating Versus Moderating Variables

Pearlin's (1989) model of the effects of stress was coincident with an increase in controversy over the effects of stress and other similar variables in sociological and psychological study. Empirical investigators (Baron & Kenny, 1986; Cobb, 1976; Cohen & Wills, 1985; Folkman & Lazarus, 1988; Mitchell & Trickett, 1980; Quittner et al., 1990; Simons, Lorenz, et al., 1993) began considering the possibilities that there were not only mediating variables which account for the relationship between the independent and the dependent variables (as postulated by Pearlin), but also moderating variables which specify conditions under which the independent variable exerts its effect on the dependent variable.

The terms "mediating" and "moderating" have often been used synonymously even within the same study (Baron & Kenny, 1986), leading Folkman and Lazarus (1988) to suggest that researchers have been confused regarding their precise definitions. Baron and Kenny (1986) focused on the distinctions between the two types of variables and appropriate methods to analyze data from each perspective. More recently, Quittner et al. (1990) proposed that these new conceptualizations may enable researchers to be more effective in linking stressors and sources of support with outcomes in context. Taylor, Roberts, and Jacobson (1997) followed the methods suggested by Baron and Kenny

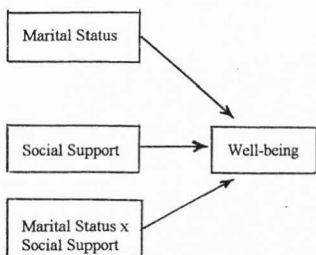
(1986) for testing the effects of mediating variables in a hypothetical model. Their study looked at stressful life events with parental well-being as the mediating variable and mothers' parenting as the outcome variable.

By carefully considering the new definitions for moderating and mediating variables and following the lead of Taylor et al. (1997), this study looked at use of social support as a moderating variable in a series of models (Figure 1). Use of social support was thus examined interacting with marital status to influence mothers' feelings of well-being (a composite variable combining mastery and depression measures) in Model 1 and mothers' perception of parenting stress in Model 2. Finally in Model 3, the moderating variable social support by marital status influences perceptions of parenting stress, with feelings of well-being as a mediating variable by which use of social support buffers the effects of divorce on parenting stress.

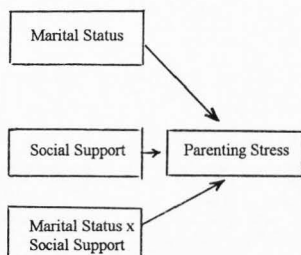
Divorce was viewed as a stressor that would increase perceptions of parenting stress and decrease feelings of well-being. Use of social support was expected to moderate this relation, acting as a buffer to reduce the effects of divorce on parenting. Finally, well-being was predicted to mediate as the means by which social support's interaction with divorce reduced the parenting stress felt by at-risk mothers.

Testing for Moderating and Mediating Variables

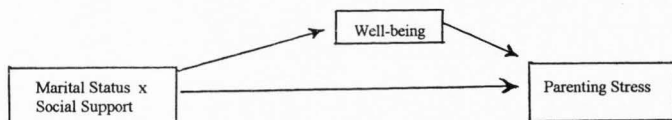
Baron and Kenny (1986) outlined specific procedures to be used in data analysis in order to allow researchers to effectively distinguish variables that work as moderators or



MODEL 1: Moderating Model Well-being



MODEL 2: Moderating Model Parenting Stress



MODEL 3: Moderating and Mediating Model

Figure 1. Theoretical models.

mediators in a theoretical model. This study used their techniques to determine if use of social support acted as moderator of the effects of divorce on parenting stress and if feelings of well-being acted as a mediator between social support and parenting stress.

Moderating Variable

According to Baron and Kenny (1986), a moderating model contains two components (Models 1 & 2, Figure 1), a predictor variable and the moderator variable. The model also includes the combined effects of both the predictor variable and the moderating variable to help specify the conditions under which the predictor's effects would hold; in this model the predictor variable was marital status and the moderator was social support.

In order to meet the analytic definition of a moderator and to allow for interpretation of the relation between the variables, the moderating variable should not be correlated with the predictor variable or the dependent variable. The moderating variable hypothesis only works if the combination of the predictor and the moderating variable is significant. Because the predictor variable in this study is a dichotomy (marital status) and the moderating variable is continuous (social support), Baron and Kenny recommend the use of regression techniques to test the hypothetical model. In using this technique the assumption is that there is a steady change in the independent variable's effect on the dependent variable as the moderator changes.

Specific procedures are outlined to analyze a moderating hypothetical model (Figure 1, Model 1 and Model 2). First, the dependent variable (well-being or parenting

stress) is regressed on the predicting variable (marital status). Next, the moderator (social support) along with marital status-by-social support is also regressed on the dependent variable. In order to meet the criteria for moderation, there should only be a significant effect of marital status by social support while marital status and social support are controlled.

Mediating Variable

Baron and Kenny (1986) stated that a mediating variable accounts for the relationship between two variables and that path analysis clarifies the meaning of that mediation (explains how and why). In this analysis, the independent variable and the mediator should be correlated. The mediator and the dependent variable should also be correlated.

Specific procedures are outlined to analyze a mediator hypothetical model (Model 3, Figure 1): (a) The mediator (feelings of well-being) is regressed on the independent variable (marital status by social support). (b) The dependent variable (perceptions of parenting stress) is regressed on the independent variable. (c) The dependent variable is regressed on both the mediating variable and the independent variable. In order to meet the criteria for a mediating variable, there should be a significant effect between the mediator and the independent variable when tested separately, a significant effect between the dependent and the independent variable when tested separately, and when all three components are tested together, the effect between the independent variable and the

dependent variable should no longer be significant. This finding would suggest that the effect of marital status by social support on parenting stress is apparent only when a certain level of well-being is present.

Summary

By using archival data from a Head Start FSC evaluation project, three samples were selected: (a) a group of divorced mothers, (b) a group of married mothers matched with the divorced group on four demographic variables, and (c) a group of married mothers selected randomly from the FSC sample.

