

ABSTRACT

Title of Document: EXPLORING THE ROLE OF PLAYFULNESS,
SOCIAL SUPPORT AND SELF ESTEEM IN
COPING WITH THE TRANSITION TO
MOTHERHOOD

Anne Fenton Cavanaugh, Master of Arts, 2006

Directed By: Professor Mary Ann Hoffman, Department of
Counseling and Personnel Services

First time parenthood is a major transition in the lives of many young adults, and can lead to both positive and negative outcomes in terms of marital satisfaction and individual adjustment. New mothers are particularly at risk for declines in satisfaction and adjustment as they are often the primary caregivers. The current study examined the coping processes of 197 women in their first year of motherhood. Playfulness, social support and self esteem were examined as possible personal resources during this transition. Data were collected using a web based survey and analyzed with cluster and correlational analyses. Results suggested postpartum adjustment is unrelated to relationship satisfaction. Additionally, while the variables of interest, particularly playfulness, predicted a large amount of variance in relationship satisfaction, they only predicted a small amount of variance in postpartum adjustment. These findings will help counseling psychologists develop and implement interventions to help new mothers in this transition.

EXPLORING THE ROLE OF PLAYFULNESS, SOCIAL SUPPORT AND SELF
ESTEEM IN COPING WITH THE TRANSITION TO MOTHERHOOD

By

Anne Fenton Cavanaugh

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Master of Arts
2006

Advisory Committee:
Professor Mary Ann Hoffman, Chair
Professor Elaine A. Anderson
Professor Ty Tashiro

© Copyright by
Anne Cavanaugh
2006

Acknowledgements

Many thanks to Mary Ann Hoffman for her numerous helpful comments as well as her support during this process. Thank you to Ty Tashiro and Elaine Anderson for serving on my committee and for their thoughtful and useful suggestions. Finally, thank you to Patrick Welsh and Michael and Jean Cavanaugh for their constant love and encouragement in all my endeavors.

Table of Contents

Acknowledgements	ii
Table of Contents	iii
List of Tables	v
List of Figures	vi
Chapter 1: Introduction	1
Chapter 2: Review of the Literature	6
The Transition to Parenthood	7
Coping	14
Coping and the transition to parenthood	18
Self esteem as a coping resource	21
Self esteem and the transition to parenthood	22
Social support as a coping resource	25
Social support and the transition to parenthood	26
Playfulness	29
Playfulness and marital satisfaction	31
Playfulness and coping	36
Chapter 3: Statement of the Problem	41
Hypotheses	44
Research Questions	46
Chapter 4: Method	49
Design	49
Participants	49
Measures	52
Procedure	59
Chapter 5: Results	62
Preliminary Analyses	62
Analysis of Hypotheses and Research Questions	62
Additional Analyses	83
Chapter 6: Discussion	87
Sample	87
Hypotheses and Research Questions	89
Additional Analyses	114
Overall Summary of Findings	117
Limitations	119
Implications for Research	122

Implications for Practice	125
Appendices	129
Appendix A: Recruitment Email	129
Appendix B: Flier Advertisement	130
Appendix C: Relationship Assessment Scale	131
Appendix D: Couples Playfulness Questionnaire II	132
Appendix E: Self Esteem Scale	134
Appendix F: Stressful Event Description	135
Appendix G: Ways of Coping	136
Appendix H: Multidimensional Scale of Perceived Social Support	138
Appendix I: Postpartum Adjustment Questionnaire	139
Appendix J: Demographics	143
Appendix K: Debriefing Form	145
References	146

List of Tables

Table 1: Demographic Characteristics of Participants	51
Table 2: Means, Standard Deviations, and Internal Consistencies for Measures Used	63
Table 3: Factor Loadings for Ways of Coping by Item	66
Table 4: Factor Loadings for Ways of Coping by Factor	67
Table 5: Categories of Qualitative Data for Research Question 3a: How has your relationship changed since becoming a mother?	71
Table 6: Categories of Qualitative Data for Research Question 3b: What is the most positive change since becoming a mother?	71
Table 7: Categories of Qualitative Data for Research Question 3c: What is the most negative change since becoming a mother?	72
Table 8: Means, Standard Deviations and Comparisons by Cluster	75
Table 9: Comparisons on Five Coping Factors by Cluster	76
Table 10: Summary of Qualitative Data by Cluster	78

List of Figures

Figure 1: Visual Depiction of Proposed Model	40
Figure 2: Bivariate Correlations	86
Figure 3: Four Cluster Solution	76
Figure 4: Coping Factors by Cluster	77
Figure 5: Visual Depiction of Tested Model	118

Chapter 1

Introduction

Ask a mother what she thinks of her baby and you may get smiles and responses about how cute he/she is or how blessed she feels. However, you may also hear complaints about 3am feedings and complete exhaustion. Why is it that one hears such varied responses to this one experience? Each year thousands of women become mothers for the first time, creating a major change and possible stressor in their lives. Mothers tend to take on 80% of child care tasks, while the amount of activities done with their spouses are cut in half (Huston & Holmes, 2004). While some women cope well with this dramatic change in lifestyle, the majority do not, facing a drop in marital satisfaction and well being (e.g. Cowan, Cowan, Heming, Garrett, Coysh, Curtis-Boles, & Boles III, 1985; Belsky, Spanier & Rovine, 1983).

Much of the literature on the transition to parenthood has focused on declining marital satisfaction as a consequence (e.g. Cowan, et. al. 1985; Belsky, et. al. 1983; Levy-Shiff, 1994; Cox, Paley, Burchinal & Payne, 1999a), and since marital satisfaction has been connected to early parenting quality (Cowan & Cowan, 1988; Cox, Paley, Payne & Burchinal, 1999b and Erel & Burman, 1995), it is an important outcome to study. Belsky's et. al. (1983) article was one of the first to show a dramatic decline in overall satisfaction, romance, and cohesion for new parents. In addition, he found this decline to be greater for women. Some studies have since argued that the decline is nonexistent, or reflects a general decline in marital satisfaction that occurs in all relationships (McHale & Huston, 1985 and White & Booth, 1985). However, studies that make that claim often look at couples in the first years of marriage. Thus, while the discrepancy in declining

marital satisfaction does not appear between parents and non parents when they are all also newlyweds, many studies show a difference in marital satisfaction in later years of marriage.

More recent literature has looked at potential correlates of this decline in marital satisfaction in an attempt to understand why it might be occurring. Research has shown that role satisfaction (Cowan, et. al. 1985), beliefs about parenting (Harriman, 1986), expectations about parenthood (Ruble, Flemming, Hackel, & Stangor, 1988), self esteem (Belsky & Rovine, 1990, Harriman, 1986, Frosch, Mangelsdorf, & McHale, 1998), and spousal support (Shapiro, Gottman, & Carrere, 2000) all significantly correlate with a decline in marital satisfaction.

However, while marital satisfaction is an important outcome variable, it seems that the general well being and adjustment of the mother, separate from her marital relationship are also important. According to Cowan et. al. (1985), 7-15% of new parents will be diagnosed with depression while 30-50% will experience “the blues.” Thus, a mother’s postpartum adjustment should also be addressed. O’Hara, Hoffman & Phillips (1992) recently developed the Postpartum Adjustment Questionnaire (PPAQ), which measures a new mother’s functioning in various social roles. This measure allows researchers to examine individual adjustment as related to the baby, in addition to marital satisfaction.

The transition to parenthood presents a common stressor to new mothers. However, researchers have failed to fully explore the role of coping in this transition. By using the coping framework to explore the outcome variables of marital satisfaction and postpartum adjustment, one can learn which coping mechanisms and resources help new

mothers and which are less helpful. Coping involves deciding whether or not an event is stressful, deciding what resources one has, and finally deciding on a response to reduce the stress (Lazarus & Folkman, 1984). It seems that new mothers will engage in this coping process countless times as they navigate their way through new parenthood.

Terry (1991b) was the first to investigate a relationship between types of coping and the transition to parenthood. Using a scale of problem focused coping and emotion focused coping (the two basic dimensions of coping according to Lazarus and Folkman (1984)), she examined whether or not the use of particular types of coping, self esteem and social support predicted global well being after the birth of a child. Her findings support her model and suggest that coping does play a role in postpartum adjustment. However, Terry restricts herself to only two types of coping, while recent literature suggests that individuals employ a much larger range of coping mechanisms (Skinner, Edge, Altman & Sherwood, 2003). In addition, she examines global well being as an outcome which could be affected by a large range of external variables. Thus, while Terry's (1991b) work is an important step, it leaves a large amount of room for future research in this area.

In addition to looking at specific coping mechanisms it is also important to explore an individual's internal and external resources, which are part of the coping process. An individual examines his or her own resources when determining which coping mechanisms to use and appraising his or her stress level. Terry (1991b) found some support for both internal and external resources. Her article showed self esteem, an internal resource, to relate to postpartum well-being. Past research has also shown self esteem to be related to marital satisfaction after the birth of a baby (Belsky & Rovine,

1990, and Frosch, et. al. 1998), implying that self esteem is an important internal resource for new mothers. Terry (1991b) also found a connection of spousal social support, an external resource, and maternal well-being. Other previous literature finds a similar connection of spousal social support and marital satisfaction (Shapiro, et. al., 2000, Tietjen & Bradley, 1994). However, some articles also suggest that support from family (McCannell, 1988) and friends (Wandersman, Wandersman, & Kahn, 1980) could be important. Thus, it is necessary to consider social support from multiple sources as a useful external resource.

Yet self esteem and social support are not the only resources that may effect the transition to parenthood. Dyadic play might be important as well. While no literature has looked at the connection of play and postpartum adjustment, play has been shown to relate to marital and relationship satisfaction (e. g. Aune & Wong, 2002, Betcher, 1977 etc.). In addition, playfulness can both create and be an expression of positive emotions (Aune & Wong, 2002). According to Fredrickson's (1998) Broaden and Build hypothesis, positive emotions can increase one's coping abilities by helping an individual consider additional thought-action responses to a given event. Finally, play has also been shown to relate to conflict management (Metz & Lutz, 1990, Baxter 1992), and communication (Betcher, 1981, Baxter, 1992); perhaps play is a way for couples to work through problems and conflicts related to the adjustment to parenthood. Children use play as a way to adapt and deal with anxiety, adults might do so as well.

The transition to parenthood presents a new mother with many challenges. Every day she must cope with a changing role, new work, and the responsibility for another life. The way in which she copes with these changes and stressors may predict her satisfaction

with her marriage and her own adjustment to this novel situation. However, it is important to look beyond the coping mechanisms and explore her resources as well; they could also be a factor. It seems that a mother's sense of confidence in herself, her ability to be playful and flexible, and the support that she receives from others will all facilitate her adaptation to parenthood. Therefore, this study explores the role of playfulness, social support, self esteem, and coping in relationship satisfaction and postpartum adjustment, paving the way for possible interventions to help women in their transition to motherhood.

Chapter 2

Review of the Literature

First time parenthood is a major transition in the lives of many young adults. However, while some new mothers and fathers tend to relish in this change, other new parents find themselves burdened and tense with the birth of their first child. Early theorists saw this time of life as a crisis. A baby was viewed as a hardship for which new parents were unprepared (Lemasters, 1957). However, in the past 30 years, theorists have realized that the baby can bring positive changes as well, and these researchers have begun to view first time parenthood as a transition phase (Hobbs & Cole, 1976, Russel, 1974). The question that remains, however, is why some new parents navigate this transition so well, while others see a major decline in marital and individual well-being.

According to Lazarus and Folkman's (1984) cognitive-phenomenological theory of stress and coping, the environment and one's personality continuously interact to create and mediate stress. Thus, this literature review begins by examining the transition to parenthood or the major stressor, which until recently has primarily focused on marital satisfaction. This section includes an argument for adding postpartum adjustment as a possible outcome variable. Following that is a review of the coping literature, the coping process and past work looking at coping mechanisms in the transition to parenthood. A review of self esteem and social support as coping resources is also presented along with the relevance of these variables to new parents. Finally, I review the playfulness literature and explain why playfulness may be an additional resource in the transition to parenthood. As playfulness has been shown to relate to positive interactions in relationships, positive emotions, relationship satisfaction (Aune & Wong, 2002) and

cognitive flexibility (Fredrickson, 2001) it may be an important variable for new moms as they undergo this potentially difficult transition.

The Transition to Parenthood

Research has shown that having a baby can be a large stressor for new parents. Not only are there new child care tasks, but there is also an increase in the number of household tasks. With the birth of a new child, the number of household and child care tasks increases from 5.8 per day to 36.2 per day (Huston & Holmes, 2004). In addition, new parents face new roles for themselves. They are now responsible for another life, resulting in a good deal of sacrifice of their own time and independence. While approximately 44% of activities are done together as a couple before the birth of the baby, this number is cut in half after the birth of the baby (Huston & Holmes, 2004). Partners have less time for leisure and play. These changes can be especially true for women as they are often the primary caregivers, taking on as many as 80% of the childcare tasks on average (Huston & Holmes, 2004). Even in dual income homes, the majority of child care decisions are left to the mother (Johnson, 2000) and fathers only take on a quarter of the responsibilities (Smith & Huston, in press, as cited in Huston & Holmes, 2004). Some data report that those who become parents at older ages usually divide domestic and child care tasks more evenly (Ishii-Kuntz & Coltrane, 1992); however, it seems that even in these couples the mother may experience a stronger role shift than the father (Cowan et. al., 1985).

The early literature on the effects of these changes focused on marital satisfaction. This is an important outcome to study as being in a relationship, in general, has been linked to well being (Diener, Suh, Lucas, & Smith, 1999), and dissatisfaction in

relationships has been linked to declines in psychological and physical health (Burns, Sayers, & Moras, 1994). However, marital satisfaction also impacts the health of the child; marital satisfaction has been linked to early parenting quality (Cowan & Cowan, 1988, Cox, et. al., 1999b and Erel & Burman, 1995). Thus, marital satisfaction is a key outcome variable to the well-being of both mother and child.

Belsky, et. al. (1983) are often cited as the first detailed account of the change in marital satisfaction during the transition to parenthood. They completed a longitudinal study of 72 families from pregnancy to nine months postpartum, consisting of individual self report measures, interviews, and behavioral observation. Interviews and self report questionnaires (including the Dyadic Adjustment Scale (Spanier, 1976)) were used to assess marital functioning. Interviewers also gathered data regarding the division of household and child-care labor, amount of joint leisure time, and characterization of the marital relationship (romance, friendship or partnership). In addition, home observations measured spousal interactions, which were then coded into whether communication was baby or non-baby related, whether both parents were jointly attending to the infant, and whether non-baby related interactions were positively affectionate. Finally, observers rated the couple on the intensity of their exchanges throughout the visit. This use of multiple forms of data collection adds richness to their work.

For primiparous couples, or those who have only had one baby, results indicated a significant decline in overall marital satisfaction from pregnancy through nine months postpartum. This decline in the overall scale was significant at each point of measurement. While wives consistently scored significantly higher than husbands on the overall score, they also experienced a significantly steeper decline on the cohesion

subscale score, as there was a time by spouse interaction effect. A decline in describing the relationship as a “romance” approached significance, while seeing the relationship as a “partnership” significantly increased from three to nine months postpartum. Results also indicated a significant decline in joint leisure activities, a form of play, from pregnancy to three months with no significant changes after that point. Meanwhile, a significant increase in child care activities was seen. At each measurement point wives were completing significantly more of these tasks than husbands, although from three to nine months, husbands showed a greater increase than wives (Belsky, et. al., 1983).

