PARENTING STRESS AND THE FAMILY ENVIRONMENT OF MOTHERS WHO HAVE RETURNED TO COLLEGE

DISSERTATION

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the Requirements For the Degree of

DOCTOR OF PHILOSOPHY

By

Kevin J. McCal, B.S., M.A.

Denton, TX

December 1995
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Stress plays a key role in our daily lives, influencing our emotional state, productivity, and health. One particular role in life, being a parent, has attracted significant attention in the research world in terms of the amount of stress parents experience in relation to different aspects of being parents. A life change that many parents, particularly mothers, are experiencing in increasing numbers is their return to college. This study compared reports of parenting stress and perceptions of the family environment between two groups of mothers. The first is a group of 32 mothers who were working 30 or more hours a week outside the home and were not enrolled in college while the second group consists of 31 mothers who were in college full-time and working less than 10 hours a week outside the home. All of the mothers were between the ages of 25 and 45 and had at least one child between the ages 5 and 12 years old. In both groups the mothers verified that their child(ren) was (were) without any diagnosis of an emotional, behavioral, or learning problem. A series of one-way multivariate analysis of variance (MANOVAs) were performed. Results indicated there were no significant group effects related to the overall parenting stress expressed by the mothers. A significant group effect was noted ($F = 5.31; p < .05$) in that the working mothers reported a greater level of perceived poor health than the mothers who
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INTRODUCTION

As a person experiences life they will be exposed to factors that result in their feeling stressed. Stress plays a key role in daily life, influencing our emotional state, productivity, and health. Because of this, stress has been extensively researched; and as a result, more than 150,000 scientific and lay articles as well as books, aimed at some aspect of stress, have been written (Hughes, Pearson, & Reinhart, 1984). Over time several different definitions or descriptions of stress have been developed.

According to Hughes, Pearson, and Reinhart (1984) the concept of stress began in the 1600s when it was defined as physical strain or pressure. In the 1700s the definition was expanded to include pressure on a person and inanimate objects. By the mid to late 1800s the concept of stress had changed from a force that affects things or objects to one that affects people. In addition it changed from an external action to an internal one.

Stress has been described as both a physiological and a psychological response. Lazarus and Folkman (1984) reported that in 1936 Hans Selye described stress as an orchestrated set of bodily defenses responding to noxious stimuli. He called this reaction the General Adaptation Syndrome. He perceived stress not as an environmental demand, which he would have called a stressor, but as a universal physiological group of reactions created by that demand.
Whipple and Webster-Stratton (1991) described stress as the result occurring when tension, caused by what they called "stressors", is not overcome. Similarly, Benedict, Wulff, and White (1992) defined stress as "a function of the interaction of the subjectively defined demands of a situation and the capacity of an individual or group to respond to these demands. Stress exists when the subjectively experienced demands are inconsistent with response capabilities" (p. 155). Weinberg and Richardson (1981) distinguished between two views of stress. The first is sociological, defining stress as the actual event that occurs. The second is a psychological view which sees stress as the individual’s appraisal of an event in terms of its potential threat. In these terms Lazarus and Folkman (1984) further defined stress as a relationship between the person and the environment which is appraised as taxing or exceeding one’s resources and endangering one’s well-being. The latter focuses more on individual differences and better explains why some people respond one way to a stressor while others respond another. It is this viewpoint which emphasizes the relationship between the person and the environment. It takes into account both the characteristics of the person and the nature of the environment.

**Cognitive Appraisal**

Cognitive appraisal is an evaluative process that determines why and to what extent a transaction or series of transactions between the person and the environment is stressful (Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus and Folkman, 1984). Similarly, Steptoe and Vogele (1986) defined cognitive
appraisal as "the ways in which people interpret their environment and the stimuli that impinge upon them" (p. 243).

Lazarus and Folkman (1984) believed that although certain environmental demands produce stress in substantial numbers of people, individual differences in the degree and type of reaction are always evident. People differ in their sensitivity and vulnerability to certain types of events as well as in their interpretations and reactions. Under comparable stressful conditions some people respond with anger, depression, anxiety, or guilt. One person may perceive such a situation as challenging while another may see it as threatening. This cognitive evaluation process requires mental activity involving judgement, discrimination, and choice of activity, which is based largely on past experience.

The process is divided into two parts. In the first part, primary appraisal, a person evaluates whether or not anything is at stake. Next, secondary appraisal occurs when a person evaluates what, if anything, can be done to prevent harm or improve the prospects for benefits (Folkman & Lazarus, 1985; Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen, 1986; Lazarus, 1985; Lazarus and Folkman, 1984). Lazarus and Folkman (1984) identified three kinds of primary appraisal. First, irrelevant events are ones perceived as having no implication on the well-being of the person. Next, a benign-positive encounter is one where the outcome is construed as one that will preserve or enhance the well-being of the person. Last, a stressful appraisal is characterized by a harm/loss (damage already
done), a threat (harm/loss not yet but anticipated), or a challenge (potential for
growth, mastery, or gain as well as harm).

Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen (1986) investigated the functional relations between cognitive appraisal and coping processes and their outcomes within stressful encounters. According to their model, coping refers to cognitive and behavioral efforts to manage a person-environment that has been appraised as taxing or exceeding the person’s resources. The results indicated that variability in coping is partially a function of how a person judges what is at stake (primary appraisal) in stressful encounters and what they view as the options for coping (secondary appraisal). Subjects tended to use more problem-focused forms of coping in encounters they perceived as changeable and more emotion-focused ones when they saw little opportunity to affect the outcome.

In summary, when a person interacts with their environment they evaluate the demands it places on them and how they will be affected by these demands. Will the effects be or have the potential to be harmful or taxing for them (cognitive appraisal)? If so, what will they do to cope with this stressful situation? One argument, with respect to this appraisal process, is that how a person responds to a similar situation varies from one person to the next. Each person has different perceptions of what the environment is demanding of them and whether or not that is stressful to them. A part of the environment that has been studied is life changes which affect people in their daily lives. What constitutes a
life change? How does this relate to stress and the cognitive appraisal process?
Are there specific characteristics of life changes which affect the perceptions
people have of them?

Life Changes

According to Holmes and Rahe (1967) a life change refers to any event
which requires a person to modify their accustomed way of life. These may occur
in any aspect of a person's life and may be construed as either positive or
negative. As with any other encounter, a person may face a life change and
cognitively appraise it to be stressful for them. At this point, a decision as to how
to cope with it would need to be made. Researchers have attempted to delineate
what factors of life changes affect people's perceptions of them and their reactions
to them.

Redfield and Stone (1979) summarized the literature regarding life-change
dimensionality and suggested there are three important factors in understanding
the nature of life stress. These include individual factors, life events, and
qualitative dimensions on which the events vary. It is the latter that their study
assessed. They attempted to investigate the extent to which individuals differ
systematically in evaluations of life events on one or more qualitative dimensions.
Subjects consisted of 85 college students enrolled in an introductory psychology
course. They were asked to rate a number of life events on each of several scales
representing qualitative features of those events. The results provided evidence
for individual differences in perception of life events. Three dimensions of
qualitative variation among events were identified: change, desirability, and meaningfulness. Change referred to what degree of adjustment in their way of life did the event require. Second, desirability was defined as how appealing the life change would be. Finally, meaningfulness related to how meaningful, to the individual, was the life change.

Chalmers (1983) looked more specifically at the different qualitative characteristics of life changes. She discovered they could be classified in terms of social desirability, type of life area, gain or loss, the control an individual has over change, predictability of the event, and the time frame of the event. She used a 92-item life event scale to examine whether the subjects' ratings of event seriousness were affected by these constructs. The results indicated that perceived desirability was the only significant factor that affected the seriousness ratings given a particular event.