Information was gathered in the FSC evaluation project by telephone interviews conducted by trained interviewers using several reliable and valid measurement instruments: the Parenting Stress Index (Abdin, 1986), the Family Coping Strategies scale (McCubbin & Patterson, 1982), the Pearlin Mastery Scale (Pearlin & Schooler, 1978), and the Center for Epidemiological Studies Depression Scale (Radloff, 1977).

In order to test the research questions, procedures were outlined following criteria described by Baron and Kenny (1988) to test for effects of both moderating and mediation variables in a hypothetical model.

CHAPTER IV

RESULTS

In order to clarify the effects of use of social support on perceptions of parenting stress, this study tested the effect of divorce as a stressor on the feelings of well-being and stress in parenting. Use of social support was predicted to moderate the effects of divorce on feelings of parenting stress and well-being for low-income mothers of preschool children. Further, well-being was tested as a mediating variable between the interactive effects of social support and marital status on perceptions of parenting stress. Finally, component variables of each of the research variables were explored in relation to their counterparts (i.e., formal social support was considered in relation to mastery and parent distress components of the research variables social support, well-being, and parenting stress). To begin this process, the differences between the divorced and married groups in this sample were considered.

† Tests

As shown in Table 4, when comparing the model variables by group, significant differences were found between the married matched comparison group and the divorced group in use of formal support and for the total variable social support (made up of use of informal support and formal support). Because the two groups were matched for number of children, income, years of education, and receipt of government assistance, no differences were found between the groups for these variables (Table 5).

Table 4

Model Variable Descriptives and Group Difference Comparisons

Variable		Divorced ($n = 20$)	Matched ($n = 20$)	t^a	Random ($n = 20$)	t^b
Informal social support	<u>M</u>	2.75	2.56	1.18	2.60	-.62
	<u>SD</u>	.73	.56		.69	
Formal social support	<u>M</u>	2.73	2.05	-2.40*	2.47	-.98
	<u>SD</u>	.99	.73		.67	
Total social support	<u>M</u>	5.48	4.85	-2.36*	5.08	-.90
	<u>SD</u>	1.35	1.05		1.14	
Depression	<u>M</u>	2.04	1.69	-1.75	1.57	-1.47
	<u>SD</u>	.72	.51		.56	
Mastery	<u>M</u>	3.12	3.22	.58	3.31	1.08
	<u>SD</u>	.56	.51		.52	
Total well-being	<u>M</u>	1.08	1.53	1.46	1.57	1.41
	<u>SD</u>	1.16	.83		.94	
Parent distress	<u>M</u>	2.39	2.25	-.59	2.35	-.12
	<u>SD</u>	.65	.60		.61	
Parent child interactions	<u>M</u>	1.80	1.63	-1.07	1.74	-.47
	<u>SD</u>	.30	.33		.10	
Difficult child	<u>M</u>	2.32	2.38	.44	2.30	-.08
	<u>SD</u>	.45	.45		.62	
Total parenting stress	<u>M</u>	6.52	6.32	-.47	6.39	-.24
	<u>SD</u>	1.06	1.12		1.34	

^a t -test comparison between divorced and matched married group.

^b t -test comparison between divorced and random married group.

* $p < .05$.

Not surprisingly, Table 5 shows that the randomly selected married comparison group showed significant differences from the divorced group in number of children, income, and government assistance (three of the four demographic variables used to create the matched sample). However, no significant differences were found for the married random group and divorced group when comparing the variables in the proposed model (Table 4).

Correlations

Further differences between the groups were considered with the aid of zero order correlational analysis of the demographic variables (looking at the contextual aspects of the hypothetical model) and the research variable and the research variables within each group.

Table 5

Match Variables Group Difference Comparisons

Group and Variable		Divorced (n = 20)	Matched (n = 20)	t ^a	Random (n = 20)	t ^b
Children	<u>M</u>	3.00	3.42	-1.17	3.75	2.16*
	<u>SD</u>	1.02	1.21		1.16	
Income	<u>M</u>	2.80	4.00	-2.08	5.27	3.44**
	<u>SD</u>	2.04	1.41		2.39	
Government Assistance	<u>M</u>	2.78	2.57	.27	1.65	-2.75*
	<u>SD</u>	1.27	3.09		1.30	

^a t-test comparison between divorced and matched married group.

^b t-test comparison between divorced and random married group.

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

Demographic Match Variables

Similar to Table 1 using the entire FSC sample, Tables 6 shows that years of education exhibited more statistically significant relations with the research variables for the entire matched group and the divorced group than did the other match variables. For the divorced group, education was correlated with all of the research variables. For the entire matched sample, it was not correlated with informal social support, difficult child, and total parenting stress. For the married matched group, education was significantly correlated with only three variables: depression (a component variable of total well-being), well-being, and parent-child interactions (a component variable of total parenting stress).

Fewer significant relations were found for the married matched group and the entire random group (Table 6). For the entire random sample, education was correlated with only informal social support and total social support. No significant relations were found for the married random group (Table 6).

As shown in Table 6, income, number of children in the home, and receipt of government assistance showed no significant relations with the research variables for the divorced group. Income was significantly related to formal social support for both of the married comparison groups (positively for the matched group and negatively for the random group) and a negative relation was found with total parenting stress for the matched group (Table 6). Number of children was negatively related to perceptions of difficult child (a component of total parenting stress) for the matched married group and