Analyses on the six marital interaction variables presented a more detailed picture of these overall changes. Both baby-related interactions and positive affect interactions declined significantly from one to three months. After three months, baby related interactions remained stable while positive affect interactions continued to show a (non-significant) decline. Finally, the other scales (joint interaction, shared pleasure in the baby, non-baby related interactions, and overall engagement) did not show significant changes over time. With these data, Belsky et. al. (1983) were able to show a decline in marital satisfaction during the first year of parenthood, with the decline more significant for new mothers. In addition, they were able to show some detailed information on how this change manifests itself behaviorally.

Despite results suggesting a decline in marital satisfaction with the birth of a new baby, a few studies have argued that this change is not unique to parents (e.g. Belsky’s et. al. 1983; Cowan et. al., 1985). According to some research, all couples experience a general decline in relationship satisfaction after marriage. McHale and Huston (1985) did a longitudinal study comparing parents and non-parents. They contacted a number of

couples within three months of their wedding day and interviewed them; by the phase two interviews (approximately a year later), 28 couples had become parents and 78 remained childless. The authors used phone interviews to gather data on the couple's activities in the previous 24 hours. These behaviors were then divided into four categories: marital companionship, instrumental role performance, socioemotional behavior, and involvement with the social network. In addition, experimenters conducted face to face interviews, in which participants reported on their satisfaction with several domains of marriage, satisfaction with their spouses' behaviors/interactions, feelings of love for their spouse and their overall marital satisfaction.

In terms of overall activity changes, McHale and Huston (1985) found that all couples experienced a decrease in positively toned behaviors and spent less time conversing and doing things together. However, parents also reported an increase in joint household and child care activities, a decrease in personal leisure time, and a move towards more traditional sex roles. This trend towards traditionalism may be explained by a substantial increase in responsibilities for mothers that is not matched by an increase for fathers. Thus, as mothers spend more time caring for the baby and household, they carry the burden of increased responsibility and may feel less relaxed and playful. Finally, there were no group differences between parents and non-parents in their extent of involvement with family and friends over that time period.

Both groups showed a decline in overall marital satisfaction, a decline in satisfaction with their spousal interactions, and a decline in their feelings of love for their partner. In addition, wives in both groups found themselves completing the majority of household tasks and were more dissatisfied with the division of labor. Finally, wives

experienced a greater decline in satisfaction with their amount of leisure time, although mothers were least satisfied with this domain overall (McHale & Huston, 1985).

Based on these results, McHale and Huston (1985) conclude that the decline in marital satisfaction for new parents is not a unique phenomenon to that group. They explain that while many of their contemporaries (such as Belsky et. al., 1985 and Cowan et. al., 1985) are studying the decline in marital satisfaction for new parents, it is actually a universal phenomenon for the majority of married couples. However, there is a major flaw in their study; they only look at couples in their first year of marriage. Essentially, their non-parent groups are experiencing the end of the “honeymoon” phase in their relationship. Were they to study couples from a range of points in marriage, they might find very different results. In addition, their parent group was unique in that they all had children within their first year of marriage and many of them were pregnant before their wedding. It is unclear how this early pregnancy effects the data, but it could easily act as a major factor affecting relationship satisfaction.

Despite this major flaw, McHale and Huston’s (1985) work does raise a good question. There are parents and non parents who experience a decline in marital satisfaction and there are those that do not; what differentiates these couples? In 1971, Feldman found that 43% of new mothers experienced a decrease in marital satisfaction, 39% experience no change and 18% actually experienced an increase in marital satisfaction. Three decades later, Shapiro (2000) found that 67% of new moms experienced a decline while 33% remained the same or improved. Over the course of time it seems that there are those who thrive in this change and those who do not. What separates these groups of mothers? More recent literature has examined possible

correlates of the decline in marital satisfaction in an attempt to figure out why it might occur.

Goldberg, Michales and Lamb (1985) chose to examine what, specifically, parents were unsatisfied with. For mothers it seemed to be a loss of time with one's spouse, a loss of sleep and a loss of one's figure. They also found that changes in labor division play an important role in the transition to parenthood. A number of other studies looked at the division of labor more closely. Cowan et. al. (1985) found support for a correlation of marital satisfaction decline and less equal sharing of household tasks. They also found a correlation of increased conflict with marital satisfaction declines. Ruble, Flemming, Hackel and Stangor (1988) instead theorized that it is not just the increase in labor for women, but the difference between their expectations and reality. They found that women reported doing a significantly larger amount of work than expected. This expectation violation significantly predicted negative variance in marital satisfaction. Thus it seems that one of the biggest stressors that comes with the transition to parenthood, an increase in labor, is indeed related to marital satisfaction.

More recent work has attempted to come up with broader models, incorporating a variety of variables to determine what best predicts declining marital satisfaction. Belsky and Rovine (1990) found that a combination of demographic, personality and marital variables, all measured before the birth of the baby, were the best predictors, although infant variables, such as temperament, did add some strength to their model. Levy-Shiff (1994) looked at the transition to parenthood using an ecological model in an Israeli sample. According to this model, parent personality characteristics (impulse control, autonomy, interpersonal affect and attitudes toward parenting), infant characteristics

(difficult behaviors), familial context (care giving, play and affiliative behaviors and communication), out of family systems (social support and work role centrality) and sociocultural context (non western ethnic origin) all work together to determine marital adjustment after the birth of the couple's first child. For women, she finds that her model accounts for 37.6% of variance after controlling for prenatal satisfaction and that each category was significant.

While these models are certainly of note, and help explain the many factors that might contribute to changes in marital satisfaction, they do not give specific information to use in developing interventions. They seem to tell the reader that the transition to parenthood is immensely complicated and that every variable may play a role in predicting marital satisfaction. A different type of theoretical framework might better inform the field of counseling psychology on this transition. Thus far the literature has suggested that new parenthood does indeed contribute to a great deal of stress and changes, yet to date few have looked at the coping processes of new parents. Using the coping framework is a new way to examine this transition and provides more detailed information on how new parents deal with the daily stressors of parenthood. Through this framework, not only can one examine the coping processes of new parents to see which mechanisms work better than others, but researchers can also examine what type of coping resources are more helpful. One can determine whether external resources such as social support, or internal resources such as self esteem and playfulness, have any role in this transition.

In addition, while marital satisfaction is an important outcome, individual adjustment might be important as well. A number of the previously mentioned studies

indicate that women fare more poorly in the transition to parenthood than men (e.g. Belsky, et. al. 1983, Cowan et. al. 1985) and take on significantly more work (e.g. Huston & Holmes, 2004). In addition, new mothers are at risk for postpartum depression and many experience “the blues” after giving birth (Cox, et. al 1999a). Thus, it is important to look specifically at women and their individual adjustment to this major life change and the stressors it causes. One way that researchers often examine the effects of such a stressor on individual adjustment and satisfaction is by looking at coping processes.

Coping

The transition to parenthood creates a number of changes in a new mother’s life. In addition to the increase in household and baby care work (e.g. Huston & Holmes, 2004), she may experience a change in her relationship with her husband (e.g. Belsky et. al., 1983), and even a change in her sense of self or her role in the world (Cowan et. al., 1985). This drastic life change will inevitably cause a new mother a great deal of stress; however, a very small amount of research has used the coping literature to look at this transition. It seems that a new mother’s choice of coping mechanisms may be essential for her adjustment to these changes.

Stress and coping theory provides a valuable theoretical framework for examining the transition to parenthood. While some theorists (i.e. McCrae & Costa, 1985) will argue that coping is a personality trait and one’s choice of coping mechanisms remains stable throughout various situations, the majority of modern theorists argue that it is situation specific. Thus, coping is not consistent for each person and instead can be looked at by situation.

Pearlin and Schooler (1978) were among the earliest to examine situation specific coping. They theorized that coping mechanisms are what people use to avoid life strain and explained that coping has three major functions: to change the situation creating stress, to control the meaning of the situation after it occurs (but before stress occurs) and to control the stress after it has emerged. Each of these functions may look different for different situations, but they are the three ways in which coping can help an individual diminish stress. The less stress created by a situation, the more effective the coping mechanisms. In order to examine coping, they interviewed 2,300 people from the Chicago area between the ages of 18 and 65. They asked questions about stressors, coping and emotional reactions/stress in each of four areas: work, marriage, parenting and economic management (for the household). They explain that these situations are “normative” in that the majority of adults face problems in these areas and may use similar solutions. In addition, they examined individuals’ personal resources by asking about their self denigration, mastery and self esteem.

Regressions of strain and coping indicated that coping made the largest difference in marriage and parenting, the interpersonal domains, followed by economic management and finally occupation, the impersonal domains. They also found similar patterns when running a regression of resources and coping on strain. Coping was the best predictor of low strain in marriage, coping and resources were equal predictors in parenting, and personality resources were more important than coping in economic management and occupational situations. Thus it seems that coping is more important than one’s personality traits/resources in interpersonal situations such as marriage and parenting (Pearlin & Schooler, 1978).

Pearlin and Schooler (1978) ran two additional regressions of interest. First, they ran a zero-order correlation of the number of coping mechanisms used (out of the 17 different mechanisms about which they asked) and strain, finding a relationship in marriage and economic management. Thus it seems that for some situations, a varied coping repertoire is also important. In addition, they explored sex differences and found 11 significant differences. Three of those 11 were used more frequently by women and those three all entailed some type of selective ignoring, which the authors had previously shown to increase stress in parenting and marriage. Thus, sex differences seem to be important, and particularly so in interpersonal domains.

Even Pearlin and Schooler's (1978) early work suggests that coping may be important to examine in new motherhood; it is a unique situation, it is interpersonal in nature and it looks at females separately. However, the present study uses the more recent model of coping created by Lazarus and Folkman (1984), for which Pearlin and Schooler's (1978) functions of coping laid the groundwork. Lazarus and Folkman (1984) present a cognitive-phenomenological theory of stress, in which the environment or situation and one's personality continually interact. This interaction can be mediated by the three step coping process. The first step is primary appraisal. This step consists of perceiving the threat; one considers what's at stake and whether or not the situation is a stressful one. In the second step, secondary appraisal, one brings to mind potential responses and evaluates one's coping resources as well as the demand of the situation. The final stage is coping, cognitive and behavioral efforts to master or reduce stress. They theorized that most coping mechanisms fall into two overarching categories which mirror Pearlin and Schooler's (1978) domains. Problem focused coping is doing

something to change the situation while emotion focused coping is doing something to change the meaning of the situation.

Lazarus and Folkman (1980, 1984, 1986a, 1986b) have completed a large amount of research based on this theory of coping. One of their earlier studies suggested that in a middle aged sample, individuals used both problem and emotion focused coping in 98% of stressful situations. These individuals were more variable than consistent in their coping styles. In a regression, personality factors had the least influence on the type of coping mechanism used, supporting their situation-based theory of coping (Folkman & Lazarus, 1980). They have also looked at the relationship of appraisal and coping choice. Some work has shown appraisal to account for the largest variability in coping choice (Folkman & Lazarus, 1980), while other work has made direct connections between certain appraisals and certain coping mechanisms. For example, when a situation was appraised as a changeable encounter, people tended to use confrontive coping, accepting responsibility, planful problem solving and positive reappraisal, while a situation appraised as one “to be accepted” (or unchangeable) participants tended to use distancing and escape/avoidance coping mechanisms (Folkman & Lazarus, 1986a). In addition, Folkman and Lazarus (1986b) have shown the usefulness of coping. In a regression looking at the relationship of coping and long term adaptation, they found that coping, primary appraisal and personality variables accounted for 43% of the variance on the Hopkins symptom check list for a sample of women between the ages of 35 and 45. Finally, they have also developed a widely used measure of coping, the Ways of Coping Scale (WOC) which asks an individual how often they use each of 60 coping

mechanisms. This scale breaks down into eight subscales and can look specifically at how people react in different situations.

Despite their focus on the situation, Lazarus and Folkman (1980, 1984, 1986a, 1986b) believe that personality plays a role in coping. They argue that one's psychological resources can be a large part of the coping process, as one evaluates them in secondary appraisal and may use them as a coping mechanism. Commonly studied resources include health, energy, problem solving skills, commitments (one's expression of what is important), beliefs (especially when they are about personal control or existence), social skills, social support, material resources and cultural constraints. The importance of each resource can vary with each new situation; however, they are a constant, more individual force in the coping process. Thus, when looking at adjustment outcomes to a stressful situation, it will be important to examine personal resources in addition to coping mechanisms. This knowledge will help structure the current study of the transition to parenthood.

Coping and the transition to parenthood. While the literature has begun to embrace the transition model, rather than crisis model, very little work has used the coping literature. As coping involves the introduction of a stressor, an appraisal of one's resources and a coping response, it seems to fit very well to the transition to parenthood, which presents new mothers with stressors on a daily basis.

Two linked studies by Terry (1991a and 1991b) did begin to examine the relationship of coping and the transition to parenthood. In one of her two studies, she examined the predictors of stress. Based on the Lazarus and Folkman (1984) model, she examined whether or not individual resources (internal control beliefs), appraisal

variables (importance of the event, familiarity with babies, anticipated difficulty, and ambiguity) and event variables (delivery complications, infant temperament and concurrent stressors) predicted stress levels in a longitudinal study of 123 couples in Australia. To test her model, Terry (1991a) ran a stepwise regression; first she entered initial stress levels as a control, followed by internal control beliefs in the second step, appraisal variables in the third and event variables in the last step. With this order, she found the appraisal variables and the event variables to account for a significant amount of variance. More specifically, she found that importance of the event, anticipated difficulty, familiarity with babies, infant temperament and concurrent stressors all emerged as distinct predictors, suggesting that the Lazarus and Folkman (1984) model of stress does fit the transition to parenthood. Both event and appraisal variables are important to the stress levels. In addition, she found sex differences, again supporting the idea that men and women should be studied individually during the transition to parenthood.

While her first study provided helpful insight on stress for new parents, Terry's (1991b) second study looks more specifically at the use of coping mechanisms during this transition. She proposes a model in which high levels of strain, defined as subjective or experienced stress levels, and tension-reducing (also known as emotion focused) coping will negatively impact the adaptation to parenthood. In addition she hypothesizes that problem focused coping, personal resources (specifically internality and self esteem) and social support (from spouse, family and friends) will help the transition.

In order to test these hypotheses, Terry (1991b) recruited 123 couples from a preparenting course who were all expecting their first child. Participants could take the

self report survey in person or via mail and were tested at three times: during pregnancy, four weeks after birth, and 18 weeks after birth. At time one, participants answered questions about their coping mechanisms and adaptation, at time two they responded to measures of perceived strain in addition to coping and adaptation, and at time three, they only filled out measures of adaptation. Terry ran two regressions with these results, one which addressed her model and one which addressed gender differences. At time two she found that the model accounted for 51% of the variance in the dependent variable and 31% of variance when controlling for levels of well-being at time one. In addition, she found that her model also accounted for 31% of the variance in adaptation at time three. More specifically, she found that an individual's level of subjective stress and use of tension-reducing coping negatively predicted adaptation. However, problem focused coping positively predicted adaptation in males only. Additionally, while there was no strong support for a relationship between personal or social support at time two, internality, spousal support and family support did predict well-being at time three. Overall, she found support for a stress and coping model of the transition to parenthood.