Thus far these studies have reviewed the qualitative factors that make up life changes and how they are perceived by different individuals. The following studies continue to examine these qualities while also investigating the effects life changes have on a person's health.

Gall and Evans (1987) examined several factors used to describe life events. These included threat, control, and desirability. They surveyed 184 subjects giving them the Psychiatric Epidemiology Research Interview (Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978), a cognitive appraisal questionnaire, the Multidimensional Inventory of Coping (Gall & Evans, 1985),
the Center for Epidemiological Studies-Depression Scale (Radloff, 1977), a health inventory, and an alcohol test. Results were factor analyzed and produced the following five factors, (1) undesirability/threat, (2) gain/challenge, (3) need for information, (4) familiarity, and (5) need to accept. It was found that different cognitive appraisals had different implications for type of coping behavior selected. For example, undesirability or threat was negatively correlated with confrontative coping while gain/challenge was the opposite. Need for information and need to accept were positively correlated with avoidant coping. Being faced with a life event that was unfamiliar and something that had to be accepted was significantly related to decreased physical health. Increased alcohol consumption was associated with an unfamiliar situation that did not need to be accepted. Finally, a greater level of depression was related to a situation appraised as undesirable or threatening, as creating a need for information, or as not involving a challenge or a gain.

A study by Vinokur and Caplan (1986) examined the relationship between life events and mental health. They found that a lack of perceived control over and anticipation of a life event does have an effect on mental health in an indirect way. They stated that a lack of control and of anticipation increase the severity of the event as a stressor and reduce the ability of a person to adjust to it. They suggested that the quality of the affective reaction to a life event or the "pleasantness" of the event may be a more important factor in how the event is experienced than the cognitive meaning of the event's outcome. It was the
accumulation of unpleasant events, not pleasant ones, that were found to increase stress and reduce adjustment.

According to Moos and Schaefer (1986) a crisis or normative transition through a cognitive appraisal of the situation's significance establishes basic adaptive tasks to which a variety of coping skills can be applied. First, a person must establish the meaning and understand the personal significance of the situation. Once this is done they can then confront the reality of the crisis and respond to the requirements of the external situation. Finally, the person needs to maintain a relationship with his/her support network as they may be beneficial in resolving the crisis. This network includes family and friends as well as anyone that could be of assistance.

In summary, stress and cognitive appraisal are major factors involved in adjusting to the changes life events may bring into an individual’s life. As the literature stated, there are qualities within each life event that people perceive as salient to the overall appraisal of the situation. How each individual perceives these qualities determines how or if one can cope with the encounter.

The American Family

Individuals become stressed for different reasons. In general, stress comes about and is modulated according to what situation a person is involved with and how that individual responds to that situation. An example of such a situation is being part of a family. In this literature review area the American family is closely examined. In the first section, a brief description of the family as it is used
in this study is given. Next, how the family, as a unit, is changing is described through the use of reported trends and statistics. The second section takes a closer look at dual-career families. In the final section, a review is presented of how these changes and trends affect families.

Trends and Statistics

A family is made up of two or more individuals that operate as a unified system. Zimmerman (1992) stated that the U.S. Census Bureau defines a family as a group of two or more persons related by birth, marriage, or adoption and residing together in a household. It is developed by the individuals within its boundaries and the ways in which they interact with each other. Beutler, Burr, Bahr, and Herrin (1989) defined the family as a "realm that is created by the birth process and the establishment of ties across generations." (p. 806) Fine (1992) broadened this definition to include intimate, committed relationships that may not involve biological ties.

Wisenale (1992) summarized perspectives concerning the family. He reported that the statistical profile of the U.S. family has changed drastically over the past 20 years. An example of this includes more working mothers, increasing divorce rates, more single parent families, later life marriages, increasing domestic violence, and fewer children.

One of the dominant changes in family structure has been the steady flow of mothers into the work force. In 1989, 75% of all mothers of children aged six to eighteen were in the labor force (Gnezda & Smithe, 1989) and it is predicted
that by 1995, 80% of school age children will have mothers in the work force (Children’s Defense Fund, 1989).

According to the U.S. Bureau of Census (1992) the number of women in the labor force has increased 81% between 1970 and 1991. By the year 2005 this number is expected to have increased 127% since 1970. Women ages 25 to 44 represented the group that most significantly grew. The amount of married women in the labor force has increased by 142% between 1960 and 1991. In 1991, of employed married women, 53% had children living at home. Of those with children 55% had children ages 6 to 17.

**Dual-Career**

The trends indicate more married mothers are in the work force which implies that there has also been an increase in dual-career families. This is a term coined by Rapoport and Rapoport in 1969 (Skinner, 1986) that refers to a type of family where both heads of household pursue careers and at the same time maintain a family life together (Rachlin & Hansen, 1985). The following studies address dual-careers and the effects upon the structure of the American family.

According to Sporakowski (1992), the typical American family today has two adults working outside the home. Changes occurring to today’s family can be thought to originate both internally and externally. Internally, change can be seen in family composition due to such unforeseen circumstances as adult children
returning home or caring for elderly members. Externally, change can occur due to the government's family policy, health care, and/or the economy.

Brazelton (1988) stated that family life, in the U.S., has been changing at a rate too rapid for parents to cope with the pressures created by this development. They are unable to handle these pressures within the nuclear family and are often without the cushion of the extended family. Any crisis, like financial burden or overwhelming role responsibilities, could place more stress on families than they can handle. He went on to report that economic stress and women's fear of being poorly equipped to cope with single parenthood are the two driving forces pushing both parents into the work force.

By all accounts, the U.S. economy has had an adverse effect on the American family. The intimate daily interactions of family life are readily affected by the economic activities of family members. Family income has been steadily declining while costs for such necessities as health care, housing, child care, etc. have been increasing. For example, the National Conference of State Legislatures (1989) stated that while median-income workers paid out 14% of their gross monthly income on mortgage expenses in 1949, those in 1985 at the same income level spent 44%. To compensate for this, both parents have been pushed into employment as opposed to just the father, as was traditionally accepted.

A study (Lewis & Cooper, 1987) examined sources of stress for men and women in two-earner families with and without children. They looked at the
consequences of the stress on the well-being of couples at different stages of the life cycle including those with children under the age of five, couples with no children, and couples expecting their first child. In general, parents reported more pressures related to balancing work and family responsibilities. Mothers reported significantly more pressure than all other groups on items related to combining parenting and employment. This implies that any negative impact of parenthood may be greatest for women. All groups reported they had too much to do with too little time to do it.

Rachlin and Hansen (1985) investigated the impact of egalitarianism on dual-career couples. In this study they examined the roles of the couple and their perceptions of the impact on marital adjustment, marital satisfaction, and individual well-being. Thirty-two couples were divided into two groups equal in numbers. One was made up of dual-career couples where both spouses worked full-time and the other of those where at least one spouse was preparing for a career. The couples were classified as being in an egalitarian relationship according to their response to a modification of the Washington Family Role Inventory (Nye and Gecas, 1976). An egalitarian relationship is one in which both individuals are receiving equal, relative gains from the relationship. Results indicated that wives in the equitable group reported significantly greater well-being and marital adjustment than the inequitable group.

Discussing the concept of dual-career families, Gilbert and Rachlin (1987), stated that a major source of stress is deciding how to combine occupational and
family roles for both men and women. Neither gets much support from today's professional world, nor do they have role models to pattern themselves after. A list of conflicts faced by dual-career couples included, gender socialization of each spouse, weight placed on occupational and family roles by each spouse, integration of roles individually and as a couple, congruence between the spouses about such issues, spouses' stages in the career and life cycles, and societal support for parenting. They summarized a review of the research literature by stating that generally asymmetry does exist in most dual-career families. That is, the wife carries a heavier domestic and child-care responsibility. She is also the one most likely to sacrifice career aspirations to the interest of her spouse. The only exception to this is when the wife contributes more to the home financially, and greater importance is tied to her work.