Table 6

Intercorrelations Between Match Variables and Research Variables

	1	2	3	4	5	6	7	8	9	10
<u>Divorced Group (n = 20)</u>										
A.	.50*	.51*	.51*	-.49*	.65**	.63**	-.46*	-.54*	-.53*	-.67**
B.	.20	.08	.17	-.20	.16	.20	-.07	-.27	-.16	-.25
C.	.09	.21	.21	-.31	.37	.37	.41	-.42	-.37	-.30
D.	-.23	.09	-.05	.28	-.01	-.18	.10	.24	.34	.33
<u>Married Matched Group (n = 20)</u>										
A.	-.15	.35	.28	-.59**	.16	.46*	-.45*	-.27	-.02	-.27
B.	-.11	.51*	.28	-.08	.42	.31	-.42	-.44	-.32	-.47*
C.	-.15	.35	.14	-.30	-.07	.13	-.30	-.01	-.49**	-.29
D.	.17	.05	.04	.07	.19	.07	-.13	-.12	.26	-.00
<u>Divorced and Married Matched Group Combination (n = 40)</u>										
A.	.19	.40*	.39*	-.49**	.38*	.52*	-.42**	-.38*	-.23	.06
B.	.04	.07	.07	.24	.28	.29	-.27	-.36*	-.16	-.32*
C.	-.05	.16	.08	-.33*	.15	.29	-.00	-.23	-.41**	-.18
D.	.02	.01	.02	.13	.11	-.02	-.05	-.00	.26	.09
<u>Married Random Group (n = 20)</u>										
A.	.35	.27	.37	-.07	.11	.10	-.22	-.09	.16	-.04
B.	-.00	-.48*	-.28	.07	-.13	-.11	.13	.10	.05	.11
C.	-.24	.01	-.14	.13	-.06	-.11	-.29	.15	-.22	-.13
D.	.21	.20	.24	.06	.26	.10	-.19	-.09	-.06	-.12
<u>Divorced and Married Random Group Combination (n = 40)</u>										
A.	.41*	.31	.44**	-.18	.30	.26	-.27	-.28	-.11	-.27
B.	.04	-.20	-.11	-.18	.12	.17	-.00	-.10	-.02	-.06
C.	-.10	.06	-.01	-.17	.20	.20	-.05	-.13	-.26	-.20
D.	.02	.19	.13	.25	.04	-.13	-.02	.10	.10	.09
A = Years of education				4 = Depression						
B = Income				5 = Mastery						
C = Number of children				6 = Total well-being						
D = Government assistance				7 = Parent child interactions						
1 = Informal social support				8 = Parent distress						
2 = Formal social support				9 = Difficult child						
3 = Total social support				10 = Total parent stress						
* $p < .05$. ** $p < .01$.										

the entire matched sample (Tables 6). Table 6 also indicates that for the entire matched sample, income had a negative relation with parent distress and total parenting stress. For the same group, number of children was related to depression (a component of total well-being) and perceptions of difficult child (a component of total parenting stress).

Research Variable Correlations

Table 7 and Table 8 indicate no significant correlations between social support and the other research variables for any of the groups. However, they show statistically significant relations between well-being and parenting stress for all three groups.

For the divorced group, social support was related to feelings of mastery and negatively related to one component of the parenting stress variable: difficult child. For the matched married group, social support was significantly correlated with two components of parenting stress: parent distress and parent child interactions. No significant correlations were found between social support or its component variables and the dependent variables for the random group.

Well-being showed a strong negative relation to parent distress (a component variable of total parenting stress) for all three groups (Table 7 and 8). In the matched married group, total well-being also was negatively related to parent child interactions. When looking at the component variables of well-being for the divorced group there was a significant negative relation between parenting stress and feelings of depression. The components of well-being (mastery and depression) showed a consistent pattern with depression and with parent distress for both the divorced and random married group.

Table 7

Intercorrelations Divorced Group^a (n = 20)Married Matched Group^b (n = 20)

	1	2	3	4	5	6	7	8	9	10
1.	—	.30	.74**	.23	.23	.00	-.15	-.41	.14	-.21
2.	.22	—	.85**	-.13	.39	.32	-.56**	-.46*	.07	-.38
3.	.70**	.84**	—	.02	.39	.22	-.47*	-.54*	.13	-.37
4.	-.27	-.01	-.16	—	-.30	-.80**	.33	.24	.17	.29
5.	.55*	.28	.50*	-.61**	—	.81**	-.53*	-.60**	-.13	-.53*
6.	.44	.15	.34	-.92**	.87**	—	.53*	-.52*	-.19	-.52*
7.	-.53*	.13	-.18	.27	-.25	-.29	—	-.73**	.32	.82**
8.	-.04	-.07	-.08	.60**	-.47*	-.60**	.18	—	.34	.89**
9.	-.48*	-.29	-.47*	.22	-.36	-.32	.18	.45*	—	.68**
10.	-.38	-.13	-.30	.54*	-.52*	-.60**	.48*	.86**	.76**	—

1 = Informal social support

3 = Total social support

7 = Parent child interactions

2 = Formal social support

4 = Depression

8 = Parent distress

^a=below the line.

5 = Mastery

9 = Difficult child

^b= above the line.

6 = Total well-being

10 = Total parent stress

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

Mastery was negatively related to parent distress for all three groups, with the strongest relation for the random married group. There was also a negative relation with parent child interactions for the matched married group.

When looking at the component variables of social support, differences were found between the married matched group and the divorced group. For the divorced group, informal support was positively related to mastery (a component of well-being) and negatively related to parent child interactions and difficult child (components of parenting stress). Formal support, on the other hand, showed statistical significance for the matched married group only with a strong negative relation with parent child interactions and a negative relation with parent distress.

Table 8

Intercorrelations Married Random Group (n = 20)

	1	2	3	4	5	6	7	8	9	10
1.	--									
2.	.41	--								
3.	.84**	.83**	--							
4.	.00	-.09	-.05	--						
5.	.20	.18	.23	-.50*	--					
6.	.11	.16	.16	-.87**	.85**	--				
7.	-.14	-.15	-.00	.13	-.47*	-.34	--			
8.	-.34	-.02	-.22	.59**	-.66**	-.72**	.36	--		
9.	.35	-.05	.24	.28	-.16	-.26	.60**	.42	--	
10.	.05	-.03	.01	.44	-.53*	-.57*	.77**	.77**	.85**	--

1 = Informal social support
 2 = Formal support
 3 = Total social support
 4 = Depression
 5 = Mastery
 6 = Total well-being
 7 = Parent child interactions
 8 = Parent distress
 9 = Difficult child
 10 = Total parent stress

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

Testing for Moderating and Mediating Variables

Specific procedures outlined by Baron and Kenny (1986) were used for data analysis in order to distinguish variables that work as moderators or mediators in the theoretical model (Figure 1). Their techniques were used to test social support as a moderator of the relation of marital status with parenting stress and well-being as a mediator between social support and parenting stress. All models were tested for two groups: (a) the divorced group combined with the married matched group and (b) the divorced group combined with the married random group. When the models were tested for the random group combined with the divorced group, the demographic variables used to create the matched group (number of children, years of education, income and government assistance) were controlled statistically by including these variables in the

regression model.