While Terry's (1991b) study has some strong points in its design, its methodology is not without flaws. To begin with, she admits to the possibility that strain and adaptation may be confounded. She claims to have addressed this problem by removing all of the overlapping items in these measures, but it leaves one to wonder if the measures remain valid after such a change. Another measurement concern is the dependent variable. Terry uses the general health questionnaire and the state trait anxiety scale to measure adaptation; however, it seems that these are incredibly broad measures and may be affected by a number of other life events. In addition, while she controls for prepartum

scores on these variables, time one is still measured during pregnancy. It is possible that marital satisfaction actually increases during pregnancy and that studies finding a decline in marital satisfaction after birth are actually detecting a return to baseline. An additional concern about the measurement time in Terry's study is time three. Her final measurement is at 18 weeks postpartum, however, previous studies have shown that it may take up to six months for fathers to experience some of the negative changes associated with parenthood (e.g. Wallace, 1990). It is possible that some of Terry's reported gender differences in the effectiveness and use of problem focused coping may be due to this timing. In her defense, Terry does offer a plausible alternative explanation for the found gender differences: that the problems associated with being a primary caregiver to the new infant, often the mother's role, are not amenable to change and therefore problem-focused coping would not help a new mother.

Thus, despite some flaws in Terry's (1991) study, it opens the door for a wealth of research on stress and coping in the transition to parenthood. It lays the groundwork for the present study, which will expand on the type of coping mechanisms measured while continuing to explore some of the same resources: self esteem and social support.

Self Esteem as a coping resource. As described previously, the coping process involves more than the use of particular coping mechanisms, it also involves the evaluation of one's resources. Internal resources are the parts of one's personality and self that might help diminish stress while external resources are parts of the environment or situation that might help diminish stress. One such important internal resource is self esteem. Self esteem refers to one's evaluation of oneself, abilities and importance. In terms of stress and coping, those with high self esteem are able to maintain direction and

a high evaluation of self, even in stressful situations. In contrast, those with low self esteem are particularly vulnerable to changes in the environment and stress (Chan, 1977).

Some theorize that this vulnerability, or lack thereof, manifests itself at the appraisal level of coping. Those with high self esteem may have a past history of successful coping making them feel more potent and in control. Therefore they will perceive a lower level of stress than those with low self esteem for the same situation. This lower level of stress will lead to lower anxiety over the situation, which will, in turn, enable them to better execute an appropriate and healthy coping mechanism. Whether or not they have a history of successfully coping with past stress, an individual with low self esteem will feel more vulnerable and less in control of the situation, will perceive it as more stressful and will experience more anxiety and a decreased ability to use coping mechanisms (Chan, 1977). Self esteem could effect coping in the specific situation of new parenthood in a similar fashion.

Self esteem and the transition to parenthood. While only a small number of studies have looked at self esteem during the transition to parenthood in a coping context, a number of studies have examined self esteem as an independent predictor of postpartum adjustment outcomes and have found mixed results. As described above, Terry's (1991b) study tested self esteem as a coping resource in the transition to parenthood and found that while it was a significant predictor at 4 weeks postpartum, it was no longer a significant predictor at 18 weeks. However, as her study only examined the first three to four months of parenthood, it has no implications for the role of self esteem for the rest of the first year.

A study by Colletta, Handler and Gregg (1981) also looked at self esteem as a coping resource; however, their sample was of mothers between 14 and 19 years of age. In their study, they asked these mothers about coping responses, emotional stress, social and institutional support, and self esteem and found that those with high self esteem and active support systems were more likely to use active coping strategies; active coping strategies were shown to be the most effective for relieving emotional stress. While this study shows a correlation of self esteem and healthy coping mechanisms, the use of adolescent mothers may create significant differences. In addition, support was also correlated with active coping strategies; therefore, it is possible that self esteem and social support were confounded in some way. For example, having a stronger support network might increase one's self esteem. Nonetheless, their study is a helpful starting point for exploring self esteem and coping in new mothers.

Other studies have explored self esteem as a unique personality variable. Frosch, Mangelsdorf, and McHale (1998) examined self esteem as part of a study looking at whether spousal behavior during a couple's problem solving task predicted behavior during family interactions. More specifically, they looked at whether or not self reported personality variables (self esteem, relationship with family of origin, positive affectivity, and negative affectivity) related to self reported marital adjustment and observed marital and family behavior. The observed behavior was collected from two, five minute video tapes. One was of the parents completing a problem solving task and the other was of the parents in unstructured time with their child. The marital behaviors were coded and reduced into two factors: positive engagement and negative engagement. The family

behaviors were also coded and reduced to two factors: marital harmony during family play and hostility during family play.

Among their many findings, they show some support for the role of self esteem in the transition to parenthood. To begin with, they found that self esteem positively correlated with positive affectivity and marital adjustment and negatively correlated with negative affectivity. In addition, self esteem approached a significant correlation with positive engagement in couple interaction and showed a significant correlation with marital harmony during family play when controlling for age. This same correlation disappears again when partialing out marital adjustment; however, as marital adjustment and self esteem are related it makes sense that this difference might occur and does not imply that self esteem is not important. Frosch's et. al. (1998) study also has a few limitations in its design, the most significant being that the authors make no mention of the fact that their data are matched pairs. They get data from husband and wife pairs, however, it seems as if they analyze their data as if they were independent groups of men and women. This process could have a large effect on their analyses.

Cowen et. al. (1985) showed some support for the role of self esteem as well. While they reported that self esteem was consistent over their 21 months of measurement, and changes in self esteem did not correlate with changes in marital satisfaction, self esteem did correlate with marital adjustment at individual assessment periods. In addition, other studies have shown a relationship between low self esteem and individual and couple differences during the transition to parenthood (e.g. Osofsky, Osofsky, Cupl, Krantz, Litt, & Tobiasen, 1985). So far, the role of self esteem in the transition to parenthood is a little unclear. While a number of studies show only minor connections,

others show large correlations. However, all those that do show a correlation of postpartum adjustment measures and self esteem show a positive one. Thus, it will be important to continue to examine self esteem as a positive personal resource in coping.

Social Support as a Coping Resource. In addition to internal resources, such as self esteem, an individual relies on external resources during times of stress. One of the most important of these external resources is that of social support. Social support makes an individual feel cared for, loved, esteemed, and that he or she is a member of a network. Literature has shown social support to help with a variety of life stressors. In a broad review of the social support literature, Cobb (1976) showed social support to protect against complications in pregnancy, ease psychological reactions in children getting tonsillectomies, lessen the occurrence of heart disease, lower the need for steroid use in asthmatics, help in drinking cessation, buffer against depression after severe events and decrease depression in a senior (greater than 63 years of age) population.

Currently, the dominant theory of how social support works is the buffering hypothesis, in which social support functions as a moderator of stress (Cohen & Wills, 1985). This theory is in contrast to the main effect hypothesis of social support which suggests that those with high social support always have higher well being. According to the buffering hypothesis, social support improves well being, or prevents declines in well being during stressful situations. Social support can buffer stress in one of two ways. First, it can prevent the perception of stress in the first place. When an event occurs and an individual makes his or her primary appraisal, social support may seem like a valuable resource; one may realize they have others to help them with the stressful situation and perceive a lower level of stress. The other possibility is that social support may prevent a

change in well being after the stress has occurred. One may perceive a situation as stressful but the knowledge of a social network available to assist may prevent negative psychological outcomes. It is hard to determine which of these possibilities (or both) is responsible for buffering in any given situation; however, there seems to be mounting evidence that social support does indeed act in a buffering fashion; thus, those with social support do not necessarily have continually higher well being, but they react in a more positive way to stress (Cohen & Wills, 1985, Koeske & Koeske, 1991).

Social support is not only complicated due to uncertainty about how it functions, it is also complicated because it can be defined and measured in many different ways. The simplest way to define and measure social support is the size of one's network, or how many people an individual can get support from. Unfortunately, while this is easy to measure, it seems to be insignificant for predicting outcomes (Cohen & Wills, 1985). Another option is to look at social support by type. Various theorists have outlined a variety of types and categories such as esteem, informational, companionship and instrumental; however, while these types are distinguishable they are not entirely separate (Cohen & Wills, 1985). In addition, some previous research on social support and the transition to parenthood has not found significant prediction value of different types of social support on postpartum outcomes (Cutrona, 1984). The final way to measure social support is to look at who provides the support. For example, one could look at spousal, familial, friendship and community support to see which has the largest effect on well being during stress. This method is employed in the current study.

Social support and the transition to parenthood. The literature on the positive link of social support and positive outcomes during the transition to parenthood has not been

crystal clear, as social support can be conceptualized and studied in vastly different ways. Those who look at type of support (ie. Cutrona, 1984, Bost, Cox, Burchinal & Payne, 2002) or the nature/extent of an individuals support network (ie. Stemp, Turner, & Noh, 1986) seem to show the weakest results. Meanwhile, those that examine the source of support and an individual's perception of or satisfaction with it consistently show that social support correlates with positive outcome (e.g. Crinic, Greenberg, Ragozin, Robinson & Basham, 1983). What remains unclear, however, is which source is most important.

Perhaps the most obvious source of support for new mothers is their husband. In fact, the role of the husband is so important that some studies have examined the connection between husband behaviors or feelings about the relationship and wives marital satisfaction outside of the context of social support (e.g. Shapiro, Gottman & Carrere, 2000). Yet, it is still important to look at husbands within that context and in comparison to other sources of social support, such as family and friends. While Terry (1991a) found both family and spouse support to significantly predict well being at 18 weeks, other studies have shown additional sources of support to be significant.

Teitjen and Bradley (1985) examined whether or not spousal support and "network" support predicted postpartum adjustment as measured by the state-trait anxiety inventory, the dyadic adjustment scale and the depression adjective checklist. For their sample of 23, 23 to 28 year old women, they found that spousal support was associated with good adjustment both during pregnancy and postpartum. However, while women reported turning to their "networks" (social support other than their husbands) for support, the authors did not find a connection between that support and adjustment. These

findings alone suggest that spousal support might be the only significant support variable. However, their data may be confounded as they combined all other sources of support together as “network” support. Had they analyzed the data based on the different types of network members, they may have found different results.

Paykel, Emms and Fletcher (1980) also examined spousal support, however, they contrasted it with support from a “confidant” other than a husband. While this person may be a family member or a friend, it does specify that support comes from another important person in an individual’s life. For their cross-sectional study, they asked 120 postpartum women to fill out a stress checklist in addition to interviewing them about their depressive symptoms and found very interesting results. As many other studies have shown, the authors reported a buffering effect of spousal support. However, they also found a main effect for confidant support, meaning that those who reported confidant support had lower stress and depressive symptoms overall. This finding suggests that support from significant others, aside from one’s husband, may also be important for well being.

Finally, Crinic, et. al. (1983) found significant results with even more sources of support. Originally conceived of as a comparison of mothers of premature and full term infants, the authors found no significant differences between the two groups on social support or stress and thus combined their data. A total of 105 mothers (52 of premature infants and 53 of full term infants) completed an hour and half interview at one month postpartum about their life stress, life satisfaction, satisfaction with parenting and social support from their intimate partner, friends, and community members/neighbors. At four months there was a follow up behavior observation. Based on the data they collected, the

authors found that mothers with high stress had less positive attitudes and behaviors. Also, mothers reporting more support had more positive attitudes and behaviors. In addition, they found that social support moderated the effects of stress on life satisfaction and behavior and that it even affected mothers' interactions with their infants. The authors also looked at the more specific types of support. A regression on life satisfaction showed intimate support, community support, and stress to be significant predictors. Meanwhile, a regression on attitudes towards parenting showed satisfaction with friendship and intimate support to be significant predictors. These results suggest that even more sources of support can play a role in positive outcomes in the transition to parenthood. Thus, it is important for this study to include multiple sources of social support as possible external resources in the coping process of new mothers.

Playfulness

Originally conceived of as a way for children to adapt and deal with anxiety, playfulness has recently been studied as a tool for adults as well. Playfulness has been shown to help with conflict reduction, communication, and problem solving (Baxter, 1992), intimacy creation and marital satisfaction (e.g. Breuss & Pearson, 1993), and has been shown to correlate with self esteem and positive emotions (Aune & Wong, 2002). Given this incredibly positive influence of playfulness, it is possible that it might help ease the transition to parenthood. Not only does playfulness correlate with marital satisfaction overall (Betcher, 1977), but it is also linked with problem solving and communication (Baxter, 1992, Metz & Lutz, 1990, Betcher, 1981), and may even relate to coping (Fredrickson, 1998, 2001).

The idea behind adult dyadic play is that the ability to explore and regress in the presence of another is healthy to interpersonal functioning. According to Betcher (1981), playfulness is one way in which the unconscious comes into awareness, involving a sense of emotional vulnerability. In a healthy relationship, you can “let your hair down” in front of the other without worrying about a negative reaction. Sadler (1966) refers to this allowance of vulnerability as freedom, freedom to express one’s interpretations of the world, to act silly or to let one’s guard down.

According to one study, playful activities generally fall into one of eight categories (Baxter, 1992). As part of a larger study comparing playfulness in same sex friendships to that of opposite-sex romantic relationships, researchers interviewed 102 undergraduate students about their playful activities. Overall, they found that 21% of playful instances were the use of private verbal code, 20% involved role playing, 17% verbal teasing, 15% pro-social physical play, 12% anti-social physical play, 8% games, 2% gossiping and 2% public performances. While these categories were predetermined, and therefore are not necessarily the eight definitive categories of playful activities, they help give a clearer definition of what adult play looks like.

Glenn and Knapp (1987) chose to explore the definition of play in yet another way, looking at what frames a playful interaction. Researchers recruited 18 pairs of students representing a variety of relationships and ages. For the study, these pairs were put in a room with a video camera and were told to talk about anything they wished for a study on communication. In addition, one member of each pair was told to try to act playful each time they saw a visual signal. If that person felt play was inappropriate or did not want to act playful at that moment, they were allowed to ignore the signal. In

examining these interactions, the authors found that play was almost never initiated with the word “play.” The invite could be overt, such as initiating a game of hangman, or subtle, such as taking the partner’s hand, and sometimes involved the use of an object in the room, such as throwing popcorn. The episode seemed to be maintained by laughter and smiles, or by staying in character if the play involved some sort of role playing. Finally, the end was usually indicated by an end to laughter or some sort of natural completion point. Unfortunately, play is a spontaneous activity by nature, and is therefore difficult to study in a laboratory setting. While the playful moments that Glenn and Knapp (1987) observed seemed somewhat natural, they were dictated by a cue and occurred in front of a video camera. However, despite these flaws, their study does help shed some light on the shape of a playful episode. Based on this literature examining what play actually looks like, and the theoretical literature by Betcher (1977, 1981) and Sadler (1966), recent research has begun to look at play in connection to other variables.

Playfulness and marital satisfaction. Play is interpersonal. Even children play in an interpersonal way, making up friends when there are no others around to play with them. Acting playful in front of another involves a great deal of trust and can therefore help create and reinforce intimacy in a relationship. Thus, much of the adult play literature has examined playfulness in the context of married or romantically involved couples (Mount, 2005; Betcher, 1977).

While much of Betcher’s (1977) dissertation was on the theory of play and the development of the playfulness scale, it also involved an experimental component, in which he examined the relationship of playfulness and marital adjustment. The participants were 30 heterosexual couples who had been married one to nine years and

ranged in age from 22 to 34 years. They completed two different play questionnaires specifically developed for this study, the dyadic adjustment scale (Spanier, 1976), a measure of social desirability, a task that involved creating stories about pictures of couples in playful activities, a measure of self actualization, and a dyadic interview.

With these measures, Betcher (1977) found that couples who said that their relationship had a high degree of novelty, spontaneity and mutuality had higher scores on the relationship adjustment scale. In addition, couples who expressed satisfaction with their marriages said that they often engaged in play. Yet, the amount of play did not seem to correlate with marital satisfaction, suggesting that it is quality and not quantity of play that is important. Betcher's (1977) study involves a very small sample size and leaves a lot to be explored regarding the relationship between play and marital satisfaction. However, it did break new ground by introducing this relationship, making a valuable contribution to the literature.