Under Stress

Recent trends indicate there has been an increase in the number of women, especially mothers, in the work force. This increase could be due to the poor economic conditions of the United States. The American family has been expected to absorb the pressures created from these adverse conditions. The following studies and reviews consider the ramifications of these conditions. South (1985) examined the relationship between the economic condition of the United States and the divorce rate and discovered that the number of women in the labor force had a significant and positive correlation to the divorce rate.
There has been a steady increase in the rate of divorce. Particularly at risk are those couples who are 35-54 years of age (Zimmerman, 1992). One of the reasons cited for the high rate of divorce was financial problems (Colasanto & Shriver, 1989). In fact, Conger, Elder, Lorenz, Conger, Simons, Whitbeck, Huck, and Melby (1990) found that the risk of marital dissolution increases with rising economic pressures. Zimmerman (1992) stated that economic well-being has been found to be both an antecedent to and a consequence of marriage stability. Mills, Grasmick, Morgan, and Wenk (1992) stated that a family's financial situation is a key factor in affecting the well-being of its members.

Menaghan and Parcel (1990) reviewed the research literature regarding the effect of parental employment on well-being, marital relations, and family interaction. As the number of women in the labor force has increased, there has not been a corresponding change in house roles. Therefore, women are forced to pick up the financial demand to work, but are not given more assistance at home to relieve the pressures there. Potentially conflicting demands from two careers, in combination with heavy demands for childrearing, create pressure in many families that can lead to unhappy compromises and exhaustion. Overall the combination of the role strain, mostly experienced by the mothers, and the burden of improving the economic condition of the family create pressure that may have a negative effect on the marital relationship.
Parental Subsystem

One of the main areas of family life affected by the passing of time and ever-changing economy is the parental sub-group. It is this group that carries the pressures to keep the family together and to provide support emotionally, financially, and materially.

Mills, Grasmick, Morgan, and Wenk (1992) examined the effects of gender differences related to family satisfaction and economic strain and its effect on psychological well-being. The subjects consisted of 197 married adults who were given several measures of psychological well-being, satisfaction with family life and economic strain. Results indicated that satisfaction with family life had a significant positive direct effect on the psychological well-being of both the husbands and the wives, with this relationship for wives being more significant than that of the husbands. Economic strain was found to have a significant inverse direct effect on the psychological well-being of both the husbands and the wives, regardless of employment status.

Crnic and Greenberg (1990) took a different approach to the investigation of stress and its effect on parents. Most parental stress research has shown that major life stresses are negatively related to the well-being of family and parental systems. They pointed out that research also indicates that major life stresses are low in frequency; therefore, they chose to examine what they called "hassles". Hassles in this study were defined as "the irritating, frustrating, annoying, and distressing demands that to some degree characterize everyday transactions with
the environment" (p. 1624). Specifically, they explored minor stresses for parents of young children five years of age. The intent of the study was to describe the frequency and perceived intensity of these hassles. Each of the 74 mothers were given several questionnaires measuring parenting and life satisfaction, life stress, family status, and a parenting daily hassles measure. The latter measured both frequency and intensity of fifteen different factors. Results indicated that minor parenting hassles are important sources of stress. They had an additive effect on major life stresses and were an independent means to assess stress within a parent-child system.

Pasley and Gecas (1984) described the parental role as one of the most difficult and complex in our society today. One difficulty is the fact that it changes as children grow older and as societal expectations change. Though society has many expectations of how parents must behave, there is not any means to prepare for being a parent other than being one. Within their review of the literature, it was generally agreed that the presence of children has a negative effect on marital satisfaction and happiness.

Returning to College

A life change that affects the parental subsystem and as a result the family as a whole, is the mother returning to college. According to the U.S. Bureau of Census (1992) college enrollment for women twenty-five years of age and older has increased 232% between 1970 and 1991. (only 58% for same age males) Matching this increase is a reported elevation in the percentage of college
freshman women from 45% in 1970 to 53% in 1991. In addition to increased enrollment, there has also been an increase in the attainment of degrees. Between 1971 and 1989 the percentage of women earning bachelor's, master's, and doctoral degrees has increased from 43% to 53%, 40% to 52%, and 14% to 36% respectively.

Recent literature has not examined what effect, if any, this increase of women in college, a large percentage of whom are married, has had on the family and/or the stress levels experienced by the parents. Ballmer and Cozby (1981) summarized findings of studies that examined the effects of women returning to college on the family relationship. These studies (Ballmer & Lee, 1971; Ballmer & Cozby, 1974; Watkins, 1974) reported positive effects in the form of increased admiration between spouses and increased financial advantages. While the husbands reported being proud of their wives, they also reported their wives as spending less time with them, a decrease in sexual satisfaction, and saw their wives as less dependent on them. Ballmer and Cozby (1981) stated that women in these situations have reported feelings of guilt connected with taking time away from their homes and families. As previously stated, they reported feelings of conflict related to functioning in multiple roles and attempting to balance all the responsibilities connected to each one.

A study (Ballmer & Cozby, 1981) investigated the impact women returning to college had on the family environment. They administered the Family Environment Scale (Moos, Insel, & Barrie, 1974) and the short-form of the
Locke-Wallace Marital Adjustment Scale (Wills, Weiss, & Patterson, 1974) to two groups of 39 couples each. In one group, the returnee group, the wives had returned to college, while in the other group, the nonreturnee group, the wives were primarily housewives. The results of the Locke-Wallace Marital Adjustment Scale indicated there was not a significant difference on marital adjustment. The results of the Family Environment Scale indicated that the returnee group perceived their family environment as having less cohesiveness, more conflict, more independence, a greater intellectual-cultural orientation, a greater active-recreational orientation, and a lower moral-religious emphasis than the nonreturnee group.

Although research is limited in this area it would appear or seem likely that the various scales of the FES would be significantly different for women who have returned to college. It would seem due to the increased time spent away from the home, attending classes and studying for courses, would result in decreased time available to take part in extra-curricular activities. This increased time commitment outside the family would also tend to decrease the time to communicate with the family and give support to them. For these reasons one would expect to see a mother who has returned to college to score lower on the following scales than those without this distraction: Cohesion, expressiveness, active-recreational orientation, and control.

As for some of the other scales of the FES, being involved with the college campus environment and gaining an education might lead to the mother feeling
more independent. In addition, by their choice to return to college and their involvement in the college lifestyle, the intellectual-cultural orientation and achievement orientation scales would most likely be higher for these mothers when compared to those who are not in college. Finally, it seems likely that the chance of conflict within the family would increase due to the stress from the demands of college participation.

Since studies that investigate the return of mothers to college are sparse and more mothers are returning to college, more information is needed about this population. In particular, family environment and parenting stress in mothers returning to college as compared to mothers who are working has not been investigated. The purpose of this study was twofold. First, information was gathered regarding the effect that returning to college has on mothers' perceptions of their family environment. Second, parenting stress experienced by these mothers will be examined. The following hypotheses were developed.

**Hypotheses**

**Hypothesis 1.** Mothers, who have returned to college, would report significantly greater stress as measured by the Child Domain of the PSI.

**Hypothesis 2.** Mothers, who have returned to college, would report significantly greater stress as measured by the Parent Domain of the PSI.

**Hypothesis 3.** Mothers, who have returned to college, would report a significantly greater number of Life Stressors on the Life Stress Scale of the PSI.
Hypothesis 4. Mothers, who have returned to college, would report a greater degree of independence, being more achievement oriented, having a higher degree of interest in intellectual and cultural activities, and a greater amount of conflict within their families as measured by the appropriate scales of the FES.