Moderating Variable

In order to meet the analytic definition of a moderator and to allow for interpretation of the relation between the variables, the moderating variable should not be correlated with the predictor variable or the dependent variable. When testing Model 1 of the theoretical model found in Figure 1, the divorced sample combined with the married random sample showed no correlational relation between social support (the moderator) and either marital status (predictor variable) or well-being (dependent variable) (Table 9). The married matched group combined with the divorced group, however, exhibited a significant correlation between marital status and the research variable social support but no correlation with the dependent variable well-being. Therefore, the analytical criteria were met only for the random group.

When testing the unique aspect of Model 2 of the theoretical model found in Figure 1, social support was not correlated with the dependent variable parenting stress for both groups. But because marital status was correlated with social support for the matched group, again, only the random group was qualified to proceed to the next analytical step.

When regression analyses were completed for the two models using the random group as the comparison sample and regressing the dependent variables well-being and parenting stress on the interaction variables marital status and social support, no

Table 9

Intercorrelations Divorced and Married Matched Group^a (n = 40)Divorced and Married Random Group^b (n = 40)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
1.	—	.30	.76**	-.13	.37*	.26	-.13	-.18	-.02	-.14	.10
2.	.29	—	.84**	-.00	.21	.11	.00	-.04	-.11	-.07	.15
3.	.72**	.87**	—	-.07	.35*	.22	-.06	-.13	-.08	-.13	.16
4.	-.03	.04	.01	—	-.58**	-.91**	.20	.56**	.24	.46**	.23
5.	.39*	.27	.39*	-.49**	—	.86**	-.37*	-.53**	-.25	-.51**	-.17
6.	.23	.11	.19	-.88**	.83**	—	-.31*	-.61**	-.27	-.54**	-.23
7.	-.30	-.08	-.21	.33*	-.24	-.42**	—	.28	.46**	.66**	.08
8.	-.18	-.17	-.21	.43**	-.52**	-.54**	.46**	—	.43**	.80**	-.13
9.	-.21	-.14	-.21	.17	-.24	-.24	.24	.40*	—	.82**	-.01
10.	-.28	-.18	-.27	.42**	-.52**	-.53**	.66**	.88**	.71**	—	.05
11.	.18	.36*	.35*	.27	-.09	-.22	.19	.11	-.07	.09	—

1 = Informal social support

2 = Formal social support

3 = Total social support

4 = Depression

5 = Mastery

6 = Total well-being

7 = Parent child interactions

8 = Parent distress

9 = Difficult child

10 = Total parent stress

11 = Marital status

^a=below the line.^b=above the line.* $p < .05$. ** $p < .01$.

statistically significant interaction was found between marital status by social support and well-being or parenting stress. Thus the results indicated that social support does not function as a moderating variable with marital status for this sample.

Mediating Variable

Because Models 1 and 2 were not supported in the analyses for the moderating variable and were prerequisites for the analysis of Model 3, Model 3 was also not supported for this sample.

Testing Alternative Models

Following the procedures outlined by Baron and Kenny (1986), alternative models were explored and tested for both the random and married groups using the component variables for each of the research variables (Tables 10 and 11). Unfortunately, no variable combinations using the total variables or their components met all of the conditions that would indicate a mediating variable model.

Table 10

Alternative Moderator Models Tested

Model number	Predictor variable	Moderating variable	Dependent variable
1	Marital status	Informal social support	Well-being
2	Marital status	Informal social support	Mastery
3	Marital status	Informal social support	Depression
4	Marital status	Formal social support	Well-being
5	Marital status	Formal social Support	Mastery
6	Marital status	Formal social support	Depression
7	Marital status	Informal social support	Parenting stress
8	Marital status	Informal social support	Parent child interactions
9	Marital status	Informal social support	Parent distress
10	Marital status	Informal social support	Difficult child
11	Marital status	Formal social support	Parenting stress
12	Marital status	Formal social support	Parent child interactions
13	Marital status	Formal social support	Parent distress
14	Marital status	Formal social support	Difficult child

Table 11

Alternative Moderating and Mediating Models Tested

Model number	Predictor variable	Moderating variable	Mediating variable	Dependent variable
1	Marital status	Informal social support	Well-being	Parenting stress
2	Marital status	Informal social support	Mastery	Parenting stress
3	Marital status	Informal social support	Depression	Parenting stress
4	Marital status	Formal social support	Well-being	Parenting stress
5	Marital status	Formal social support	Mastery	Parenting stress
6	Marital status	Formal social support	Depression	Parenting stress
7	Marital status	Informal social support	Well-being	Parent child interactions
8	Marital status	Informal social support	Mastery	Parent child interactions
9	Marital status	Informal social support	Depression	Parent child interactions
10	Marital status	Formal social support	Well-being	Parent child interactions
11	Marital status	Formal social support	Mastery	Parent child interactions
12	Marital status	Formal social support	Depression	Parent child interactions
13	Marital status	Informal social support	Well-being	Parent distress
14	Marital status	Informal social support	Mastery	Parent distress
15	Marital status	Informal social support	Depression	Parent distress
16	Marital status	Formal social support	Well-being	Parent distress
17	Marital status	Formal social support	Mastery	Parent distress
18	Marital status	Formal social support	Depression	Parent distress

(table continues)