Since Betcher (1977) first experimentally examined play and marital satisfaction, a number of studies have continued to explore the relationship. Bell, Buerkel-Rothfuss and Gore (1987) looked at idioms, a specific type of play. Idiomatic communication in couples involves the use of words/phrases or nonverbal actions that are unique to the couple. They fall under Baxter's (1992) category of "private verbal code," the most frequent form of play. Idioms may be a particularly important form of play for couples as they emphasize the identity of the pair by creating some boundaries between themselves and the outside world. This behavior creates unity and cohesiveness. For their study, 100 heterosexual couples filled out measures of love, liking, commitment and closeness and were then questioned about the idioms used in their relationship. This process resulted in

647 reported idioms that researchers coded into eight previously developed function groups: confrontations, expressions of affection, labels for outsiders, nicknames (for each other), requests, sexual invitations, sexual references/euphemisms, and teasing insults (Hooper, Knapp, & Scott, 1981).

The authors found that loving, commitment and closeness were all correlated with the number of reported idioms that expressed affection, were sexual references or were sexual invitations (Bell et. al., 1987). These results suggest that playfulness is related to more than overall relationship satisfaction, it is also related to other positive relationship variables such as loving, commitment and closeness. In addition, it suggests that specific forms of play may be more related to “romantic” relationship variables than others.

Breuss and Pearson (1993) also looked at idiom use and relationship satisfaction. However, in their study they examined whether or not the relationship was different at different life stages. Participants were 154 couples that fell into four relationship stages: newlyweds, childbearing, mid-life and empty nest/retirement. These couples filled out the DAS (Spanier, 1976) and were then asked to recall idioms they used in their relationship. These idioms were then categorized in the same way as in the previously described study.

The authors found that when all the age groups were combined, higher satisfaction positively correlated with number of recalled idioms. However, when looking at individual age groups, the only significant correlation was for those in mid-life, although this may be due to very small n’s for the first two stages. In addition, the authors found a significant decrease in idioms recalled over age group. Finally, the authors found that for men, expressions of affection and requests seemed to correlate most strongly with relationship satisfaction, while for women the strongest correlations with relationship

satisfaction were nicknames, confrontations and sexual invitations (Breuss & Pearson, 1993). These results again support the general relationship of play and marital satisfaction. Like Bell's et. al. (1987) results, they also suggest that specific forms of play might be more related to marital satisfaction than others. Although, this study finds different types of play to have the strongest relationship with marital satisfaction than those shown in Bell's et. al. study. In addition, these results suggest that playfulness, at least in the form of idiom use, may decrease with age or length of marriage and thus it will be important to look at age effects in future studies of playfulness.

Much more recently, Aune and Wong (2002) also explored the relationship of playfulness and marital satisfaction, creating a model of how the two are linked. According to their hypothesized model, both self esteem and humor orientation are positively associated with play in relationships. Play in turn is positively associated with positive emotion and this experience of positive emotion in a relationship is positively associated with relationship satisfaction. Thus, they theorize that play's effect on relationship satisfaction is via the creation of positive emotions. In order to test this model they gave self report questionnaires to 113 subjects all in romantic relationships ranging from casual daters to married couples. They measured both self esteem and humor orientation with previously validated measures. They used altered versions of previously validated measures of relationship satisfaction (they changed any reference to marriage to "relationship") and play (they dropped items referring to sexual play as not all participants were necessarily engaged in a sexual relationship with their partners). Finally, they used their own method to assess positive emotion in the relationship. Using a path analysis to analyze their data, Aune and Wong found significant positive

coefficients at each step of their model and conclude that it is valid; self esteem and humor orientation lead to play, which leads to experienced positive emotion, which leads to relationship satisfaction.

Aune and Wong (2002) undertake a large project with their study. Attempting to explain the relationship of dyadic play and relationship satisfaction could be extremely complicated and they make it clear and understandable. In addition, the correlations they find are very interesting and seem to validate their model. However, there are a number of problems with the work at both the method and analysis levels. To begin with, they have a very large age range in their subjects (17 to 62) and a large range of relationship statuses. It seems that both of these factors could impact self esteem levels, play levels and even relationship satisfaction. While it is interesting to see data on all of these groups and ages combined, it would also be useful to see data for each relationship type and for smaller age ranges.

There are also some concerns at the analysis level. Their path analysis showed significant correlations, either at the .01 or .05 level, for each of the proposed associations in their model. However, if one looks more closely at their results, one sees that, in fact, every variable is significantly correlated with every other variable in their model. Thus, while self esteem and humor orientation do indeed correlate with play, they also correlated with relationship satisfaction, positive emotion and each other. Additionally, play is significantly correlated with relationship satisfaction directly as well as with positive emotion. This leads one to question whether the variables are related in the path they suggest or if they are a group of positively correlated variables. This result does not negate their findings nor does it make their study suddenly unimportant, but the authors

need to address the fact that they might have found a group of variables that have reciprocal relationships, rather than a path model through which the variables interact. However, despite these flaws, their work is valuable. It continues to support the link of marital satisfaction and playfulness and begins to address why that relationship might exist or what personality factors might affect that relationship.

Playfulness and coping. According to Fredrickson's (1998) "Broaden and Build" hypothesis, experiencing positive emotions (which play can create (Aune & Wong, 2002)) helps to broaden the possible thoughts and actions that come to mind as a response, which in turn can help build one's personal resources. Positive emotions such as joy, interest, contentment, pride and love, can encourage an individual to play, explore, savor, integrate and envision future achievements (Fredrickson, 2001). These new thought-actions can then become part of one's physical, intellectual, social or psychological resources, useful in coping. This cognitive and behavioral flexibility can lead to the use of "broad minded coping" (Fredrickson & Joiner, 2000) such as thinking of new and different ways to deal with a problem or stepping back to take a more objective standpoint. Those who use broad-minded coping tend to be more resilient and experience more positive emotions, thus continuing the upward spiral. Playfulness may both create positive emotions, which helps develop one's coping repertoire, and serve as an additional coping mechanism itself.

Thus far, no study has directly linked playfulness to coping or looked at it as a possible coping mechanism using Fredrickson's (1998) theory. However, a number of studies have linked play to problem solving variables, communication, flexibility and conflict resolution in either a theoretical or experimental way. In his theoretical

development of the play concept, Betcher (1981) explains that children and animals use play to help themselves adapt to their environment and to control anxiety. This description sounds very similar to that of a coping mechanism. He also later explains that adult intimate play can be used as intimacy indexing, communication and conflict reduction. By enabling partner's to express themselves in a "safer" way, play can help a couple share their important thoughts and feelings. If play serves these functions in a marriage then it seems logical that it might help coping with marital stressors.

One piece of literature on coping theory also implies a possible link of playfulness and coping. Vaillant (1977, 1994) describes four types of coping: psychotic, immature, neurotic and mature. Mature leads to the best adjustment. He then proceeds to give humor as an example of mature coping. While Vaillant does not make a direct theoretical connection of healthy coping and playfulness, humor orientation has been connected to play (Aune & Wong, 2002). If humor is a mature way to cope, then perhaps playfulness will lead to adjustment as well.

As part of a study looking at what play episodes are, Baxter (1992) confirms that some play functions as conflict management. In her study, 93 undergraduate students performed a variety of play sorting and categorizing tasks. One of these tasks was to rate the functions of different play episodes. Subjects found that the play enactments could be divided into the four experimenter-determined categories of intimacy indexing, dangerous play/risk management, distancing of self and conflict management. While this study does not definitively show a link of play and conflict management or coping, it does suggest that such a link could be present and that these undergraduate students perceived such a link.

Metz and Lutz (1990) looked at play in a very different way, studying couples in marital and sex therapy. While the purpose of their study was to examine sex therapy's theoretical link of playfulness and sexual functioning, their study provides useful information about the link of play and marital adjustment as well. For this study, 33 "clinical" couples (17 in sex therapy and 16 in marital therapy) and 50 non-clinical couples completed Betcher's Couples Play Questionnaire (CPQ; 1977), the DAS (Spanier, 1976), questions regarding their joint leisure patterns, and a scale of marital conventionalism (Edmonds, 1976). The demographic variables between the two groups were similar; the clinical couples had an average age of 36, had been married for an average of 10 years, and had one child, while the non-clinical couples were 40 years of age on average, had been married 15 years and had 2.3 children.

The authors found that global play was highest in the non-clinical control couples, intermediate in the sex-therapy couples and the lowest in the marital therapy couples. Both groups of clinical couples had significantly different scores from the non-clinical couples on global play. The authors also found that the sex therapy couples scored significantly higher on overall marital adjustment than the marital therapy couples; however, on the affectional expressivity subscale, the order was reversed, with the sex therapy couples scoring lower. The sex therapy couples also scored significantly lower on the flexibility scale and higher on conventionalism. (Metz & Lutz, 1990).

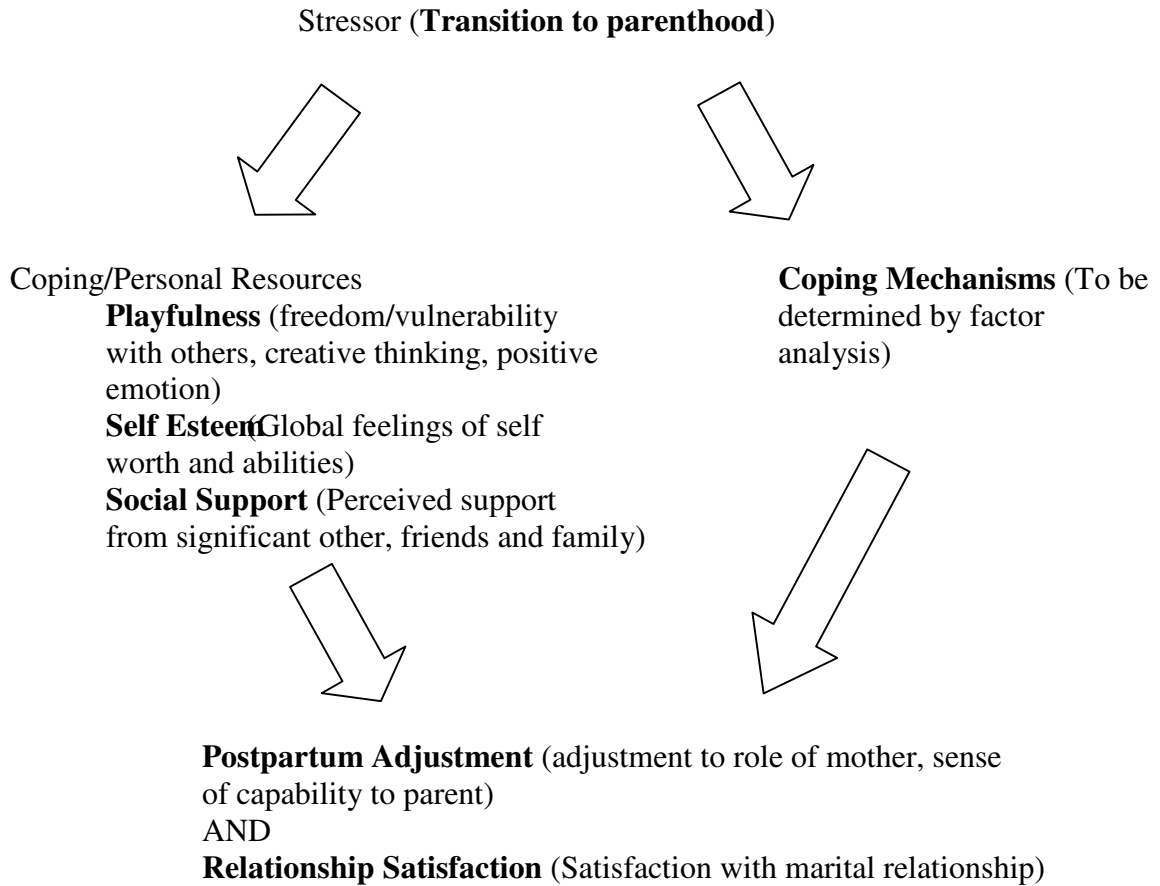
These results have a number of interesting implications for playfulness. To begin with, the fact that the clinical couples were significantly lower on both DAS (Spanier, 1976) scores and CPQ (Betcher, 1977) scores provided additional evidence for the link of playfulness and marital satisfaction. Also interesting are the findings regarding flexibility

and play. The sex therapy couples scored lower on flexibility and higher on conventionalism. These couples seem to be inhibited in some way, or cognitively inflexible. This finding could provide further evidence for the application of Fredrickson's (1998) broaden and build hypothesis; playfulness helps with cognitive flexibility and therefore might help individuals cope with new stressors. While this study does not directly imply a link between playfulness and coping, it does show decreased playfulness in couples seeking counseling for marital and sexual problems, allowing one to make the theoretical leap that playfulness might help couples cope with stressors, whether they are marital, sexual or external to the relationship. Thus, while there is no literature that looks directly at a possible link between coping and playfulness, the theoretical and experimental literature suggests that such a link might exist. This study hopes to begin exploring such a connection.

No study has looked at the connection of playfulness to the transition to parenthood. While there seems to be a relationship between playfulness and marital satisfaction, it is unclear whether this relationship will hold up during this stressful time. Some work has shown that problem solving skills help ease the transition to parenthood (Cox, 1999a). In addition, previous literature has theorized that playfulness relates to relational problem solving variables such as communication and conflict management (Baxter, 1992). Therefore, it seems that playfulness might help ease the transition to parenthood through both its general effects on marital satisfaction and its role in coping and promoting healthy interpersonal functioning. This study examined how playfulness, coping mechanisms, self esteem and social support related to marital satisfaction and postpartum adjustment for women who had recently had a child and were currently

coping with the transition to first time motherhood. For a visual depiction of the proposed relationships, see Figure 1.

Figure 1: Visual Depiction of Proposed Model



Chapter 3

Statement of the Problem

First time parenthood is a major transition in the lives of many adults, one which can lead to positive and negative outcomes in terms of marital satisfaction and individual adjustment. The life of a new parent presents numerous challenges every day that can affect marriage, work, home life, social interactions and an individual's sense of his or her role. New parents must find ways to cope with these stressors. As new mothers may see a large increase in household work and are often the primary caregivers (Huston & Holmes, 2004), this change affects them in unique ways. Therefore, it is important to look at them as a separate group from their husbands. In fact, some studies show that women are more at risk than men for depression and a steeper decline in marital satisfaction after the birth of the baby (Belsky, et. al. 1983, and Cowan et al., 1985). However, despite the obvious fit of the coping literature to this developmental phase for adults, very little literature has used the coping framework. Terry (1991b) began work in this area by examining the role of problem versus emotion focused coping in general well being after the birth of baby. The present study aims to expand on her work and explore the effects of multiple types of coping on both marital and individual outcomes.

The majority of previous research on the transition to parenthood has looked at its effects on marital satisfaction (ie. Belsky, et. al 1983, Cox, et. al. 1999a, Shapiro, et. al., 2000, etc.) Marital satisfaction is a very important outcome variable to examine as some previous studies have shown that people who are more satisfied in their marriages offer higher quality early parenting (ie. Cowan & Cowan, 1988, Cox, et. al 1999b, and Erel & Burman, 1995). Thus, marital satisfaction is important to the well being of both the

mother and the new child. However, marital satisfaction is only a part of the picture; individual adjustment may be important as well. Some studies have chosen to remedy this missing piece of information by looking at the overall well being of new parents (Terry, 1991b). However, general well being is a very global measure that fails to get at adjustment to a particular event. The current study looks specifically at the postpartum functioning of new moms and how the new baby has changed their functioning, by using a specific postpartum adjustment scale (O'Hara, et. al. 1992).