METHOD

Subjects

Subjects consisted of two groups of mothers (total N = 63). The first, henceforth referred to as the student mothers, was composed of 31 mothers who were full-time students in some type of post high school educational institution and worked ten hours or less outside the home. The second group, referred to as the working mothers, consisted of 32 mothers who were working thirty or more hours outside the home and were not enrolled in any type of educational institution. The mothers of both groups were married, between the ages of 25 and 45, and had at least one child between the ages of 5 and 12. In both groups, the mothers verified that their child(ren) was (were) without any diagnosis of an emotional, behavioral, or learning problem.

The student mothers were volunteers from the University of North Texas, Denton, TX., and Wright State University, Dayton, OH. The working mothers were volunteers from the Dallas, Denton, and Dayton working communities. The volunteers from working mothers' group were recruited by a combination of written and verbal advertisements. The student mothers' group were recruited by
advertisements offering extra-course credit for their involvement and by written
and verbal announcements in a variety of classes.

A total of 63 children were represented by the two groups with 31 in the
student mothers' group and 32 in the working mothers' group. In terms of family
composition, the student mothers' group consisted of 12 boys and 19 girls
compared to 15 boys and 17 girls in the working mothers' group. Analysis of
variance (ANOVA) procedures did not reveal any gender differences on any of
the dependent measures. Eighty-four percent of the children represented in the
student mothers' group lived with their natural parents compared to 88% of
those represented by the working mothers' group. Seventy-five percent of the
student mothers, compared to 74% of the working mothers, kept their children at
a care facility outside their own home. Sixty-one percent of the student mothers
had families with only one child compared to 56% of the working mothers'
families. Overall the student mothers had an average of 2.39 children in their
family while the working mothers reported of 2.12 children in their family.

Subjects in the student and working mothers' groups were predominantly white
(84% and 78% respectively) and best described as middle class based on
Hollingshead's Four Factor Index of Social Status (Hollingshead, 1975). Of the
31 fathers represented by the student mothers' group 30 had jobs and 87%
worked more than 30 hours per week. In comparison, of the 32 fathers
represented in the second group, 30 had jobs and 94% worked more than 30
hours per week. There were no significant difference between the groups on
items such as child age, parent age and SES. Groups were equally distributed in terms of parent education. The majority of respondents indicated they were satisfied or very satisfied with their jobs (see Tables 1-3).

In regards to the composition of the student mother and the factors that make it unique, i.e. educational characteristics, 12 or 39% of the mothers were enrolled in a educational institution that uses a quarter system while 19 or 61% were enrolled in a semester system. The mothers’ reported major areas of study represented 15 different topic/specialty areas with one mother reporting that she was undecided as to her major. With respect to educational goal, 17 (55%) mothers reported being in the process of attaining bachelor degrees, 4 (13%) in the process of attaining a masters degree, 9 (29%) in the process of attaining a doctorate degree and 1 (3%) was undecided. The reason for returning to college was categorized under three different areas: Financial need, change of career, and personal interest. With respect to these categories, the number of mothers giving one of these reasons for returning to college was 8 (25%), 9 (29%), and 14 (45%) respectively. For a summary of this information see Table 4. In addition, for the number of credits each of the mothers were enrolled in at the time of their participation, the number of credits they had accumulated prior to that time, and the amount of time they had been working toward their educational goal, see Tables 5-7.
Procedure

Each mother was given a packet containing instructions about how to complete the contents of the packet (see Appendix A), a consent form (see Appendix B), a demographic questionnaire (see Appendix C), the Family Environment Scale, Form R, and the Parenting Stress Index. The mothers were asked to complete the materials in the packets and return them to the examiner. The packets took from one hour to one and a half hours for most of the mothers to complete. After the completion of the packet, further explanation of the study was given, verbally and/or written, (see Appendix D) to any of the mothers who were interested. In addition, as part of completing the consent form, they were given the opportunity to request the summary of the findings of this study upon its completion.

Dependent Measures

Parenting Stress Index (PSI; Loyd & Abidin, 1985). The PSI is a 120 item, parent self-reporting instrument, yielding a measure of three domains: Child, Parent, and Life Stress. The Child Domain measures parenting stress due to child characteristics and consists of six subscales: Adaptability, demandingness, distractibility, acceptability, reinforcement of parents, and mood. The Parent Domain measures parenting stress due to parent characteristics and consists of seven subscales: Depression, attachment, restrictions of role, sense of competence, social isolation, relationship with spouse, and parent health. Subscale descriptions are in Appendix E. The Life Stress Scale consists of nineteen life events that the
parent reports as having occurred to their immediate family in the last twelve months. Internal consistency reliability coefficients are reported as .89 for the Child Characteristics domain, .93 for the Parent Characteristics domain, and .95 for the Total Stress Score (Loyd & Abidin, 1985).

An extensive set of validity research has included studies investigating concurrent and construct validity, discriminant validity, predictive validity, outcome measurement, and factorial validity. With respect to concurrent and construct validity, the Child Domain of the PSI has been found to be significantly correlated with the Child Behavior Checklist (Casey, 1983; Oppenheimer, 1986; Quay & Peterson, 1979). The Parent Domain has been correlated with the State-Trait Anxiety Index (Jenkins, 1982; Spielberger, Gorsuch & Lushene, 1970). Finally, the PSI, as a whole, has been significantly correlated to the Bayley Infant Developmental Scales (Zakreski, 1983), marital satisfaction (Awalt, 1981), and is negatively correlated with husband support (Lawrence, 1982). The discriminative validity of the PSI has been demonstrated by studies which have distinguished parents of special population of children from control groups. These populations include cerebral palsy (Zimmerman, 1979), mental retardation (Greenberg, 1983; Jenkins, 1982), feeding problems (Saviano, 1981), hyperactive (Mash & Johnston, 1983a, 1983b), and spina bifida (Kazak & Clark, 1986; Kazak & Marvin, 1984). Finally, the predictive validity has been shown in studies predicting marital satisfaction (Cowan & Cowan, 1983), parents of developmentally delayed or handicapped children from those of "normal" children (LaFiosca 1981, 1986;
Upshur, 1981), and how well a child will adapt to the divorce of their parents (McGaughey, 1987; Prinz et. al. 1983). See Abidin (1986) for a more comprehensive review of these studies and their conclusions.

Family Environment Scale (FES; Moos & Moos, 1986). This measure is a 90-item self-report scale with a true-false format. It evaluates the social environment of the family unit. It contains 10 subscales which assess three major dimensions: Interpersonal Relationships, Personal Growth, and System Maintenance. The Interpersonal Relationship dimension consists of three subscales: Cohesion, expressiveness, and conflict. The Personal Growth dimension consists of five subscales: Independence, Achievement orientation, intellectual-cultural orientation, active-recreational orientation, and moral-religious emphasis. The third dimension, System Maintenance, consists of two subscales: Organization and control. Scale descriptions are summarized in Appendix F. Three forms of the FES are available: Real Form, Ideal Form, and Expectations Form. For the purpose of this study, the Real Form, because it evaluates the current family environment, will be used. This instrument can be completed by family members over the age of 11.

Normative data on the Form R subscales were collected for 1,125 normal and 500 distressed families. The instrument has good test-retest and internal consistency reliability yielding coefficients from .61 to .85 on the various subscales (Moos & Moos, 1986).
In addition, this form has adequate face and content validity (Carlson, 1990; Moos & Moos, 1986; Wilk, 1991). With respect to construct validity, the FES Cohesion subscale is positively related to measures of dyadic and marital adjustment as well as support from other family members. FES Conflict subscale is positively associated with family arguments, and FES Organization and Control subscales are linked to reliance on predictable and regular family routines. The FES dimensions tend to be predictably related to external criteria in both concurrent and predictive studies.