Model number	Predictor variable	Moderating variable	Mediating variable	Dependent variable
19	Marital status	Informal social support	Well-being	Difficult child
20	Marital status	Informal social support	Mastery	Difficult child
21	Marital status	Informal social support	Depression	Difficult child
22	Marital status	Formal social support	Well-being	Difficult child
23	Marital status	Formal social support	Mastery	Difficult child
24	Marital status	Formal social support	Depression	Difficult child

Summary

To test the research questions, three sample groups were selected from archival data collected upon enrollment in a Head Start intervention project. Sample groups included a group of divorced mothers and two married comparison groups. T-tests showed that divorced mothers used more formal support and had higher total social support scores than the married mothers who were matched with them for level of education, income, number of children in the home and receipt of government assistance. They also received more government assistance, had fewer children, and less income than the randomly selected married group. Education was the only matching variable related significantly with all of the research variables. For the matched married group, more education resulted in lower levels of depression, higher levels of well-being and more positive parent-child interactions. A higher income was related to more use of formal social support and less stress in parenting.

For the random married group, depressed mothers had lower levels of mastery and felt more distress in their parenting. Higher use of formal social support was related to more positive parent-child interactions and less parent distress for the matched married group, while informal support was related to higher mastery, more positive parent-child interactions, and more positive views of their child, for the divorced group.

The divorced and random married groups both exhibited significant relations between depression and parent distress. All three groups showed significant relations between well-being and parenting stress, mastery and parenting stress, and mastery and parent distress. The analysis of moderating and mediating variables using Baron and Kenny's (1986) approach did not support the proposed hypothetical model or alternative models tested.

CHAPTER V

DISCUSSION AND CONCLUSIONS

In the following section a general overview of the previous chapters is provided. Next, the results of testing the model are discussed and important findings from within group comparisons are shown. Finally, limitations of the study are outlined.

The stress parents feel affects how they fulfill their roles as a parent and also affects their own psychological well-being (Abidin, 1986; Jarvis & Creasy, 1991; Mash & Johnston, 1983; Quittner et al., 1990). Social support has been shown to help parents deal with the demands of parenting while maintaining psychological health (Albrecht & Adelman, 1984; Cassel, 1974; Cobb, 1976; Sanson & Farnell, 1997). Low-income can add further to the levels of stress in parenting and increase the need for sources of social support. Low-income parents are more likely to be depressed and have less favorable impressions of their children, particularly low-income mothers of preschool children (Bird, 1997; Jackson, 1993; Lavee et al., 1996; Whitbeck et al., 1997). In addition, divorced mothers of preschool children are often categorized as at-risk of experiencing parenting stress and less positive feelings of well-being compared to married mothers of preschoolers (Ahrons, 1980; Belsky, 1981; Day & Bahr, 1986; McLannahan & Booth, 1989; O'Leary et al., 1996; Tschann et al., 1990). Divorce may limit the resources that can be helpful in parenting (i.e., assistance from a spouse and their relatives and financial resources).

The purpose of this study was to compare divorced and married low-income mothers of preschool children controlling for contextual factors (education, income, number of children and receipt of government assistance), an approach not used in past research, and looking at their use of social support and feelings of well-being in relation to their feelings of parenting stress. Two groups of married mothers were used in comparison with a group of divorced mothers. One married group was selected from the original FSC archival sample by matching contextual characteristics of the divorced group: years of education, their family income, number of children, and use of government assistance. The other group of married mothers was selected from the original FSC sample using a random number table and their identification numbers. When data analysis of the hypothetical model was carried out utilizing the random group, years of education, income, number of children, and use of government assistance were controlled statistically.

The study explored mothers' perceptions of the stress of parenting in relation to their use of social support resources. The psychological well-being (feelings of happiness and confidence) of mothers was also compared in association with perceptions of parenting stress and use of social support.

Parenting stress was assessed by exploring mothers' feelings of parenting distress, their perceptions of their interactions with their children, and their perceptions of the difficulty of their children's characteristics. Well-being measures were derived by asking mothers about their feelings of self-confidence and symptoms of depression. The use of

social support was assessed by asking how often subjects turn to formal and informal sources of social support when they have a problem.

In order to clarify the effects of social support on parenting stress, this study tested the effect of divorce as a stressor on the feelings of well-being and stress in parenting. Social support was predicted to moderate the effects of divorce on parenting stress and well-being for low-income mothers of preschool children.

Testing the Model

The hypothetical model was tested twice: once using the divorced group combined with the matched married group and once with the divorced group combined with the randomly selected married group. In order to replicate the results, the contextual variables used to create the married matched group were statistically controlled in analyses utilizing the randomly selected married group.

Procedures outlined by Baron and Kenny (1986) were used to test social support as a moderating variable. In the matched group, social support and marital status were significantly correlated making any effects of the two variables acting together on parenting stress or well-being difficult to determine. Therefore, the model was not supported for the matched group. For the random group, the variables social support and marital status were not correlated, allowing the analysis to proceed to the next step. Unfortunately, no statistically significant effect was seen for the combination of marital status and social support on well-being or parenting stress for this group, indicating that the model was also not supported for this group. Because the moderating variable made

up the first portion of the mediating variable model, the mediating portion of the model was also not supported.

For this sample of low-income mothers, social support with marital status did not moderate the effects of marital status on parenting stress or well-being. Thus, this study did not support conclusions that social support acts as a moderating variable against stress (Caplan, 1976; Cohen & Wills, 1985; Mueller, 1980; Quittner et al., 1990; Simons, Lorenz, et al., 1993; Thoits, 1982) or to promote well-being (Jarvis & Creasy, 1991; Lavee et al., 1996; McDowell et al, 1995; Mash & Johnston, 1983; Mash et al., 1983; Sanson & Farnell, 1997; Shaw & Burns, 1993; Simoni, 1991; Winslow & Shaw, 1993).