According to Lazarus and Folkman (1984), the coping process consists of appraisal of an event, appraising one's resources and then executing a coping response. Coping mechanisms fall into the category of response. Terry (1991b) found that emotion focused coping negatively correlated with well being postpartum for women and that problem focused coping did not correlate with well being in either direction for women. However, by looking at more specific types of coping mechanisms in a larger number of categories, researchers may be able to gain a better understanding of what types of coping mechanisms are associated with better outcomes for women coping with new parenthood.

In addition to looking at coping mechanisms, it is also important to examine one's resources and their role in the coping process. Personal resources can effect one's appraisal of a situation and act as an additional coping mechanism in some cases. One internal resource that may play a role in the transition to parenthood is self esteem. Previous data on the relation of self esteem and the transition to parenthood has shown mixed results. Cowan at al. (1985) found that self esteem correlated with marital adjustment at particular times but did not correlate with declines in marital satisfaction and Terry (1991b) only found self esteem to predict postpartum well being at 4 weeks,

but not at 18 weeks. However, other researchers have found that self esteem correlates with marital adjustment (Frosch, et. al. 1998, and Osofsky, 1985), and lower stress in new parents (Coletta, et. al., 1981, and Osofsky, 1985). The present study continues to explore the relationship of self esteem with this major transition.

An additional resource that may be important in the transition to parenthood is social support. Some literature has focused on the types of social support such as material or emotional (e.g. Cutrona, 2004, Bost et. al., 2002); however the results thus far have been mixed and somewhat unclear. Other research has examined the source of and satisfaction with the support and found relationships of spousal support (Paykel, et. al. 1980, Stemp et. al., 1986, Tietjen, 1985 etc.), family support (Terry, 1991a), friendship/confidant support (Cronic, Greenberg, Ragozin, Robinson, & Basham 1983, Paykel et. al. 1980) and even community/neighbor support (Cronic, et. al. 1983) with some outcome variable measuring postpartum functioning or adjustment. Thus, it is important to examine support from spouse, family and friends in new mothers.

Finally, because of its role in both relationship satisfaction and coping, playfulness could help ease the transition to parenthood. Playfulness has been shown to relate to relationship satisfaction in general (e.g. Betcher 1977) but it is unclear how this relationship will hold up in a time of transition for the couple. Playfulness has also been shown to relate to conflict management (Metz & Lutz, 1990) and communication (Baxter, 1992). Thus it seems that playfulness is a possible way to deal with problems and cope with new stressors. In addition, the Broaden and Build hypothesis (Fredrickson, 1998) suggests that positive emotions help to increase one's coping resources by increasing one's possible response repertoire. Thus playfulness, an indicator and creator

of positive emotions and cognitive flexibility, may relate to coping with the transition to parenthood. It is possible that playfulness will help ease the transition to parenthood because of its role in both relationship satisfaction and coping.

The purpose of the present study is to explore the roles of coping and playfulness in the transition to parenthood. Specifically, this study looks at how coping mechanisms, self esteem, playfulness, (both internal resources), and social support (an external resource) relate to the marital satisfaction and postpartum adjustment of first time mothers.

Hypotheses

Hypothesis 1a. Higher playfulness scores will correlate with higher marital satisfaction scores.

Hypothesis 1b. Higher playfulness scores will correlate with higher postpartum adjustment scores.

A number of studies on dyadic playfulness have shown higher playfulness scores to correlate with marital satisfaction. (Aune & Wong, 2002 and Betcher, 1977). In addition, some work has shown higher amounts of idiom use, a specific type of playful activity, to correlate with marital satisfaction (Bell, 1987, and Breuss & Pearson 1993). Playfulness has also been found to correlate with intimacy (Metz & Lutz, 1990) and closeness (Baxter 1992). However, one might wonder whether or not this connection will hold up in a time of stress. Research on play seems to suggest it will, as a number of studies show a connection of playfulness to conflict resolution and communication (Betcher, 1981, Metz & Lutz, 1990, and Baxter, 1992). Based on these previous findings

it is expected that there will be a positive correlation of playfulness and marital satisfaction scores.

In addition, as playfulness seems to be related to positive emotion (Aune & Wong, 2002) and coping (Fredrickson, 2001) it is hypothesized that higher playfulness scores will relate to higher postpartum adjustment scores as well (PPAQ; O'hara et. al., 1992).

Hypothesis 2. Higher self esteem scores will correlate with higher playfulness scores.

Aune and Wong (2002) found a correlation between self esteem and playfulness ($r=.26$, sig, $p<.01$) in a sample of 113 romantically involved adults (age 17-62; it is hypothesized that the current study will find the same result.

Hypothesis 3. Higher marital satisfaction scores will correlate with higher postpartum adjustment scores.

Research on relationships have shown being in a relationship to relate to well being (Diener, et. al. 1999). In addition, some work has demonstrated a connection of low satisfaction in relationships with declines in psychological and physical health (Burns Sayers, & Moras, 1994). O'Hara et. al. (1992) also showed this link in his development of the postpartum adjustment questionnaire. When correlated with marital satisfaction as measured by the Dyadic Adjustment Scale (Spanier, 1976), it produced an r of .52; large enough to show a relationship but small enough to conceive of them as separate concepts. Based on these data, it seems that marital satisfaction as measured by Hendrick's (1988) scale will also relate to postpartum adjustment in new mothers.

Research Questions

Question 1. What types of coping do new mothers use to help with stress related to first time motherhood?

Very few studies have looked at the use of coping during the transition to parenthood. Those that do often limit themselves to just looking at emotion and problem focused coping (i.e. Terry, 1991a). However, it seems that the transition to parenthood is a unique situation as many of the related stressors are not amenable to change; new parents cannot always use problem focused coping. This study looks at ways of coping with greater specificity by using a scale with 30 different possible coping mechanisms.

Question 2. How do the different types of coping mechanism relate to marital satisfaction and postpartum adjustment?

In addition to exploring the various categories of coping used by the sample, this study examines whether or not any specific coping types relate to varying marital satisfaction scores. Studies have shown that coping with general or overall stress relates to marital satisfaction (e.g. Bouchard, Sabourin, Lussier, & Wright, 1998) and relationship satisfaction (Ptacek & Dodge, 1995). In addition some work has shown coping with a child's illness to relate to marital satisfaction (Berant, Mikulincer, & Florian, 2003 and Hoekstra-Weebers, Jaspers, Kamps, & Klip, 2008). However, it is unclear whether or not this relationship will remain true with stress related to the transition to parenthood.

Coping has also been shown to relate to overall well being (Lazarus & Folkman, 1986b) and well being postpartum (Terry, 1991b), but it is unclear whether or not it relates to well being as determined by a specific postpartum adjustment measure.

Question 3a. How with participants respond to the open-ended question, “How has becoming a mother affected your relationship with your husband?”

Question 3b. How with participants respond to the open-ended question, “What is the most positive change you have experienced since becoming a mother?”

Question 3c. How with participants respond to the open-ended question, “What is your most negative change you have experienced since becoming a mother?”

These questions explore the changes in participants relationships and roles. As researchers are allowing the participants to use their own voices in response to the questions, there are no predetermined categories or suggested answers.

Question 4. How do natural groupings form with regards to their use of coping mechanisms, self esteem, social support, playfulness, relationship satisfaction and postpartum adjustment?

While some studies have linked one or two of the variables of interest, no literature has linked coping, self esteem, social support, playfulness, relationship satisfaction and postpartum adjustment together, and it is unclear as to how participants will cluster, especially with regard to playfulness. There has not been any research in the area of playfulness and coping. However, studies have theorized and shown a link between play and various types of interpersonal problem solving (Betcher, 1977, Metz & Lutz, 1990, and Baxter, 1992). It seems that if playfulness can help mediate stressors in some situations, it may also help individuals navigate the stressors of relationships.

Question 5. To what extent do coping mechanisms, self esteem, social support and playfulness predict marital satisfaction and postpartum adjustment?

Just as there is a lack of literature on the relationship of all the criterion variables, there is also a lack of literature on how these variables, as a group, will relate to each of the outcome variables (relationship satisfaction and postpartum adjustment). There has been data on how the individual criterion variables relate or predict marital satisfaction and postpartum adjustment; however it is unclear how they will work together. In addition, the literature has been unclear on how ones coping resources and mechanisms interact to predict positive outcomes, thus all of the variables are examined in one regression rather than attempting to examine some sort of hierarchical model. Thus this question seeks to examine the predictive power of the criterion variables of interest all together.

Question 6. How do the three types of social support relate to relationship satisfaction and postpartum adjustment?

Previous research has shown social support to be important during the transition to parenthood (e.g. Terry, 1991a). However, it is unclear if any particular source of support is more important than others. Some previous studies have suggested that spousal and family support (Terry, 1991a), confidant support (Paykel, et. al., 1980), and community support (Crinic, et. al, 1983) are related to lower depression levels and higher well being. However, no previous studies have looked at the three sources of support in comparison. In addition, previous studies have not looked at the sources of support and a specific measure of postpartum adjustment. Question six examines whether or not significant others, friends or family support predict relationship satisfaction and postpartum adjustment.

Chapter 4

Method

Design

This study collected data from first time mothers during the baby's first year of life. The overall research design was a correlational field study. A factor analysis determined groupings of coping mechanisms to determine the various ways in which new mother's cope. In addition, Pearson correlations determined the relationship of individual criterion variables while a cluster analysis explored how they relate as a group. Finally, multiple regression analyses were run on both postpartum adjustment and marital satisfaction to determine how the different predictor variables related to these outcome measures.

Participants

One hundred and ninety seven adult (at least 18 years of age) married women who had become mothers within the past year completed the survey and fit the participation criteria. A minimum of 123 participants were needed, based on an a priori power analysis specifying a small effect size (0.3), an alpha of .05 and power of .95. Women who had had their first child during the past year were eligible as previous research has shown that women are at the greatest risk for decreases in overall well being and marital satisfaction during the first year of parenthood (Cox, et. al, 1999a, Belsky, et. al. 1983, and Cowan et al., 1985). In addition, participants had to be married and currently living with their partners. As playfulness is a measure for those within a dyadic relationship, the requirement that participants be married and living with their partners was important for the validity of this study. This requirement allowed for greater comparison with previous research as well. Of the women who completed the survey, fifteen did not meet these

requirements. Eleven women had children older than one year, one had not yet had her child, one was not married and two did not provide information about their marital status or baby's age. In addition, seven participants skipped a measure and were also not included in the sample.

The participants ranged in age from 21 to 46, with a mean of 30.98 years old (SD=4.43), represented at least eight different ethnicities, and had been married for an average of four years (SD=32.26 months). The overwhelming majority had completed college or graduate school; 46.7% had completed college and an additional 41.1% had completed graduate school. Only 9.6% reported that their highest level of education completed was high school. However, their self reported socioeconomic status represented a range of classes. In addition, 42.4% of the sample were currently working full time, 15.7% were working part time, 3.7% indicated that they were students and 37.1% were not employed. For a more comprehensive picture of the mothers' demographic information, see Table 1.

As for the babies, they had an average age of 6.52 months (SD=3.50); 47.2% were male and 49.7% were female (3% did not answer this question). In addition, 77.2% of the pregnancies were planned and 13.2% of the women had received fertility treatments.

Participants were recruited through online forums (message boards, chatrooms, etc.) such as www.durbanmoms.com, www.babycenter.com and www.craigslist.org, through faculty, staff and graduate student emails at the researcher's university, and through the snowball sampling technique (Monge & Contractor, 1988). (See Appendices A and B)

Table 1. Demographic Characteristics of Participants		
<i>Race/Ethnicity</i>	<i>N</i>	<i>Percentage</i>
African American/Black	5	2.5%
Asian American/Pacific Islander	5	2.5%
Asian Indian/Pakistani	1	0.5%
Hispanic/Latino(a)	8	4.1%
Middle Eastern/Arab	1	0.5%
Native American/Native Alaskan	1	0.5%
White/European American	165	83.8%
Foreign National	5	2.5%
Not Reported	5	2.5%
<i>Highest Level of Education Completed</i>		
<i>Highest Level of Education Completed</i>	<i>N</i>	<i>Percentage</i>
High School	19	9.6%
College	92	46.7%
Graduate School	81	41.1%
<i>Socioeconomic Status</i>		
<i>Socioeconomic Status</i>	<i>N</i>	<i>Percentage</i>
Working class	21	10.7%
Middle class	90	45.7%
Upper-Middle class	73	37.1%
Upper class	7	3.6%
<i>Employment Status (of wife currently)</i>		
<i>Employment Status (of wife currently)</i>	<i>N</i>	<i>Percentage</i>
Not Employed	69	35.0%
Part time	30	15.2%
Full time	81	41.1%
Student	7	3.6%
<i>Employment Status (of wife before baby)</i>		
<i>Employment Status (of wife before baby)</i>	<i>N</i>	<i>Percentage</i>
Not Employed	8	4.1%
Part time	10	5.1%
Full time	156	79.2%
Student	4	2.0%
<i>Employment Status (of husband)</i>		
<i>Employment Status (of husband)</i>	<i>N</i>	<i>Percentage</i>
Not Employed	4	2.0%
Part time	8	4.1%
Full time	168	85.3%
Student	4	2.0%

Response Rate. Because participants were recruited via website message boards and snowball emails, it is not possible to know exactly how many people received or saw the invitation to participate in this study. However, researchers were able to track the number of people that visited the website. A total of 404 visits were made to the website during the time of data collection and 219 individuals completed the survey. Based on these numbers, there is an estimated response rate of 54.21%. However, this number is only an estimate as there are a number of possible reasons for unfinished surveys. For example, while the survey was active, we received reports that the website was not working or shut down when a participant was only part way through the survey. In addition, the nature of the sample is important to consider. Participants were new mothers; thus they may have been caring for the baby while completing the survey. It is possible that some women may have been unable to complete the survey because they had to give attention to their child. Finally, an unknown number of visitors to the site were friends and colleagues of the researchers who were interested in the study, but not necessarily eligible themselves. Thus, the estimated response rate should be considered conservatively low.

Measures

Demographics. An experimenter designed demographic questionnaire asked for information about the participants' age, race, occupation, education and socioeconomic status. It also asked questions regarding the length of their relationship, partner's employment status, age and gender of the baby, whether the child was planned, whether there were infertility treatments, whether the baby was adopted, and whether the mother had hired help with the baby or the house work. Finally, this section included questions

on the mother's health during pregnancy, the baby's health, and the mother's enjoyment of motherhood. (See Appendix J)

Marital Satisfaction. Hendrick's (1988) Dyadic Relationship Assessment Scale (RAS) was used to examine participants' level of marital satisfaction (See Appendix C). This measure consists of seven items on a 5-point Likert-type scale with two reverse-scored items. The result is one global relationship satisfaction score which can range from 7 to 35. A sample item is "In general, how satisfied are you with your relationship?" The scale shows strong reliability with an alpha of .86; however Hendrick (1988) does not report any test-retest reliability. Chronbach's alpha for the current sample was .90. While this scale was developed on undergraduate students who self reported being "in love," it shows a strong correlation ($r=.80$) with the Dyadic Adjustment Scale, a psychometrically sound measure of marital adjustment, making it appropriate for use with the current sample. Hendrick (1988) also finds significant correlations of her scale with the love styles of Eros or passionate love ($r=.60$) and agape or altruistic love ($r=.36$). Finally, she shows correlations with self esteem ($r=.34$), self disclosure ($r=.41$), commitment ($r=.55$) and relationship investment ($r=.45$), all demonstrating construct validity.