RESULTS

To compare group differences on the dependent measures, a series of one-way multivariate analyses of variance (MANOVAs) were performed. Significant effects were investigated using MANOVAS with post-hoc analyses conducted using Scheffe's method. A summary of these analyses is presented in Tables 8 and 9.

Parenting Stress

In the first analysis, the Child and Parent Domains and scale scores of the PSI (see Appendix E for a listing of these scales) served as the dependent variables with group membership (school or working mothers) as the independent variable. There was not a main effect for group on either domain score.

A second MANOVA using the subscales of the Child Domain showed no main effect for group. A third MANOVA using the subscales of the Parent Domain showed a significant group effect, Parental Health ($F = 5.31; P < .05$).
The mothers who worked outside of the home reported a significantly greater level of perceived poor health than the mothers who attended school full-time. Table 9 presents the means, standard deviations, and F-tests for each scale.

In addition, a one-way analysis of variance (ANOVA) was conducted using the Life Stressors Scale of the PSI as the dependent variable and group membership as the independent variable. There was not a main effect for group.

Family Environment Scale

A series of three MANOVAS were conducted using the subscales of each domain area of the FES. There were no main effects for the subscales in the Interpersonal Relationship or System Maintenance dimensions. In the Personal Growth domain there was a significant group effect for the variable Moral-Religious Emphasis ($F = 6.23; p < .05$).

DISCUSSION

This study compared reports of parenting stress and perceptions of the family environment among mothers who had returned to college and mothers who worked outside the home. The results did not support the predictions that the student mothers would report greater parenting stress due to child or parent characteristics. However, working mothers did report being in poorer health than the student mothers. In addition, contrary to what was predicted, the two groups were not significantly different related to the number of life stressors they reported experiencing. Another prediction, that student mothers would report a greater interest in intellectual and cultural activities, was not supported. Finally,
though not as predicted, there was a significant difference between the two groups on one of the subscales of the FES. The working mothers endorsed items indicating they place a greater emphasis on ethical and religious issues and values than the student mothers do.

It was not predicted that these two groups would report similar levels of parenting stress. What factors could account for these two sets of mothers perceiving or cognitively appraising their situation as having near equivalent amounts of stress even though they are involved in totally different endeavors? Are what they are involved with completely different tasks? Obviously going to school and going to work require different efforts. However, the factors that seemed more salient to this particular topic, parenting stress, seem more similar than different and may explain, at least in part, why these two groups did not differ significantly.

The first of these factors is a decrease in the amount of available time for the mothers to accomplish what they were once able to do. The two main areas this has been found to affect are household chores and childcare. There has been an extensive amount of research looking at how dual-career families balance work and family responsibilities (Lewis & Cooper, 1987; Rachlin & Hansen, 1985; Gilbert & Rachlin, 1987; Menaghan & Parcel, 1990). Rachlin and Hansen (1985) found that if the husband and wife divided the family responsibilities, including household chores and childcare, i.e. an egalitarian relationship, then the wives reported greater well-being and marital adjustment. However, as Gilbert and
Rachlin (1987) pointed out, this is not the case. They reported, as well as many other authors, that even though the mothers of the United States are increasingly entering the work force and pursuing higher education the husbands, for the most part, are not absorbing their share of the workload at home. According to previous studies (Elman & Gilbert, 1984; Ross & Mirowsky, 1988), one should consider the degree to which the husband is supportive not only emotionally of his wife's endeavor but also his willingness to take his share of the family responsibilities. Regarding the results of this study, results indicated that the student mothers reported less satisfaction with their marriage than did the working mothers ($F = 3.83; p < .10$; see Table 10 for frequencies and percentages). One reason for this may be that 8 (26%) of the student mothers reported a lack of emotional and active support by their husbands in the area of child care as compared to none of the working mothers reporting similar perceptions as measured by the Relationship with Spouse scale of the PSI (Loyd & Abidin, 1985). Though there was not a statistically significant difference found on this scale between the two groups, it is significant that a fourth of the student mothers reported not feeling supported by their husbands in relation to childcare at home. Though this seems to agree with the research just described, it appears, at least for these subjects, that these two variables, marital satisfaction and support by husband related to childcare, did not play a role in the degree of parental stress experienced by these mothers. It may be that the student mothers have developed a way to compensate for these reported marital stressors or not
enough time has passed for them to experience these factors and translate it to parental stress.

A second area, often evaluated, is the placement of the child(ren) in childcare. Studies (Ross & Mirowsky, 1988; Van Meter & Agronow, 1982) have found that the mother's perception of the situation she has left her children in was a factor in determining the degree of stress she experienced. The only result that could be used to evaluate this concept in this study was the amount of hours the children were placed in childcare each week. The results indicated the working mothers placed their children in some type of childcare outside the home significantly more hours each week than did the student mothers ($F = 3.86; p < .05$). However, to be able to make any conclusions about this related to parenting stress, the mothers' feelings and perceptions about having to place their child in childcare need to be evaluated. This was not done in this study and may be an area to examine in future studies.

Finally, research (South, 1985; Colasanto & Shriver, 1989; Conger, et. al., 1990; Zimmerman, 1992) has found economic pressure to be correlated with parental stress and marriage stability. With this in mind one would expect that the working mothers group would have been less stressed. The working mothers are earning money for their family whereas the student mothers are using their family's finances with the hope of earning money for the family at a future date. In light of the lack of significance between the amount of parental stress reported by these two groups, two reasons that financial pressures did not have a bearing
are likely. First, the student mothers have cognitively appraised their situation and decided for whatever reason, possibly knowing that education is the key to greater family income, not to see it as a threatening event. Second, their financial situation may not have been the reason for their returning college and therefore not an initial pressure. In fact, with regards to this study, both occurred. Of the 31 student mothers, only 8 (26%) of the mothers stated the reason for returning to college was for financial reasons. Of the remaining 23 mothers, 14 (45%) stated they returned to school for their own personal interests and 9 reported an interest in changing careers (see Table 4). However, since this type of data were not collected for the working mothers group, it was not possible to decide if these data are significant.

A result that was not predicted was the higher report of perceived poor health for the working mothers than for the student mothers. A couple of reasons for this could be possible. The working mothers are experiencing increased stress due to feeling greater concern for their child’s care as their children, as reported above, were in childcare outside the home a greater number of hours. Second, they may be experiencing more pronounced role strain, possibly due to being in a working role for a longer duration. All of these have been shown to be correlated to a reduction in mental and/or physical health (Hibbard & Pope, 1985; Verbrugge, 1986).

The final prediction, stating that mothers, who have returned to college, would report a greater degree of independence, be more achievement oriented,
and have a greater amount of conflict within their families as measured by the appropriate scales of the FES, did not hold true. The working mothers group reported a greater emphasis on ethical and religious values in their families than the student mothers. A study (Eiswirth-Neems & Handel, 1978) found that when the husband is supportive of the wife’s occupational status, the wives reported more religious emphasis as compared with families where the husband was not supportive. In this study, as already indicated, the student mothers reported feelings of a greater lack of support by their husbands. Therefore, the higher religious emphasis within the working mothers’ families may be a result of the degree of support given by the husband to the wife. To better clarify this hypothesis the actual spousal support experienced by the mother needs to be measured. Another hypothesis may be that the student mothers’ educational growth contributes to questions of traditional values.

Since there has not been a plethora of studies that have investigated parental stress or the family environment of families where the mother has returned to college, especially recently, it is difficult to discuss how these results compare to other studies. However, Ballmer and Cozby (1981), who compared mothers that returned to college to mothers who were homemakers using the FES, cited the student mothers reported less cohesiveness, more independence, a higher degree of concern about intellectual issues, a greater participation in recreational activities, and a decreased emphasis on religious and ethical values. The student mothers of this study also reported more concern about intellectual
and cultural issues and a decreased level of emphasis on religious and ethical issues. Their study did not report the demographics of their subjects, making it difficult to compare them to the subjects chosen for this study. Their study did not find any significant differences in the degree of marital adjustment whereas this study did find marginal significance. Beyond this it is difficult to make any further comparisons. What can be suggested by comparing these two studies is to contemplate comparing all three groups in one future study that controls for as many demographic factors as possible.