Within-Group Comparisons

Although the hypothetical model was not supported in this study, looking at correlational analyses within each group, married and divorced, may offer insight into relations among variables for this sample. Analyses correlating the contextual variables used to match samples with the research variables for each group indicated that for the divorced group in this sample, education was the most important variable. Education showed significant correlations with all of the research variables except one component of parenting stress. These results support past research linking education with social support and parenting stress (Arditti & Bickley, 1996; Bird, 1997; Flowers et al., 1996; Simons, Lorenz, et al., 1993; Tellen, Herzog, & Kibane, 1989). For this sample divorced mothers with more years of education used more social support, had better psychological health,

and felt less stress in their parenting. The other contextual variables showed no significant relations with the research variables for the divorced group.

For the married matched group, education was significantly correlated with depression, well-being, and parent-child interactions (the only variable not significantly correlated for the divorced group). There were no significant correlations for education in the married random sample.

Analyses looking at components of the total social support variable also supported past research. Although *t* tests indicated that divorced mothers in this study used significantly more formal support than the married matched mothers, correlational analyses showed that use of informal support by divorced mothers was significantly related to aspects of parenting stress and well-being. Formal support was related to parenting stress for the married matched sample. Formal support was also related to income for both married groups. The difference in the use of informal social support by the divorced mothers in this study does support past research, which concluded that many divorced women depend on informal social support more exclusively than married women do (Albrecht et al., 1983; Anspach, 1976; Halem, 1982; Kurtz, 1996; McLannahan & Booth, 1989; McLannahan & Sandefur, 1994; Oppawsky, 1991; Thabes, 1997).

All three groups exhibited significant relations between well-being and parenting stress. Although no differences between groups were reflected in this study, the results support past research reporting that parents who are self-confident and happy are more likely to be satisfied with the role of parenting, view themselves as more effective parents, and be more accepting of the characteristics of their child (Abidin, 1986; Huyck, 1991;

Jarvis & Creasy, 1991; Lavee et al., 1996; McDowell, Saylor, Taylor, & Boyce, 1995; Mash & Johnston, 1983; Mash et al., 1983; Quitnner et al., 1990; Shaw & Burns, 1993; Simoni, 1991; Simons, Beaman, et al., 1993; Simons, Lorenz, et al., 1993; Winslow & Shaw, 1993).

Study Limitations

One explanation for the differences in findings between this study and past research may lie in the complexity of the concept of social support and inconsistent approaches in measuring it. In 1982, Thoits postulated that the concept of social support in health and social science research suffered from serious problems with its conceptualization. She believed that a precise conceptualization had not yet been developed and that in fact researchers who proposed that social support was a multidimensional concept and should be measured in that way were on the road to improving the definitions of that concept.

In 1985, Cohen and Wills took Thoits's (1982) ideas a step further and reviewed a number of studies focusing on stress and social support and their methodological characteristics. Cohen and Wills (1985) organized their review of social support research with respect to how the variable was measured in the studies which were reviewed. Two aspects of social support measures were identified: (a) structure versus function and (b) specificity versus globality. Structure was defined in this study as simply describing the existence of relationships. Function measured the extent to which the relationships served

certain functions. Specificity combined a number of structural measures together to form an index. Globality combined a number of functional measures together to form an index.

The social support measure used for this study combines two measures that describe the existence of relationships (structure and specificity). Cohen and Wills (1985) concluded that studies which used the structure measures provided only an indirect measure of availability of support and consistently found weaker results. Further, it was proposed that in order to test successfully for moderating variables and interactive effects, functional and global measures should be used. Studies that have successfully found social support acting as a moderator of stress tend to use functional measures alone, or in conjunction with structural measures. As indicated by the results of this study and the conclusions of Cohen and Wills (1985), future research striving to clarify the effects of social support should use measures that encompass not only structure but also function of the concept. Extensive lists of social support scales are available along with critical reviews on each instrument (Bruhn & Philips, 1984; Dunst & Trivett, 1988; Fewell, 1986; House & Kahn, 1985; Tardy, 1985).

Further, including two variables related to marital status in this study, quality of marital relationship and length of time since divorce, may have helped clarify social support as a moderating variable in this model and for this sample. In 1981, Belsky proposed that the quality of a marital relationship affected a mother's interaction with her children. Kessler and Essex (1982) concluded that the confiding and intimate marital relationship resulted in lower levels of depression in partners when dealing with the strains

of life. Quality of marital relationship has since been shown to influence psychological health, parent-child relationships, and competence in parenting (Cox, 1989; Crnic, Greenberg, et al., 1984; Crnic & Greenberg, 1990; Heller, Swindle, & Dusenbury, 1986; Simons, Beaman, et al., 1993). Distinguishing this factor for the married groups in this sample may have helped to account for differences between the two married groups and similarities with the divorced group. It has been postulated that those in an unhappy marriage may even be worse off than those who are single (Mermelstein, Cohen, Lichenstein, Baer, & Kamerack, 1986).

The FSC evaluation project did not measure length of time since divorce. In 1990 Quittner concluded that social support may work as a moderating variable more often in cases where the stressor is of an acute nature such as would be the case before, during, and directly after a divorce rather than in chronic cases of stress as seen for divorced mothers over time. Information regarding the time since divorce may have helped clarify its stress as acute or chronic and further clarify the effects of social support for that particular group. Looking more closely at each aspect of marital status may also assist future researchers in sorting out the effects of social support. For married parents, quality of the marital relationship may be important, and for divorced parents, length of time since the divorce may well determine the type of stress felt and determine how social support affects outcomes.

Finally, another limitation for this study was the size of the total sample ($N = 60$) and particularly the small number of divorced mothers ($N = 20$) available in the archival

data. A larger sample would have allowed for more flexibility in analysis and more generalizable results.

Summary

For this sample of low-income mothers, social support interacting with marital status did not moderate the effects of marital status on parenting stress or well-being. Thus, this study did not support conclusions that social support acts as a moderating variable against stress and did not allow for testing of the mediating effects of well-being. The failure of this study to support the hypothetical model of social support as a moderating variable may be the result of the instrument selected by the evaluation project to measure social support. Cohen and Wills (1985) and Thoits (1982) agree that social support is a multidimensional qualitative concept and in order to fully understand its effects, all dimensions of the concept must be measured, rather than simply quantifying the use of social support and its types. Future research should use more encompassing measures to capture the complexity and true effects of social support and look at more qualitative aspects of marital status.