Postpartum Adjustment. The Postpartum Adjustment Questionnaire (PPAQ; O'Hara, Hoffman, & Phillips, 1992) measured the functioning of mothers in different social roles with 61 items (See Appendix I). These items can be divided into a number of different subscales either by type of role or by type of performance evaluation. According to the study's author, any subscales may be used independent of the other scales. The four evaluation type subscales are "time for roles," "self evaluation of

performance/relationships,” “others evaluations of performance/relationships,” and “change in role performance/relationships.” For the purposes of this study, the scale of interest was the change in role performance. This subscale is 13 items long, has a range of scores from 16-80, and includes questions such as “How had your performance in cooking/preparing food for your family changed since the birth of your baby?” One item on this scale was not used as it addresses caring for additional children in the house and as this study is of first time mothers, the question was not applicable.

The total scale can also be divided into subscales regarding a range of different roles. These roles include “worker in the home,” “worker outside of the home,” “friendship relationships,” “family relationships,” “new baby,” “other children in the home,” and “spouse”. As no items on the “new baby” subscale overlap with the “change in role performance” scale, it was also included to measure the new mother’s feelings about her performance as a parent. This subscale is 9 items, has a range of 12-45, and a sample item is “How would you evaluate your performance in regard to caring for your baby’s needs?” The two subscales used in this study (new baby and change in role performance) were chosen as they were the most relevant and the overall scale was prohibitively long.

This measure was normed on adult women with an average age of 27.6 years. Test-retest data over a one month time period was moderately stable with an r of .69 and internal consistency was high with a Cronbach’s alpha of .86 for the overall scale. In addition, the authors reported an Chronbach’s alpha of .75 for the new baby scale but did not report alphas for the evaluation-type subscales, including the change in role performance subscale. The current sample had a Chronbach’s alpha of .65 for the “new

baby” and “change in role performance” subscales put together, an alpha of .55 for the “change in role performance” scale alone and an alpha of .72 for the “new baby” subscale alone. Because of the low internal consistency score for the two scales put together and for the change in role performance alone, only the new baby scale was used to measure postpartum adjustment. As this subscale looks at a mother’s comfort and confidence with the role of mother, it can still be a useful measure of postpartum adjustment.

The overall measure shows moderate correlations with the DAS ($r = -.52$) and with the Beck Depression Inventory ($r = .57$) showing these to be separate but related constructs. In addition, these correlations demonstrate construct validity. While there is no reliability or consistency data for the individual subscales, all of the subscales significantly correlated with the overall scale. The authors state that they can be used independently.

A series of open ended questions also explored the transition to parenthood for these mothers and their feelings on their baby and their new role. These open ended questions were included to enrich the data on postpartum adjustment and how these women feel about motherhood and their relationships now that the baby is born. An example question was: “What is the most positive change since becoming a mother?”

Coping. Coping was measured using a shortened version of the Ways of Coping Questionnaire (WOC, Lazarus & Folkman, 1980; See Appendix G). The original version consisted of 68 items that are answered on a yes/no checklist. Each of the items fall into one of two categories, problem-focused coping (27 items) and emotion-focused coping (41 items). The correlation of these two groups is .44, which indicates that while the two are separate constructs, they are related; individuals will logically use both together in

coping. Folkman and Lazarus (1980) report that individuals use both problem and emotion focused coping in 98 percent of all stressful situations. Both scales also show good internal reliability with a Cronbach's alpha of .80 for the problem scale and .81 for the emotion scale. Upon further factor analysis of these items, Folkman and Lazarus (1980, 1986a) find eight subscales: confrontive coping, distancing, self control, seeking social support, accepting responsibility, escape-avoidance, planful problem solving and positive reappraisal.

Many studies have successfully used variations on the longer version of the Ways of Coping (WOC; 1980). This study used a shortened version of the Ways of Coping Questionnaire in an effort to increase parsimony and make the survey easier for the participants. The shortened version was reported in a study of factor congruency with Lazarus and Folkman's original Ways of Coping scale (Scherer, Weibe, Luther and Adams, 1988). It consists of 30 items answered on a 0 (does not apply or not used) to 3 (used a great deal) Likert scale with a range of scores from 0-90. A higher score thus indicates extensive use of that particular coping mechanism. While Scherer et al. (1988) did not explain their rationale for choosing these particular items, they seemed to parallel the main categories found by Lazarus and Folkman across various populations, and are appropriate for the purposes of this study. In their factor analysis, Scherer, et. al. (1988) found that their 30 items loaded into five factors which they named problem focused coping, detachment, seeking social support, wishful thinking and focusing on the positive.

Because coping is viewed as situation-specific, participants were first asked to describe the most stressful event related to the situation of interest (in this case, parenting

since the birth of their first child) in as much detail as they can remember (See Appendix F). A brief summary of the themes participants listed can be seen in the discussion. This approach primes the event in the participants mind so that they can then answer the questionnaire. Sample items include “I tried to seek out sympathy,” “I tried to do something creative,” and “I decided to try to change something.” The shortened Ways of Coping scale is scored by running an exploratory factor analysis on the 30 items. Chronbach’s alpha for the current sample was .86.

Self Esteem. The Rosenberg Self Esteem Scale (Rosenberg, 1965) measured global self esteem (See Appendix E). It is a 10-item measure with a range of scores from 10-40; each item is answered using a four point Likert-type scale (strongly agree to strongly disagree). One total score is obtained by summing these items. Sample items include “I take a positive attitude towards myself.” This scale shows strong internal consistency with a Cronbach’s alphas typically ranging from .77 to .88 and test-retest correlations typically ranging from .82 to .88 for samples of adolescents (Rosenberg, 1965). The current sample had an alpha of .75. While this measure was normed on an adolescent population, studies looking at the transition to parenthood have used it to measure self esteem as well and reported Chronbach’s alphas of .90 for a sample of adult mothers (Frosch, et. al., 1998) and .96 for a sample of adolescent mothers (Colletta, et. al., 1981).

Social Support. This study used the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988) to measure the perceived adequacy of support from family, friends, and significant others (See Appendix H). It has 12 items with a 7-point Likert-type scale (agree-disagree) with a range of scores from 12-84. An example item is

“I can count on my friends when things go wrong”. The original scale was developed on undergraduate students who had an overall mean of 5.80 (SD= 0.86). The scale demonstrates good reliability with an overall Cronbach’s alpha of .88 and individual subscale alpha’s of .91 (significant other), .87 (family) and .85 (friends). For this sample, the overall alpha was .94 with individual subscale alpha’s of .95 (significant other), .93 (family) and .96 (friends). Test-retest reliability after a two to three month interval was also strong. For the overall scale the score was .85, for the significant other subscale it was .72, for the family subscale it was .85, and for the friends subscale it was .75. In addition, validity was established through correlations with both depression and anxiety. The scale showed a significant correlation with the depression subscale of the HSCL ($r=-.25, p< .01$). In addition, the family subscale was significantly correlated with the anxiety subscale of the HSCL ($r=-.18, p< .01$).

Playfulness. The Couples Play Questionnaire II (CPQII; Betcher, 1977) was used to measure playfulness (See Appendix D). This instrument consists of 28 items on a Likert-type scale (1 is “very strong disagreement and 5 is “very strong agreement”). Experimenters can then use a total score ranging from 28 to 140, or an average score, ranging from one to five, with higher scores indicating greater playfulness. Sample items include: “We have our own unique and creative ways of having fun together” and “I enjoy my partner’s sense of humor.” Twelve items are reversed scored, such as “I don’t enjoy acting irrational with my partner.” The scale was originally developed on married adults and will therefore be valid for use with the current study’s population. While there is no test-retest reliability and validity information yet, some studies have shown internal consistency averaging around .85 (Aune & Wong, 2002). The current sample had a

Cronbach's alpha of .83. In addition, playfulness seems to demonstrate construct validity through its significant correlation with humor orientation ($r=.42$, $p<.01$), self esteem ($r=.26$, $p<.01$) and positive emotions ($r=.60$, $p<.01$) (Aune & Wong, 2002).

In addition, a single open-ended question, "In what ways do you and your husband play together?" explored the different types of playful activities these couples engage in.

Procedure

Participants were recruited through online forums as well as through snowballing emails (See Appendices A and B for the email and posting). The email was sent to friends and colleagues of the researchers and academic departments within the education and psychology departments, "snowballing" from there. Internet forums, also known as "message boards" included thebabyvornor.com, babycenter.com, parents.com, parenting.com, parenthood.com, dcurbanmoms.com, craigslist.com, beamoms.com, latinamami.com, southernmomsonline.com, christianitytoday.com, matchingmoms.com, and simplymoms.com. These and other websites were selected in an effort to recruit women from a variety of religions, ethnic, geographic, and socioeconomic backgrounds.

The posting and email explained that there was an online study of first time motherhood, in which they could participate if their first (and only) child is under one year of age and if they are currently married and living with their spouse. This announcement also included the web address of the study (<http://surveymonkey.com/s.asp?u=426831221436>). Once at the website, participants read and agreed to an informed consent. This form assured them that their participation was voluntary and anonymous and that participation should take approximately 15

minutes. In addition, while there was no compensation for participation, they were informed that this research might help researchers better understand the effects of new parenthood on marital relationships and postpartum adjustment. Once agreeing, participants filled out demographic information, the Couples Play Questionnaire II (CPQII; Betcher, 1977) along with an open ended question regarding their playful behaviors, the Rosenberg Self Esteem Scale (Rosenberg, 1965), the Multidimensional Scale of Perceived Social Support (Zimet, 1988), a modified version of the Ways of Coping Scale (WOC; Scherer et al, 1988), the Relationship Satisfaction Scale (Hendrick, 1988), the Postpartum Adjustment Questionnaire (PPAQ; O'Hara, et al. 1992), and open-ended questions on their experience as new mothers. In addition, as another counseling psychology graduate student was also researching first time married mothers, the two collaborated in data collection. The decision to collect data together was made in collaboration between the two students and their advisor. As both students were studying the same population, it made sense to combine the surveys. This approach prevented overuse/recruitment of the population and allowed the researchers to get a larger and more diverse sample. Thus, participants also filled out measures for the other student's study regarding equity and sex role beliefs. The demographic measure and relationship satisfaction (Hendrick, 1988) measure were used in both studies. The measures were not counterbalanced; all participants took them in the same order as internet technology did not allow for multiple versions of the survey. However, in an effort to avoid ordering effects, the current study's measures were alternated with measures for the other student's study. The demographics were last so that they did not effect participants answers and the outcome measures were included in the beginning so that thinking about

the criterion measures did not affect their answers. In addition, to avoid fatigue, shorter scales alternated with longer scales. The entire survey took approximately 30 to 40 minutes to complete. After completing the survey, participants received further information about the study, resources should they have more questions or wish to seek counseling, and were asked to refer other eligible individuals to the website for participation.

Chapter 5

Results

This chapter is divided into preliminary analyses, analysis of hypotheses and research questions, and additional analyses.

Preliminary Analyses

Descriptive data for this sample were presented in the previous chapter (See Table 1). See Table 2 for means, standard deviations, and internal consistency values for each of the measures administered. All measures had adequate internal consistency ($\alpha > .70$) with the exception of the “change in role performance” subscale of postpartum adjustment ($\alpha = .55$) which contributed to the lower than desirable alpha for the two subscales of postpartum adjustment combines ($\alpha = .65$). Because reliability for the one subscale was very low and researchers had measured a second subscale of postpartum adjustment (the “New Baby” subscale), the change in role performance was not used in any further analyses. In addition, bivariate correlations were calculated to examine the relationship between these variables of interest as well as their relationship with the demographic variables such as age, length of relationship, baby’s age and health of the pregnancy and the baby. Because of the large number of correlations that were conducted, a more strict alpha ($p > .01$) was used to control for familywise error. See Figure 2 for a table of these correlations.

Analysis of Hypotheses and Research Questions

Hypothesis 1a. Higher playfulness scores will correlate with higher marital satisfaction scores.

Table 2: Means, Standard Deviations, and Internal Consistencies for Measures Used

<i>Measure</i>	<i>Possible Range</i>	<i>Sample Range</i>	<i>Scoring</i>	<i>Mean</i>	<i>SD</i>	<i>Alpha</i>
Dyadic Relationship Assessment Scale (RAS)	7-35	11-35	Likert range 1-5 (higher=more satisfaction)	28.82	5.03	0.90
Postpartum Adjustment Questionnaire (PPAQ)- New Baby Scale	12-45	12-22	Likert range 2-5 (lower=higher adjustment) ¹	15.27	2.41	0.72
Ways of Coping (WOC)	0-90	30-90	Likert range 0-3; Factor analysis scored into 5 subscales	66.39	14.06	0.86
Rosenberg Self Esteem Scale	10-40	12-31	Likert range 1-4 (higher=lower self esteem) ²	18.25	3.79	0.75
Multidimensional Scale of Perceived Social Support (MSPSS)	12-84	12-84	Likert range 1-7 (higher=less social support) ³	26.23	13.62	0.95
Couples Play Questionnaire II (CPQII)	28-140	51-126	Likert range 1-5 (higher=more playful)	94.20	5.03	0.83
Enjoyment of Motherhood (Single Item)	1-7	3-7	Likert range 1-5 (higher=more enjoyment)	6.38	0.90	N/A

¹ For ease in understanding the data, this scale has been reversed in all analyses so that higher scores mean better postpartum adjustment

² For ease in understanding the data, this scale has been reversed in all analyses so that higher scores mean better self esteem

³ For ease in understanding the data, this scale has been reversed in all analyses so that higher scores mean more perceived social support

This hypothesis was supported by the data. The Pearson's r correlation of RAS scores (Hendrick, 1988) with CPQII Scores (Betcher, 1977) was .59 ($p < .01$), a large effect size.

Hypothesis 1b. Higher playfulness scores will correlate with higher postpartum adjustment scores.

This hypothesis was supported by the data. The Pearson's r correlation of CPQII scores (Betcher, 1976) with overall PPAQ scores (O'Hara, et. al. 1992) was .31 ($p < .01$), a medium effect.

Hypothesis 2. Higher self esteem scores will correlate with higher playfulness scores.

This hypothesis was supported by the data. The Pearson correlation between CPQII scores (Betcher, 1976) and Self Esteem Scale scores (Rosenberg, 1989) was .27 ($p < .01$), a small effect.

Hypothesis 3. Higher marital satisfaction scores will correlate with better postpartum adjustment scores.

This hypothesis was not supported by the data. The Pearson correlation coefficient of RAS scores (Hendrick, 1988) and overall PPAQ scores (O'Hara, et. al. 1992) was .07 ($p > .05$).

Research Question 1. What types of coping do new mothers use to help with stress related to first time motherhood?

To explore the types of coping mechanisms used by new mothers, a maximum likelihood factor analysis was run to identify latent constructs among the 30 coping items. In addition, a direct oblimin rotation was used as it does not force the factors to be orthogonal, and it is theoretically assumed that different types of coping mechanisms will

correlate. The initial factor analysis revealed 8 factors with eigenvalues of 1.0 or greater and accounted for 50.38% of the variance. After examining the scree plot and four and six factor solutions, it was determined that the six factor solution best differentiated between important groups of coping mechanisms. However, this solution contained one factor that contained only two items (“I went over in my mind what I would say or do” and “Tried to see things from another’s point of view”). As a two-item factor would not be conducive to further analysis, the two items were dropped along with four items that had failed to load on the 8, 6, and 4 factor solutions. The factor analysis was run again, yielding a five factor solution and accounted for 45.6% of the variance. Factor loadings for each item are listed in Table 3. For an item to be included in a factor, it had to have a loading of at least 0.4 on that factor and that loading had to be at least 0.1 higher than the next highest loading for that item. Items could not be included on multiple factors. Loadings were determined for each of the four factors (see Table 4) and based on those groupings, names were assigned to each factor.