In regards to implications of this study, it seems if one looked at these results from a multiple role perspective the results would be as expected. In both groups the mothers were attempting to balance more than one role thus both experienced similar levels of stress. These results seem to further support the "Scarcity Hypothesis" (Froberg, Gjerdingen, & Preston, 1986) which states that as the number of roles increase so does the potential for role strain ultimately leading to physical and mental health deterioration. This as opposed to the "Expansion Hypothesis" which states that there is an overall benefit to being involved in many roles.

In hindsight, this study could have been improved in several areas. The assumption that the mothers who returned to college would be more stressed was not supported. Though it is possible they would commit more time to school by attending classes, studying, and taking tests it still appears to come down to three important factors. To improve this study more information needed to be collected
regarding how the subjects (mothers) appraised their situation, the total time involved in their roles, and the amount of support by the husband (emotionally and willingness to help out). In relation to how the situation was appraised, several areas need to be evaluated. It would be beneficial to know how the mother copes with changes in her life to better understand how she chose to adjust to this change. Is this change, returning to school, appraised as stressful? One factor that would help to decide this was not measured. The level of comfort or distress the mothers felt, related to the care their children were receiving outside the home while they were at school or work, was not identified. Another factor possibly involved in the appraisal is the financial position of the family. Is the family feeling any financial strain? Though the SES was calculated this did not shed any light on this question. These would be important in future studies to better comprehend the mothers’ appraisal of their situation. Therefore, neither the coping style or the cognitive appraisal of the situation were identified in this study.

With regards to time and its involvement, it would be important to know how the mothers’ time was used prior to becoming a student or an employed individual. The following are a few of the areas that would be useful to collect more comprehensive information. First, the actual changes that resulted when the mothers added their new role. Next, whether or not adjustments were made to accommodate their new role with respect to the amount of responsibilities the mothers had. These are important areas to know more about in order to better
understand the degree of change this was for these mothers. Another factor in which time may play a role is the length of time these mothers have had to adjust to these multiple roles. It would be beneficial to know how new these roles are and to then take it into consideration when evaluating the results.

Finally, other researchers have noted that support by the husband is an important element in multiple role interaction. To better understand the results of this study mothers’ perceptions of the support received by spouses need to be collected. How the parental responsibilities are divided would be useful to evaluate whether or not the husband is doing an equal share. The husband’s perceptions of his wife’s role as a student or an employed individual would be useful to evaluate his support of his wife’s involvement in these new roles. Finally, the wife’s perceptions related to the support she feels from her husband should be gathered to further explain the area of spousal support. These areas of information need to be collected in some fashion in order to evaluate the degree of support felt by the mothers.

Statistically, the sample size was small and may have limited the power of the statistical tests to distinguish any but the strongest effects. In addition, though difficult to do, the groups may need to be controlled for more variables, i.e. natural parents and not step-families. Finally, a control group, made up of strictly homemakers, may have been used in order to have more data to compare and ideally make more conclusions.
Future studies need to continue to investigate these two groups since trends indicate they will continue to increase in numbers in the United States. Studies will need to continue to look at how factors like parental stress and family environment intertwine with the concept of multiple roles to affect parents' mental and physical health as well as marital stability. To do a more complete job of this, fathers need to be included both by way of their self-reports and the wives' perceptions of their spouse's support. In addition, the children's perceptions could be considered as well. As part of this, how the roles are distributed within the parental sub-system will need to be evaluated.
APPENDIX A

INSTRUCTIONS FOR COMPLETING PACKET
Instructions For Completing This Packet

1) First, read the form entitled, "Parent Research Program". Then fill in your full name in the blank and sign it at the bottom along with the date. If you have any questions after reading it please feel free to call me at 667-2671.

2) Next, complete the "Information Sheet". Remember, from now on, you do not put any names on the forms. For this form all questions must be answered.

When completing the next two questionnaires, please try to focus on one of your children (if you have more than one) that is between five and twelve years old as best you can. If you have more than one child, highlight on the Information Sheet which one you are focusing on. I realize it may be difficult to answer some of these questions thinking of only one of your children, but please do the best that you can.

3) Next, complete the "Family Environment Scale". Read and follow the instructions on the front of the form and on the answer form.

4) Finally, complete the "Parenting Stress Index". Read and follow the instructions on the front of the questionnaire booklet. Please complete this all the way through item #120.

UPON COMPLETION, PLEASE RETURN THIS PACKET TO ________________ BY ______________, 1995 AS DISCUSSED.

THANK YOU SO MUCH FOR YOUR TIME AND ENERGY!!!!!!!!!!!!!
APPENDIX B

RESEARCH CONSENT FORM
RESEARCH CONSENT FORM

I, ____________________________ agree to participate in a study of parental perceptions of their immediate family environment. I understand that I will be asked to complete two questionnaires. I have been informed that the completion of these questionnaires will take approximately one hour and fifteen minutes.

I understand that the information gathered will be used for research purposes and that it will be recorded in a manner that will not identify me.

I understand that there are no personal risks for me directly associated with this study. I also understand that I can withdraw from participation in the study at any time.

This has been approved by the North Texas Institutional Review Board for the Protection of Human Subjects in Research.

If you would like a copy of the results from this study, write your name and address on the back side of this form. A copy will be sent to you upon the completion of this study.

If I have questions or difficulties related to my participation in the study, I should contact Kevin McCal, researcher, at (817) 565-2671.

_________________________________________  ____________________________
Signature                      Date

_________________________________________  ____________________________
Researcher                    Date
APPENDIX C

INFORMATION SHEET
INFORMATION SHEET

Children

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<td>5)</td>
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Do any of your children have a diagnosed Learning Disability or Psychiatric Disorder?  Yes ____ No ____

If yes: Which child(ren)?  #(s)__________

What type?  __________

Diagnosed by who?

- Pediatrician _____
- Psychologist _____
- Psychiatrist _____
- School _____
- Other_______

Type of child care used:

- In-Home Care _____
- Another Individual’s Home _____
- Organized Day-Care Setting _____
- Other (Please Specify) _____

Total hours per week: ______

Living Arrangements:

- Both Biological Parents _____
- Adoptive Parents _____
- Natural Mother & Stepfather _____
- Natural Father & Stepmother _____
- Mother Only _____
Father Only ___
Relatives ___
Foster Home ___
Other ___

Marital Status:

Married ___ Single ___ Divorced ___ Widowed ___

Overall, how would you rate your marital satisfaction?

Very satisfied ___
Satisfied ___
Neutral ___
Dissatisfied ___
Very Dissatisfied ___

Father

Age: ___

Occupation: __________________________

full-time (30 or more hrs/week) ___
part-time (less than 30 hrs/week) ___

What is your highest level of education completed?

1) 0 to 11th grade ___
2) High school graduate ___
3) Some college credit ___
4) College graduate ___
5) Master's degree ___
6) Ph.D., J.D., M.D., or equivalent ___

Ethnicity:

White ___ Hispanic ___ Black ___
Native American ___ Asian ___ Other ___

Do you have a history of learning, emotional, or behavioral problems? If yes, what type? ____________
Mother

Age: ___

Occupation: __________________________

How satisfied are you with your current employment?

Very satisfied ___
Satisfied ___
Neutral ___
Dissatisfied ___
Very Dissatisfied ___

Current number of hours you work per week:

<table>
<thead>
<tr>
<th>Hours per Week</th>
<th>___</th>
<th>0 - 5</th>
<th>6 - 10</th>
<th>11 - 15</th>
<th>16 - 20</th>
<th>21 - 25</th>
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</tr>
<tr>
<td></td>
<td></td>
<td>26 - 30</td>
<td>31 - 35</td>
<td>36 - 40</td>
<td>40+</td>
<td></td>
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</tbody>
</table>

What is your highest level of education completed?