Support for past research was found when studying correlational analyses for each group separately. Like that found in previous research, informal social support was more important for the divorced mothers. This study revealed that they had improved feelings of mastery, perceptions of their child, and interactions with their child. However, for the married mothers, formal social support was more important, leading to improved perceptions of their child and interactions with their child.

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Education:

Ph.D. (1999) Utah State University
 Department of Family and Human Development
 Focus: Family Dissertation topic: "Parenting Stress and Social Support Among
 Married and Divorced At-Risk Mothers"
 M.S. (1993), Utah State University, Family and Human Development
 Focus: Early Childhood Thesis: "Preschool Children's Perceptions of Their Parents: A
 Comparison of Children from Married and Divorced Homes"
 B.S. (1989), California State University at Fullerton, Child Development
 A.A. (1983), Cerritos College, General Studies
 A.A. (1982), Cerritos College, Early Childhood Education
 (Outstanding Academic Achievement Award)
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Administrative Experience

Location: Utah State University, Logan, Utah
 Dates: September 1993 to November 1998
 Position: Director, USU Children's House

Oversee and direct an accredited preschool program for the children of university students. In charge of hiring/placement, staff development, supervision and evaluation of staff and student workers. Complete enrollment of children and oversee fee payment. Complete and direct budget considerations. Maintain and supervise facility upgrades. Provide community and professional service to the community.

Location: Utah State University
 Dates: June 1992 to June 1995
 Position: Project Manager
 Evaluation Bear River Head Start Family Service Center

Assisted in the development of measurement tools and research design. Oversaw data collection, data entry and data analysis (using SPSS). Assisted in writing reports, manuscripts, and presentation related to this project (see conference presentations and publications).

Location: Cerritos College Child Development Center, Norwalk, California
 Dates: January 1984 to May 1985
 Position: Director (1 semester)

Supervise professional and student staff, receive parent registration and fees. Process maintenance work orders, handle petty cash and ordering of warehouse supplies. In charge of purchasing and record keeping. Handled publicity on campus and in the community.

Grant Writing Experience

Source: Office of Child Care Enrichment Grants:

1. Wheeled Vehicle Safety 1997
 Allowed the purchase of tricycles, scooters, wagons, and helmets for two locations of school.
2. Multicultural Curriculum 1995
 Allowed for the purchase of multicultural equipment, and staff training in cultural education.
3. Accreditation 1994
 Allowed for the payment of fees for the accreditation process.
4. Child Care Resource and Referral 1993 (with Austin, A.)
 Funding to set up service agency which provides data base of child care for parent referral and provides training for providers.

Teaching Experience (Adults): *

Marriage and The American Family (1 quarter).
 Human Growth and Development (5 quarters).
 Seminar In Early Childhood Education/ Practicum in Early Childhood (5 quarters).
 Infancy (2 quarters).
 Child 2-5 (1 quarter).
 Child 6 to 12 (1 quarter).
 Lab for Children Six to Twelve (1 quarter).
 Practice Teaching in Child Development Lab (19 quarters).
 (Seminar) Practice Teaching in Child Development Lab (9 quarters).
 Children Birth to Five (3 quarters).

*Have taught in distance learning format (4 quarters).

Research Experience

Location: Utah State University
 Dates: June 1991 to June 1995
 Position: Data entry and analysis

Assisted in data entry and analysis in project studying infant/toddler parent interactions (instruments: Parent Stress Index, Bailey Developmental Assessment, Attachment Q-sort).

Location: Utah State University

Dates: June 1992 to June 1993

Position: Data Collection

Assisted in data collection for several research projects (strategic planning evaluation for State of Utah Board of Education, study on adolescent sexual development).

Community and Professional Service:

1. National Academy of Early Childhood Programs
Accreditation Validator 1997-present
2. Cache Valley Association for the Education of Young Children
Affiliate of National Association for the Education of Young Children
Past President 1997-98.
President 1996-97
Newsletter 1993-1995
Week of the Young Child 1991- 1993
3. First Judicial District Victim's Rights Committee 1993-November 1998
4. Cache County Children's Justice Center Advisory Board
Member 1996- November 1998
Chair 1994-1996
5. Cache County Children's Justice Center Friends Committee (Vice Chair, Board of Trustees)
Member 1994- November 1998
6. National Association of Child Care Resource and Referral
Rural Issues Committee 1996-present
7. Child and Family Focus: Child Care Resource and Referral Advisory Board
Chair 1993-1996
8. FIP Advisory Board 1996- November 1998
9. Governor's Conference on Family (Northern Region)
Child Care 1995-1997

Teacher Training Conference Presentations:

1. Western Regional Conference, National Association of Child Care Resource and Referral, Spring 1996 "Advocacy", and "Rural Child Care Issues".
2. Utah Inter-Institutional Childhood Conference, Spring 1996 "Acceptance of the Rights of Others: Multicultural Education and Nonviolence", Summer '93, "Resources for Supporting Young Children and their Divorced Families"

3. Utah's Statewide Preschool Conference, Spring '92, "Teacher Skills to Cope with the Aftermath of Divorce at School"
4. Insights into Early Childhood, Summer 1989, "Effective Group Times"

Other Conference Presentations:

1. South West Regional Conference Society for Research in Child Development
Spring 1994 "Preschool Children's Perceptions of Their Parents: An Examination of Single Parent and Two Parent Homes"
2. Utah Policy Conference, Spring '93, "Preschool Children's Perceptions of Their Parents: An Examination of Single Parent and Two Parent Homes"
3. The 2nd National Head Start Research Conference, Winter '93, "Parenting Stress in Head Start Parents: Correlates and Implications for Interventions" with Roggman, L., Hart, A., & Thorson, K.
4. Region VII Head Start Conference, Fall '93, "What is the Family Service Center? How Can it Work for Your Families?" with Leslie, C., DeSpain, K., & Lund, L.
5. National Association for the Education of Young Children Conference, Fall '91 and '92, Poster Presentation, "Preschool Children's Perceptions of Their Parents: An Examination of Single Parent and Two Parent Homes"