Factor one (active coping) included items that represented trying to do something concrete about the problem and included items 18, 22, 13, 21, 9, and 11. It had an internal consistency alpha of .83. The second factor (wishful thinking) included items related to daydreaming or fantasizing about the problem going away. It included items 26, 27, 28, 25, 4, and 5 and had a Chronbach’s alpha of .83. Factor three (seeking social support) consisted of items that represented seeking social support and particularly emotional support. Items 19, 8, 15, and 17 loaded on this factor and it had a Chronbach’s alpha of .79. Factor four (denial) involved purposely forgetting or ignoring the problem and had

Table 3: Factor Loadings for Ways of Coping by Item	F1	F2	F3	F4	F5
1. I tried to analyze the problem in order to understand it better.	---	---	---	---	---
2. I felt that time would make a difference and the only thing to do was to wait.	0.23	-0.01	-0.09	0.28	0.32
3. Talked to someone who could do something concrete about the problem.	---	---	---	---	---
4. Hoped a miracle would happen.	0.61	-0.09	-0.15	0.14	0.23
5. Went along with fate; sometimes I just have bad luck.	0.47	-0.11	-0.18	0.30	0.10
6. I went on as if nothing had happened.	0.19	0.09	0.10	0.82	0.20
7. Looked for the silver lining, so to speak, tried to look for the bright side of things.	0.15	-0.36	-0.22	0.22	0.51
8. Accepted sympathy and understanding from someone.	0.16	-0.26	-0.67	0.05	0.15
9. I was inspired to do something creative.	-	-0.60	-0.21	-0.11	0.14
10. Tried to forget the whole thing.	0.22	0.07	-0.06	0.57	0.12
11. Tried to make changes and grow as a person in a good way.	0.04	-0.54	-0.34	0.08	0.38
12. Decided to wait and see what would happen before I did anything.	0.17	-0.05	-0.08	0.52	0.29
13. Tried to come up with a plan of action and follow it.	0.06	-0.70	-0.44	0.01	0.14
14. I tried not to act too hastily or my first hunch.	---	---	---	---	---
15. Tried to let feelings out.	0.16	-0.27	-0.66	0.01	0.22
16. Decided to rediscover what was important in life.	0.05	-0.41	-0.33	0.14	0.28
17. Asked a relative/friend for advice.	0.14	-0.38	-0.64	-0.01	-0.01
18. Decided to try to change something so that things would turn out right.	0.09	-0.75	-0.33	0.03	0.09
19. Talked to someone about how I was feeling.	0.23	-0.32	-0.85	0.06	0.09
20. Drew on my past experiences.	---	---	---	---	---
21. Thought about what could be done and doubled my efforts to make things work.	0.20	-0.68	-0.38	-0.02	0.06
22. Came up with a couple of different solutions to the problem	0.19	-0.72	-0.28	-0.11	-0.10
23. Tried to accept the situation, since nothing could be done.	0.25	0.06	-0.08	0.29	0.57
24. Tried to keep my feelings from interfering with other things too much.	0.29	-0.16	-0.21	0.25	0.59
25. Wished that I could change what had happened or how I felt	0.62	-0.01	-0.23	0.25	0.29
26. I daydreamed or imagined a better time or place than the one I'm in.	0.81	-0.10	-0.19	0.33	0.37
27. Wished that the situation would go away or somehow be over with.	0.77	0.00	-0.22	0.31	0.16
28. Had fantasies or wishes about how things might turn out.	0.74	-0.18	-0.20	0.20	0.44
29. I went over in my	---	---	---	---	---
30. Tried to see things from another person's point of view.	---	---	---	---	---

Table 4: Factor Loadings for Ways of Coping by Factor	F1	F2	F3	F4	F5
Factor One: Active Coping					
Decided to try to change something so that things would turn out right.	-	0.09	-0.33	0.03	0.09
Came up with a couple of different solutions to the problem.	-	0.19	-0.28	-0.11	-0.10
Thought about what could be done and doubled my efforts to make things work.	-	0.06	-0.44	0.01	0.14
Tried to come up with a plan of action and follow it.	-	0.20	-0.38	-0.02	0.06
I was inspired to do something creative.	-	-0.12	-0.21	-0.11	0.14
Tried to make changes and grow as a person in a good way.	-	0.04	-0.34	0.08	0.38
Factor 2: Wishful Thinking					
I daydreamed or imagined a better time or place than the one I'm in.	-	0.81	-0.19	0.33	0.37
Wished that the situation would go away or somehow be over with.	0.00	0.77	-0.22	0.31	0.16
Had fantasies or wishes about how things might turn out.	-	0.74	-0.20	0.20	0.44
Hoped a miracle would happen.	-	0.62	-0.23	0.25	0.29
Wished that I could change what had happened or how I felt.	-	0.61	-0.15	0.14	0.02
Went along with fate; sometimes I just have bad luck.	-	0.47	-0.18	0.30	0.10
Factor 3: Seeking Social Support					
Talked to someone about how I was feeling.	-	0.23	-0.85	0.06	0.09
Accepted sympathy and understanding from someone.	-	0.16	-0.67	0.05	0.15
Tried to let feelings out.	-	0.16	-0.66	0.01	0.22
Asked a relative/friend for advice.	-	0.14	-0.64	-0.01	-0.01
Factor 4: Denial					
I went on as if nothing had happened.	0.09	0.19	0.10	0.82	0.20
Tried to forget the whole thing.	0.07	0.22	-0.06	0.57	0.12
Decided to wait and see what would happen before I did anything.	-	0.17	-0.08	0.52	0.29
Factor 5: Acceptance/Moving On					
Tried to accept the situation, since nothing could be done.	-	0.29	-0.21	0.25	0.59
Tried to keep my feelings from interfering with other things too much.	0.06	0.25	-0.08	0.29	0.57
Looked for the silver lining, so to speak, tried to look for the bright side of things.	-	0.15	-0.22	0.22	0.51

three items: 6, 10, and 12. It had an internal consistency of .66. The fifth factor (acceptance) contained items that referred to moving on and accepting the problem. It consisted of three items, 24, 23 and 7, and had a Chronbach's alpha of .55. This alpha is fairly low and thus further interpretation of this factor should be done cautiously.

Question 2. How do the different types of coping mechanism relate to marital satisfaction and postpartum adjustment?

Relationship satisfaction was significantly negatively correlated with the use of wishful thinking ($r = -.26, <.01$), denial ($r = -.20, <.01$) and positively correlated with the use of acceptance ($r = .16, p <.05$), which are all small effects. A multiple regression was also run to explore the predictive value of these coping mechanisms on relationship satisfaction. The overall regression was significant ($F(5, 184) = 4.54, p <.01$) and accounted for 11.2% of the variance. The only significant predictor above and beyond the others was wishful thinking ($p <.01, \beta = -.25$). The squared semi-partial was .05 indicating a large effect size.

Postpartum adjustment was significantly positively correlated with seeking social support ($r = .16, p <.05$), which is also a small effect. A multiple regression of the five coping mechanisms on postpartum adjustment was also significant ($F(5, 186) = 14.30, p <.05$), but only accounted for 6.8% of the variance. Both wishful thinking and seeking social support account for additional variance above and beyond the other coping mechanisms ($p <.01, \beta = -.22$ and $p <.05, \beta = .20$ respectively). For both coping factors, the squared semi-partial was .03, indicating a medium effect size.

Research Question 3a. How will participants respond to the open ended question, "How has becoming a mother affected your relationship with your husband?"

To address this question, another student researcher in the counseling psychology doctoral program and a faculty advisor read over the qualitative responses to this question and came up with possible categories. They discussed these categories and agreed on four that broadly qualified how the relationship had changed. The two researchers and the studies author then independently coded the data into these four categories. Inter-rater reliability for the three rates was 96.2% with a kappa of .81, $p < .01$.

In addition to the four broad categories, the student researcher and faculty advisor came up with eight content domains. The three raters then placed each participant's response into up to three of these domains. An example of a response that was coded into multiple domains is "There has been less time for our relationship and our own needs as individuals. Communication gets difficult, there is some resentment at times over the amount of sacrifice I have as a mother." This response was coded as both "less time together (to focus on relationship)" and "Mother's resentment about sex roles or husband not helping ." After independently rating each response into the domains, the three discussed the responses and refined the domains. Usually the raters agreed on the main content domain but there was less agreement on the second and third content domains. However, discussion and refinement of the categories led to a consensus for all the domains of each response. Because the domains were clarified during the discussion, it is not possible to get a kappa statistic. However, the central piece of this question is the overall categorization, specifically, whether the relationship had changed for the better, for the worse, had mixed changes, or had not changed, and thus the data was not recoded using the clarified domains.

The percentages of responses in each of the four categories and eight domains are below in Table 5. Because participant responses were often coded into more than one of the eight content domains, the percentages do not sum to 100. The largest percentage of mothers indicated that their relationship with their husband had gotten worse since the birth of the baby (40.6%) while another large portion indicated that the change was mixed, some parts had gotten better while others have gotten worse (25.9%). Only 3.6% of the mothers said the relationship stayed the same, but 18.3% said their relationship had gotten better. The two most common content domains were “less time for the relationship to develop” and “feel more in love with husband (romantic).”

Research Question 3b. How will participants respond to the open ended question, “What is the most positive change you have experienced since becoming a mother?”

Using the same method of categorization described in research question 3b, the three coders determined six content domains. These domains along with the percentage of participant responses are listed in Table 6. The column percentages do not sum to 100 percent as some responses were coded into several content domains. The most common responses were “love for the baby” and “a feeling of new meaning or perspective in life.

Research Question 3c. How will participants respond to the open ended question, “What is the most negative change you have experienced since becoming a mother?”

Using the same method of categorization described in research question 3b, the three coders determined ten content domains. These domains along with the percentage of participant responses are listed in Table 7. The column percentages do not sum to 100 percent as some responses were coded into more than one content domains. The most

Table 5: Categories of Qualitative Data for Research Question 3a: How has your relationship changed since becoming a mother?		
	N	% of Total N
Four Categories to Describe Relationship		
1. Relationship is worse	80	40.6%
2. Relationship is mixed (parts are better, parts are worse)	51	25.9%
3. Relationship is better	36	18.3%
4. Relationship is the same	7	3.6%
Not reported/Not coded	23	
Eight Content Domains of Relationship Change		
1. Less time together (to focus on relationship)	74	37.6%
2. Feel more in love with husband (romantic)	59	29.9%
3. Tired/less energy and time/stressed with daily tasks	37	18.8%
4. Husband's demands/expectations not met (i.e. time, attention, sex)	34	17.2%
5. More bickering/fighting	30	15.2%
6. Formation of new family, survived transition and are stronger	27	13.7%
7. Mother's resentment about sex roles and husband not helping	25	12.7%
8. No Change/same	6	3.0%
Not reported/Not coded	22	11.1%

Table 6: Categories of Qualitative Data for Research Question 3b: What is the most positive change since becoming a mother?		
	N	% of Total N
Six Content Domains of Positive Change		
1. Love for the baby	59	29.9%
2. New perspective/purpose, generalized feeling of confidence in life (not just as mother)	58	29.4%
3. Confidence as a mother, loves the role of caring for child	46	23.3%
4. Deeper emotional self, greater capacity to love in general	33	16.8%
5. Feeling closer to and more in love with husband	19	9.6%
6. Feel closer to own mother and community of parents, valuing all relationships more	16	8.1%
Did not report	25	12.7%

Table 7: Categories of Qualitative Data for Research Question 3c: What is the most negative change since becoming a mother?		
	N	% of Total N
Ten Content Domains of Negative Change		
1. Lack of time for self, recreation and day to day tasks	47	23.9%
2. Tired/Sleep deprived/No energy	37	18.8%
3. Role of mother is harder than expected/feel inadequate as a mother/struggling to juggle roles	32	16.2%
4. Loss of self/identity, psychological loss (i.e. miss professional role, feel isolated/trapped)	29	14.7%
5. Globally more emotional, overwhelmed, depression	23	11.7%
6. Negative body changes	21	10.7%
7. Miss previous intimacy/relationship with husband	17	8.6%
8. Negative reactions to husband (i.e. find him not empathic, lost respect for him)	12	6.1%
9. External stressors (i.e. moving, in-laws, death in family)	10	5.1%
10. Loss of interest in sex/changes in sex life	5	2.5%
Did not report	29	14.7%

common responses were “lack of time for self and day to day tasks” and “feeling tired/sleep deprived.”

Research Question 4. How do natural groupings of new mothers form with regards to their use of coping mechanisms, playfulness, self esteem and social support?

Cluster Analysis. This question was explored using Ward’s (1963) cluster analysis method. As none of the bivariate correlations were too high, it was determined that none of the measures needed to be grouped and thus the cluster analysis on individual measures was conducted.

Ward’s method is commonly used for cluster analysis in the behavioral sciences and is included in the Statistical Package for the Social Sciences. Clusters are constructed hierarchically by connecting participants from n-1 clusters to 1 overarching cluster. This method is pictorially represented by a dendogram. Essentially, the analysis pairs all the subjects based on similarity and then continues to pair them, creating larger and larger

clusters. This process leads to a minimization of within-cluster variability and a maximization of between-cluster variability (Borgen & Barnett, 1987).

While the purpose of this question is to examine how women group on coping mechanisms, social support, play, self esteem, relationship satisfaction and postpartum adjustment, Borgen and Barnett (1987) recommend leaving some variables out of the initial clustering solution to help establish construct validity later. Thus, coping mechanisms were left out as they added five extra variables and the question “How much do you enjoy motherhood?” was left out as it was a single item measure and not one of the main variables in the study. The excluded variables were analyzed across clusters after the clusters were formed.

Once the variables of playfulness, self esteem, social support, relationship satisfaction and postpartum adjustment were chosen for the initial analysis, the variables were then standardized to ensure that variables with larger scales did not account for more variance. The resulting dendrogram indicated possible three, four and five cluster solutions. To clarify the number of clusters more specifically, a graph of squared coefficient changes was created. This graph, similar to a scree plot looks at where the largest changes in error occur. While the single largest change in error was at a three cluster solution, there was still a large change between three and four cluster solution and thus a four cluster solution was chosen. A description of how the variables come together will be presented in individual cluster descriptions following a presentation of the findings on each variable.

MANOVA on cluster factors by cluster. A MANOVA was conducted to determine whether or not the clusters were significantly different from each other. The MANOVA

suggests that the overall cluster model was significant ($F(15, 480)=22.12, p<.01$). However, given that these variables were used to create clusters with maximum difference between them, this result is not surprising. Tukey HSD post-hoc comparisons were then used to compare the specific differences between means. This test is the most conservative and was chosen to control for family-wise error. The results of these comparisons are shown in Table 8. The results for the between cluster comparisons were as follows: relationship satisfaction: $F(3, 166)=58.95, p<.01$; postpartum adjustment $F(3, 166)=43.92, p<.01$; playfulness $F(3, 166)= 43.88, p<.01$; social support $F(3, 166)= 36.60, p<.01$; and self esteem $F(3, 166)=24.78, p<.01$. The Z scores of each cluster on each of these five variables are visually depicted in Figure 3.