1) 0 to 11th grade ___
2) High school graduate ___
3) Some college credit ___
4) College graduate ___
5) Master’s degree ___
6) Ph.D., J.D., M.D., or equivalent ___

Ethnicity:

White ___ Hispanic ___ Black ___
Native American ___ Asian ___ Other ___

Do you have a history of learning, emotional, or behavioral problems? If yes, what type? __________________________

Additional Educational Information for Mother Only:

In college presently? Yes ___ No ___
If yes, how many credit hours are you currently enrolled? ______

Does the college/university you attend use a ____ quarter or ____ semester system?

Total college credits accumulated (not including current courses): ___

How long have you been taking courses? ______

Area of study? ____________________________

What is your present educational goal (Degree)? ______

Most important reason for returning to college:

1) Financial position ___
2) Change of career ___
3) Personal interest ___
4) Other (Please specify) ____________________________
APPENDIX D

DESCRIPTION OF STUDY
Dear Parents:

I am a Counseling Psychology doctoral student from The University of North Texas. I am conducting research under the supervision of David Baker, Ph.D. to meet the requirements for my dissertation.

The purpose of this study is to obtain information about parent's perceptions of their immediate family environment. I will administer two questionnaires to each parent along with an information sheet. These will take approximately one hour and fifteen minutes to complete.

All responses on the tests and on the questionnaire will be gathered in strict compliance with the American Psychological Association guidelines for human subjects participation. Responses will be completely anonymous. All identifying information will remain confidential and responses will be recorded so as not to identify you. No one will know or have access to your scores. All results of this study will be reported as group data, not as individual responses. In addition, you have the right to withdraw from this study at any point.

Your cooperation and efforts are greatly appreciated. Should you have any questions about this study, please contact Kevin McCal at (817) 565-2671.

Kevin McCal, M.A.
Doctoral Candidate/Researcher
University of North Texas
Denton, Texas 76203

David Baker, Ph.D.
Assistant Professor/Research Advisor
University of North Texas
Denton, Texas 76203
APPENDIX E

PSI SUBSCALE DESCRIPTIONS (ABIDIN, 1986)
PSI Subscale Descriptions (Abidin, 1986)

Child Domain
1) Adaptability - The extent to which the parent perceives the child's ability to adjust to changes in his or her physical or social environment

2) Acceptability - Measures the parent’s perception of their child’s overall attractiveness

3) Demandingness - The degree of demand the parent perceives by the child

4) Mood - Measures parent’s perception of the child’s affective functioning

5) Distractibility - Identifies presence of behavioral characteristics of the child that are common with the criteria of ADHD

6) Reinforcement of Parent - Measures the degree to which the parent experiences their child as a source of positive reinforcement

Parent Domain
1) Depression - Measures possible depression in the parent

2) Attachment - Parent’s sense of emotional closeness to their child and/or ability to read and understand their child’s feelings

3) Restriction - Parent’s perception of how restricted they feel in the parent role

4) Sense of Competence - Measures general competence parent interaction with their child and how reinforcing their role as a parent feels to them

5) Social Isolation - Measures degree of isolation parent perceives from friends, relatives and the other parent

6) Relationship with Spouse - Measures perceived emotional and active support by other parent in area of child care

7) Parental Health - Measures level of perceived health
APPENDIX F

FES SCALE DESCRIPTIONS (MOOS & MOOS, 1986)
FES Scale Descriptions (Moos & Moos, 1986)

1) **Cohesion** - The degree of commitment, help and support members provide for one another

2) **Expressiveness** - The extent to which family members are encouraged to act openly and to express their feelings directly

3) **Conflict** - The amount of openly expressed anger, aggression and conflict among family members

4) **Independence** - The extent to which family members are assertive, are self-sufficient and make their own decisions

5) **Achievement Orientation** - The extent to which activities (such as school and work) are cast into an achievement-oriented or competitive framework

6) **Intellectual-Cultural Orientation** - The degree of interest in political social, intellectual and cultural activities

7) **Active-Recreational Orientation** - The extent of participation in social and recreational activities

8) **Moral-Religious Emphasis** - The degree of emphasis of ethical and religious issues and values

9) **Organization** - The degree of importance of clear organization and structure in planning family activities and responsibilities

10) **Control** - The extent to which set rules and procedures are used to run family life
APPENDIX G

TABLES
Table 1

Sample Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1</th>
<th></th>
<th>Group 2</th>
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<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Child's age (years)</td>
<td></td>
<td>8.03</td>
<td>1.89</td>
<td>8.59</td>
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<tr>
<td>Child's grade (year)</td>
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<td>2.52</td>
<td>1.95</td>
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<tr>
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<td>34.87</td>
<td>6.08</td>
<td>35.28</td>
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<td>Father's age (years)</td>
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<td>38.19</td>
<td>6.26</td>
<td>38.44</td>
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<tr>
<td>SES(^{a})</td>
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<td>45.61</td>
<td>12.07</td>
<td>42.91</td>
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<tr>
<td>Number of children (in the home)</td>
<td>2.39</td>
<td>1.41</td>
<td>2.12</td>
<td>0.75</td>
</tr>
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</table>

\(^{a}\) - calculated using Hollingshead's Four Factor Index of Social Status (Hollingshead, 1974)
### Table 2

**Education Level of Parents**

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<thead>
<tr>
<th>Present level of education</th>
<th>Group 1 Students (N=31)</th>
<th>Group 2 Workers (N=32)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MOTHERS</td>
<td>FATHERS</td>
</tr>
<tr>
<td>&lt;11th Grade</td>
<td>---</td>
<td>3.1%</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>6.5%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Some College Credit</td>
<td>48.4%</td>
<td>31.3%</td>
</tr>
<tr>
<td>College Graduate</td>
<td>25.8%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>19.4%</td>
<td>9.4%</td>
</tr>
<tr>
<td>Ph.D., J.D., M.D. or equal</td>
<td>---</td>
<td>12.5%</td>
</tr>
</tbody>
</table>
Table 3

Mother's Job Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1</th>
<th></th>
<th>Group 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Students</td>
<td>(N=12*)</td>
<td>Workers</td>
<td>(N=32)</td>
</tr>
<tr>
<td>FREQUENCY</td>
<td>PERCENTAGE</td>
<td></td>
<td>FREQUENCY</td>
<td>PERCENTAGE</td>
</tr>
<tr>
<td>Very Satisfied</td>
<td>4</td>
<td>33.3%</td>
<td>11</td>
<td>34.3%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>4</td>
<td>33.3%</td>
<td>15</td>
<td>46.8%</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
<td>25.0%</td>
<td>4</td>
<td>12.5%</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>1</td>
<td>8.3%</td>
<td>2</td>
<td>6.2%</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

*Of the 31 total student mothers in the group only 12 worked outside the home.
### Table 4