Second Author Conference Presentations:

1. Roggman, L. A., Moe, S.T., & Hart, A.D. (1994, February). Head Start families: Correlates of parenting stress. Southwest Society for Research in Human Development, Austin, TX.
2. Roggman, L. A., Moe, S.T., Hart, A.D., & Forthun, L.F. (1994, April). Social Support and Family Leisure: Correlates of Parenting among Head Start Parents, Child Advocacy Conference of Utah Children, Salt Lake City, UT.
3. Roggman, L. A., Moe, S.T., & Hart, A.D. & Thorson, K. R. (1993, November). Parenting Stress in Head Start parents: Correlates and implications for intervention. National Head Start Research Conference, Washington, D.C.

Reports

- Roggman, L.T., Moe, S.T., Hart, A.D., and Forthun, L. (1994, December 31). Family Service Center: project evaluation: Year 3 final report. Submitted to Bear River Head Start Family Service Center, Logan, UT, and Head Start Bureau, Washington, DC.
- Roggman, L.T., Moe, S.T., Hart, A.D., and Forthun, L. (1994, December 31). Bear River Head Start Family Service Center: What is it? Does it work? Submitted to Bear River Head Start Family Service Center, Logan, UT.
- Roggman, L.T., Moe, S.T., Hart, A.D., and Forthun, L. (1994, November 30). Family Service Center: project evaluation: Year 3 participants and service report. Submitted to Bear River Head Start Family Service Center, Logan, UT.

Roggman, L.T., Moe, S.T., Hart, A.D., and Forthun, L. (1993, November 1). Family Service Center: project evaluation: Year 2 report. Submitted to Bear River Head Start Family Service Center, Logan, UT, and Head Start Bureau, Washington, DC.

Roggman, L.T., Moe, S.T., Hart, A.D., and Thorson, K. R. (1992, September 30). Family Service Center: project evaluation: Year 1 preliminary report. Submitted to Bear River Head Start Family Service Center, Logan, UT, and Head Start Bureau, Washington, DC.

Publications:

A. Salt Lake Tribune Articles

1. "A Mother's Relations With Her Infant Reaps Benefits Later On" - Tues. Oct. 15, 1991.
2. "Decision to Divorce Based on Certain Variables"- Tues., July 2, 1991.
3. "Preschool Children Suffer Most Trauma From Divorce"- Sun., Aug. 5, 1990.
4. "How to Adapt to Divorce"- Sun., July 29, 1990.

B. Brochures

1. "A Responsive Multicultural Curriculum" Fall 1995.
2. "Early Childhood and the Media" Winter 1996.

C. Other

1. Moe, S, National Association for Child Care Resource and Referral; Rural Round Robin Newsletter; 2 issues per year first issue 1996.
2. Moe, S. and Miller, C.; Utah Children: Kids Count of Cache Valley Advocacy Group for Cache Valley Parents and Children, 1994.
3. Roggman, L.T., Moe, S.T., Hart, A.D., and Forthun, L.F. "Family Leisure and Social Support: Relations with Parenting Stress and Psychological Well-being in Head Start Parents". Early Childhood Research Quarterly, 1994, 96, 463-480.
4. Abstract-"Preschool Children's Perceptions of Their Parents: An Examination of Single Parent and Two Parent Homes" Utah Children Voice, 8, (3), June/July, 1993
5. Roggman, L., Hart, A., Moe, S., and Thorson, K. (1993) "Parenting Stress in Head Start Parents: Correlates and Implications for Interventions" Proceeding from Head Start Conference: Translating Research into Practice: Implications for Serving Families with Young Children
5. Boyce, G., Moe, S., Piburn, D., and Ashcroft, E. All Children Are Our Future: Child Services Referral Guide (1991 through 1995)

Radio Presentations:

1. KUSU "Issues for Families and Children" (1996)
2. KVNLU "Toys for Christmas" (1995)
3. KUSU "Child Guidance" (1995)
4. KUSU "Day Care Licensing" (1995)
5. KUSU "Children's Justice Centers (1995)
4. KUSU "Activities for Children" (1994)
5. KUSU "Choosing Child Care" (1994)

Television Presentations:

1. KVLV "Toys for Children"
 2. KVLV "Children's Justice Centers"
-

Teaching Experience (Children)

Location: Utah State University, Logan, Utah
 Dates: September 1993 to Summer 1995
 Position: Head Teacher, USU Children's House (Ages 3 to 6)

Duties with children and families. Develop and execute curriculum. Supervise student curriculum development and execution. Complete child assessments in preparation for parent conferences. Supervise student assessment of children. Maintain communication and rapport with parents.

Location: Utah State University, Logan, Utah
 Dates: September 1989 to August 1992
 Position: Head Teacher, Traditional Lab (4 year olds), USU Child Lab
 Head Teacher, School Age Lab (6 to 12 year olds), USU Child Lab
 Department of Family and Human Development

Duties with children and families. Develop and execute curriculum. Supervise student curriculum development and execution. Complete child assessments in preparation for parent conferences. Supervise student assessment of children. Maintain communication and rapport with parents. Supervise student organization of family activities for parents and children (i.e., parent education presentations, family parties, family field trips). Conduct yearly home visits.

Location: Cerritos College Child Development Center, Norwalk, California
 Dates: February 1982- May 1989
 Position: Child Center Full-Time Teacher (2 years 9 months to 12 years)

Duties with children and students: Develop and execute curriculum. Supervise student curriculum development and execution. Complete child assessments in preparation for parent conferences. Maintain communication and rapport with parents.

References

Mary Bissonette, Executive Director, Box Elder County Child and Family Support Center, Brigham City, UT. (435) 723-6010.

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