**Student Mothers' Educational Characteristics**

<table>
<thead>
<tr>
<th></th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCHOOL SYSTEM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarter</td>
<td>12</td>
<td>38.7%</td>
</tr>
<tr>
<td>Semester</td>
<td>19</td>
<td>61.2%</td>
</tr>
<tr>
<td><strong>MAJOR AREA OF STUDY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td>9</td>
<td>29.0%</td>
</tr>
<tr>
<td>Graduate Psychology</td>
<td>7</td>
<td>22.6%</td>
</tr>
<tr>
<td>Speech and Language</td>
<td>2</td>
<td>6.5%</td>
</tr>
<tr>
<td>Architecture</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Graduate Architecture</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Music</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Graduate English</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Business</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Graduate Operations Research</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Graduate Foods &amp; Nutrition</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Graduate Nursing</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Sociology</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Graduate Rehabilitation</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Undecided</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>EDUCATIONAL GOAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>17</td>
<td>54.8%</td>
</tr>
<tr>
<td>Doctorate Degree</td>
<td>9</td>
<td>29.0%</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>4</td>
<td>12.9%</td>
</tr>
<tr>
<td>Undecided</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td><strong>REASON FOR RETURNING TO SCHOOL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Interests</td>
<td>14</td>
<td>45.2%</td>
</tr>
<tr>
<td>Change of Career</td>
<td>9</td>
<td>29.0%</td>
</tr>
<tr>
<td>Financial</td>
<td>8</td>
<td>25.8%</td>
</tr>
</tbody>
</table>
Table 5

Credits Student Mothers are Enrolled at Time of Participation

<table>
<thead>
<tr>
<th>QUARTER SYSTEM (credit hours)</th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>16-20</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>21-25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER SYSTEM (credit hours)</th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>11-15</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>16-20</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>20-25</td>
<td>1</td>
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</tr>
</tbody>
</table>
Table 6

Total Number of Credits Completed by Student Mothers at Time of Participation

<table>
<thead>
<tr>
<th>QUARTER SYSTEM (credit hours)</th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-50</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>51-100</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>101-150</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>151-200</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>201-250</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>251-300</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEMESTER SYSTEM (credit hours)</th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-50</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>51-100</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>101-150</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>151-200</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>201-250</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>251-300</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 7

Number of Months Student Mothers Have Been Taking College Courses

<table>
<thead>
<tr>
<th>QUARTER SYSTEM (credit hours)</th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-12</td>
<td>1</td>
<td>-----</td>
</tr>
<tr>
<td>13-24</td>
<td>3</td>
<td>-----</td>
</tr>
<tr>
<td>25-36</td>
<td>2</td>
<td>-----</td>
</tr>
<tr>
<td>27-48</td>
<td>2</td>
<td>-----</td>
</tr>
<tr>
<td>49-60</td>
<td>-----</td>
<td>2</td>
</tr>
<tr>
<td>61-72</td>
<td>1</td>
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<td>-----</td>
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<table>
<thead>
<tr>
<th>SEMESTER SYSTEM (credit hours)</th>
<th>UNDERGRADUATE</th>
<th>GRADUATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-12</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13-24</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25-36</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>37-48</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>49-60</td>
<td>-----</td>
<td>1</td>
</tr>
<tr>
<td>61-72</td>
<td>-----</td>
<td>2</td>
</tr>
<tr>
<td>unknown</td>
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<td>-----</td>
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Table 8

Parenting Stress Index - MANOVA Results

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student Mothers (N=31)</td>
<td>Working Mothers (N=32)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M    SD</td>
<td>M    SD</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Comparisons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Domain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptability</td>
<td>24.26 7.09</td>
<td>24.28 3.88</td>
<td>0.00 NS</td>
</tr>
<tr>
<td>Acceptability</td>
<td>12.39 4.36</td>
<td>12.41 2.92</td>
<td>0.00 NS</td>
</tr>
<tr>
<td>Demandingness</td>
<td>18.00 5.56</td>
<td>17.84 4.03</td>
<td>0.02 NS</td>
</tr>
<tr>
<td>Mood</td>
<td>9.97 2.73</td>
<td>10.13 2.78</td>
<td>0.05 NS</td>
</tr>
<tr>
<td>Distractibility/Hyperactivity</td>
<td>22.23 5.19</td>
<td>22.47 4.73</td>
<td>0.04 NS</td>
</tr>
<tr>
<td>Reinforcement of Parent</td>
<td>10.58 3.68</td>
<td>10.34 2.48</td>
<td>0.09 NS</td>
</tr>
<tr>
<td>Parent Domain</td>
<td>116.29 28.87</td>
<td>121.72 18.10</td>
<td>0.80 NS</td>
</tr>
<tr>
<td>Depression</td>
<td>18.58 6.96</td>
<td>19.09 3.78</td>
<td>0.13 NS</td>
</tr>
<tr>
<td>Attachment</td>
<td>12.35 3.75</td>
<td>12.56 3.58</td>
<td>0.05 NS</td>
</tr>
<tr>
<td>Restriction</td>
<td>16.90 5.42</td>
<td>18.44 3.82</td>
<td>1.70 NS</td>
</tr>
<tr>
<td>Sense of Competence</td>
<td>27.19 5.92</td>
<td>27.47 6.16</td>
<td>0.03 NS</td>
</tr>
<tr>
<td>Social Isolation</td>
<td>12.23 4.92</td>
<td>13.69 3.69</td>
<td>1.78 NS</td>
</tr>
<tr>
<td>Relationship</td>
<td>18.42 6.32</td>
<td>17.50 3.46</td>
<td>0.51 NS</td>
</tr>
<tr>
<td>Parental Health</td>
<td>10.71 3.87</td>
<td>12.59 2.49</td>
<td>5.31* 2&gt;1</td>
</tr>
<tr>
<td>Life Stressors</td>
<td>2.06 1.95</td>
<td>1.69 1.94</td>
<td>0.59 NS</td>
</tr>
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</table>

*p < 0.05
Table 9

FES - MANOVA Results

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Group 1</th>
<th>Group 2</th>
<th>F</th>
<th>Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal Relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohesion</td>
<td>7.48 (N=31)</td>
<td>7.66 (N=32)</td>
<td>0.22</td>
<td>NS</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>6.55 (N=31)</td>
<td>6.44 (N=32)</td>
<td>0.06</td>
<td>NS</td>
</tr>
<tr>
<td>Conflict</td>
<td>3.10 (N=31)</td>
<td>2.56 (N=32)</td>
<td>1.06</td>
<td>NS</td>
</tr>
<tr>
<td>Personal Growth Dimension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>6.58 (N=31)</td>
<td>6.41 (N=32)</td>
<td>0.24</td>
<td>NS</td>
</tr>
<tr>
<td>Achievement Orientation</td>
<td>5.32 (N=31)</td>
<td>5.41 (N=32)</td>
<td>0.04</td>
<td>NS</td>
</tr>
<tr>
<td>Intellectual-Cultural Orientation</td>
<td>7.16 (N=31)</td>
<td>6.28 (N=32)</td>
<td>3.74</td>
<td>NS</td>
</tr>
<tr>
<td>Active-Recreational Orientation</td>
<td>6.19 (N=31)</td>
<td>5.50 (N=32)</td>
<td>2.58</td>
<td>NS</td>
</tr>
<tr>
<td>Moral-Religious Emphasis</td>
<td>6.00 (N=31)</td>
<td>7.16 (N=32)</td>
<td>6.23*</td>
<td>&gt;1</td>
</tr>
<tr>
<td>System Maintenance</td>
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</tr>
<tr>
<td>Organization</td>
<td>5.06 (N=31)</td>
<td>5.62 (N=32)</td>
<td>0.96</td>
<td>NS</td>
</tr>
<tr>
<td>Control</td>
<td>4.65 (N=31)</td>
<td>5.44 (N=32)</td>
<td>3.33</td>
<td>NS</td>
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</tbody>
</table>

* p ≤ 0.05
Table 10

**Mother's Marital Satisfaction**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Very Satisfied</td>
<td>15</td>
<td>48.4%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>13</td>
<td>41.9%</td>
</tr>
<tr>
<td>Neutral</td>
<td>1</td>
<td>3.2%</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>2</td>
<td>6.5%</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>
REFERENCES


Prinz, R., Bella, B., & Oppenheimer, K. (1983). Children of separating parents: They are not all alike. Unpublished manuscript, Department of Psychology, University of South Carolina.