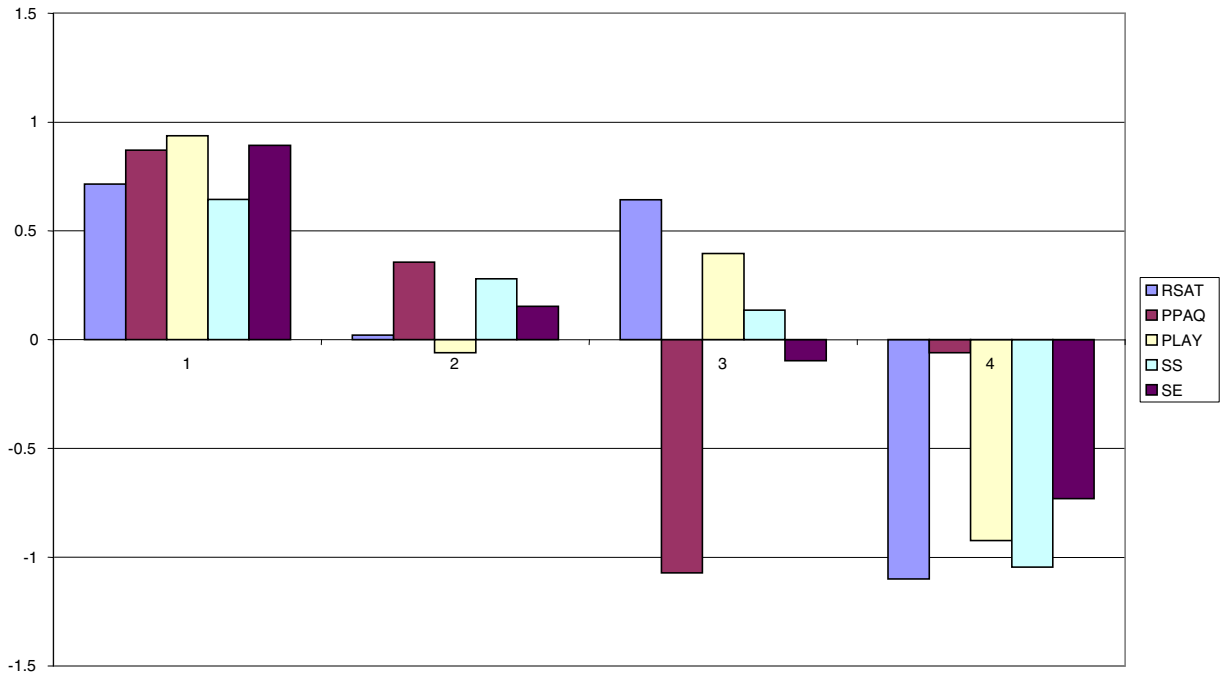
Construct Validity. As Borgen and Barnett (1987) recommended leaving a few variables out of the original cluster analysis solution, the coping mechanisms and “enjoyment of motherhood” were not used. After the clusters were created, a MANOVA determined whether new mothers’ use of the five coping factors differed significantly between clusters. The overall MANOVA was significant ($F(15, 456)= 2.48, p<.01$) as were active coping (factor 1) ($F(3, 157)=2.66, p=.05$), wishful thinking (factor 2) ($F(2,157)=4.72, p<.01$) and denial (factor 4) ($F(3,157)=4.43, p<.01$) individually. Table 9 shows how these three individual coping factors differ between each group using the Tukey HSD follow up test. Differences between clusters on these five factors can be seen in Table 9. See Figure 4 for a visual depiction of these differences.

In addition, an ANOVA was conducted on the question “How much do you enjoy motherhood” to see if participants varied in their answer to this question by cluster. The overall ANOVA was significant ($F(3, 157)=3.88, p=.01$). Follow up Tukey HSD tests

Cluster Number	N	Variable	Mean (Z)	SD (Z)	Tukey HSD
1: Happy Healthy Copers	30	RAS	.72	.29	1>2, 1>4
		PPAQ	.87	.55	1>2, 1>3, 1>4
		CPQII	.93	.68	1>2, 1>3, 1>4
		MSPSS	.64	.52	1>4
		SE	.89	.46	1>2, 1>3, 1>4
2: Muddle Through it Mothers	51	RAS	.02	.65	2<1, 2<3, 2>4
		PPAQ	.36	.60	2<1, 2>3, 2>4
		CPQII	-.06	.65	2<1, 2<3, 2>4
		MSPSS	.28	.59	2>4
		SE	.15	.81	2<1, 2>4
3: Satisfied Wives, Insecure Mothers	31	RAS	.64	.48	3>2, 3>4
		PPAQ	-1.07	.71	3<1, 3<2, 3<4
		CPQII	.40	.56	3<1, 3>2, 3>4
		MSPSS	.14	.52	3>4
		SE	.10	.92	3<1, 3>4
4: Unsatisfied, Insufficient Copers	46	RAS	-1.10	1.01	4<1, 4<2, 4<3
		PPAQ	-.39	1.01	4<1, 4<2, 4>3
		CPQII	-.92	.96	4<1, 4<2, 4<3
		MSPSS	-1.05	1.20	4<1, 4<2, 4<3
		SE	.73	.98	4<1, 4<2, 4<3

Key to abbreviations: RAS= Relationship Satisfaction, PPAQ= Postpartum Adjustment, CPQII= Playfulness, MSPSS= Social Support, SE= Self Esteem

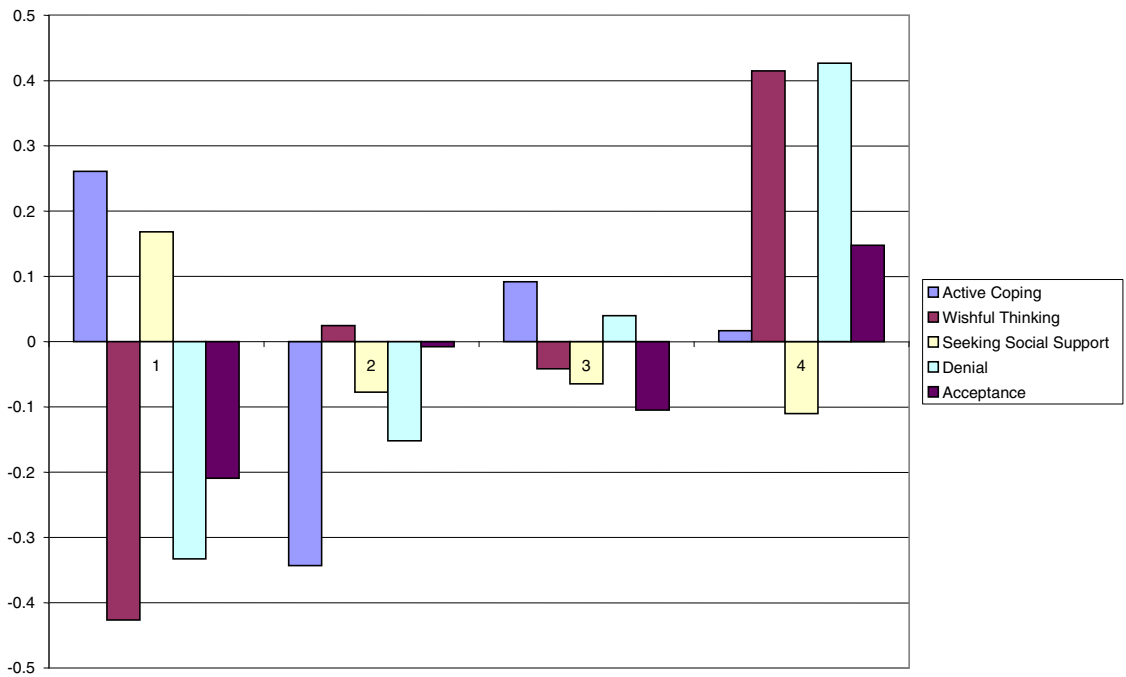
Figure 3: 4 Cluster Solution



Key to abbreviations: RAS= Relationship Satisfaction, PPAQ= Postpartum Adjustment, CPQII= Playfulness, MSPSS= Social Support, SE= Self Esteem

Cluster #	Active Coping	Wishful Thinking	Seeking Social Support	Denial	Acceptance
1	1>2	4>1	No Sig. Differences	4>1	No Sig. Differences
2	No Sig. Differences	No Sig. Differences	No Sig. Differences	4>2	No Sig. Differences
3	No Sig. Differences	No Sig. Differences	No Sig. Differences	No Sig. Differences	No Sig. Differences
4	No Sig. Differences	4>1	No Sig. Differences	4>1, 4>2	No Sig. Differences

Figure 4: Coping Factors by Cluster



were also run on this variable to see the specific differences between groups. Clusters one and two were significantly different from group four ($p < .05$ for both).

Finally, a series of chi square tests for independence looked at how the clusters varied in some of their responses to the open ended questions. These data are summarized in Table 10. There was a significant difference in relationship category between clusters ($\chi^2 (9, N=148)=22.38, p < .01$). Mothers in cluster one were more likely to say that the relationship was better or mixed while participants in groups two and four were more likely to say the relationship had gotten worse. In addition, researchers looked at some of the most relevant content domains to see if they varied by cluster. The domain “feel more in love with husband (romantic)” was also significantly related to cluster ($\chi^2 (3,$

	Cluster 1 N=30	Cluster 2 N=51	Cluster 3 N=31	Cluster 4 N=47
Relationship Category				
1. Relationship is worse	23.3%	50.0%	30.0%	69.0%
2. Relationship is mixed	40.0%	23.9%	40.0%	21.4%
3. Relationship is better	33.3%	21.7%	20.0%	7.1%
4. Relationship is the same	3.3%	4.3%	10.0%	2.4%
Feel closer and more in love with husband				
Response included this theme	60.0%	24.4%	43.3%	17.1%
Response did not include this theme	40.0%	75.6%	56.7%	82.9%

N=146)=17.37, $p < .01$), with mothers in group one more likely to mention this domain.

There were no significant difference in referring to feeling more confident as a mom (χ^2 (3, N=142)=1.46, $p = .35$), gaining new perspective/meaning (χ^2 (3, N=143)=3.71, $p = .15$), feeling inadequate or overwhelmed in the role of mother (χ^2 (3, N=138)=2.31, $p = .26$) or feeling globally overwhelmed/depressed (χ^2 (3, N=138)=1.84, $p = .30$).

Demographic variables by cluster. To determine whether any demographic variables differed by cluster, a number of analyses were run. First, one way ANOVA's were run on the continuous demographic variables including mother's age, baby's age, years married, mother's health during pregnancy and baby's health. There were no significant differences found for mother's age ($F(3, 158)=1.12$, $p = .341$), baby's age ($F(3, 158)=1.81$, $p = .149$), years married ($F(3, 133)=1.59$, $p = .196$) and baby's health ($F(3, 159)=.13$, $p = .942$). The ANOVA on mother's health during pregnancy was significant ($F(3, 157)=2.80$, $p < .05$) with a Tukey HSD follow up indicating mother's in group four reported significantly less healthy pregnancies than those in group one ($p < .05$).

To examine differences between the categorical demographic variables, a series of chi squared tests for independence were run. There were no significant differences between clusters found for mother's employment before the baby (χ^2 (18, N=161)=12.94, $p=.39$), mother's current employment (χ^2 (12, N=160)=8.72, $p=.36$), husband's employment (χ^2 (12, N=161)=13.06, $p=.18$), whether or not the baby was adopted (χ^2 (3, N=158)=2.45, $p=.24$), whether the couple used infertility treatments (χ^2 (3, N=159)=1.31, $p=.36$), the baby's gender (χ^2 (3, N=160)=6.098, $p=.054$), and socioeconomic status (χ^2 (9, N=160)=14.15, $p=.06$).

There were significant differences for whether or not the parents had hired help with the house (χ^2 (3, N=159)=7.95, $p<.05$) and hired help with the baby (χ^2 (3, N=158)=8.39, $p<.05$). While the large majority of women did not have hired help with the house or the baby, group two was less likely than the other three groups to have help with the house and group three was more likely than the other three groups to have help with the baby. There were also significant differences in whether or not the baby was planned (χ^2 (3, N=158)=11.57, $p<.01$). Groups one and three reported fewer than 10% unplanned pregnancies while groups two and four both reported around 30% unplanned pregnancies. Finally, there were significant differences in highest level of education achieved (χ^2 (6, N=161)=13.34, $p<.05$). Group two reported a larger percentage of mothers with their high school degree and their college degree than the other three groups, and fewer people with a graduate degree.

Cluster Descriptions. The aim of this section is to highlight the differences between clusters based on the above analyses. Because of the number of variables used to form the clusters, some demographic variables, such as hired help with the baby, hired

help in the house, or whether or not the pregnancy was planned, which did not apply to the majority of women in any group, were not included below to help lend more clarity to the descriptions. For a visual depiction of the differences on variables used to create the clusters, see figure 3 (previous). In order to characterize each cluster, the ± 0.5 Z-score (half a standard deviation) was set as the criteria for being above or below average on these variables. For a visual depiction of the differences on the coping factors, see figure 4. As the coping scores did not vary as much as the variables used to create the clusters, a cut off of ± 0.25 (one quarter a standard deviation) was set as the criteria for examining differences. This cut off showed differences in line with those determined by the Tukey HSD tests.

The first cluster (N=30) was characterized by participants who were doing well compared to the other clusters in all domains. Mothers in this group reported above average relationship satisfaction and postpartum adjustment as well as reporting above average playfulness, self esteem and social support when compared to the sample as a whole. In addition, women in this group reported more enjoyment of motherhood than those in group four but not different from groups two or three. When compared with other clusters on the qualitative data, these women were significantly more likely to say that their relationship had gotten better since the birth of their child (33%) or at least that the changes were mixed with some things getting worse and some getting better (40%). They were more likely to refer to feeling more in love with their husbands than the other groups as well. They were also above average in their use of active coping, or trying to do something about the problem, and below average in their use of wishful thinking and denial coping. These mothers reported few problems transitioning to motherhood and

showed strong resources and coping skills, thus they will be called the “happy, healthy copers”

The second cluster (N=51) was the largest and was essentially characterized by not scoring above or below average on any of the five variables used to create the clusters in comparison to the sample as a whole. Mothers in this cluster did report more enjoyment of motherhood than did group four but were not significantly different from groups one or three. However, they were also more likely to report that their relationship had changed for the worse when compared with the other clusters. They were below average in their use of active coping compared to the women in the other clusters but only average on the other four types of coping. They were also less likely than the other groups to have a graduate school education. This group seems to represent women who are surviving but not thriving during this tough transition. They are relatively satisfied with their relationships, feel relatively adjusted to motherhood, have average resources compared to the sample as a whole and do report enjoying motherhood. Thus, their group is the “muddle through it mothers”

The third cluster (N=31) had a unique pattern of variables. They score above the whole sample average on relationship satisfaction and close to above average for the whole sample on playfulness. They score only average on social support and self esteem when compared to the sample as a whole. However, they score very below average on postpartum adjustment (more than one standard deviation). Their reported enjoyment of motherhood did not significantly differ from any other group. In addition, they were not as likely as groups two and four to say their relationship has changed for the worse. Finally, their use of the five coping mechanisms was average. As these mothers seemed

to continue to enjoy their relationships with their husbands but did not feel confident in the role of moms, they are called the “satisfied wives, insecure mothers.”

Finally, cluster four (N=47) was the second largest group of mothers and reported a number of scores below the sample average. This group was very below average on relationship satisfaction and social support (more than one standard deviation) and below average on playfulness and self esteem in comparison to the total sample. However, postpartum adjustment scores were average although tukey tests indicated that the score was significantly lower than groups one and two. This group also expressed significantly lower enjoyment of motherhood than groups one and two. When compared with the other groups, group four was significantly more likely to say the relationship with their husband has changed for the worse; 69% of mother's in the group fell into that category. These moms were also less likely to refer to feeling more in love with their husbands than mothers in the other clusters. In addition, the women in this group scored above average on the use of wishful thinking and denial coping, indicating that they dealt with problems related to the new baby by wishing them away or denying their existence. This group seems to consist of women who are very unsatisfied with their relationship, do not report having good resources such as social support, self esteem or playfulness, and are not coping well to the transition to parenthood. Therefore this group is called the “unsatisfied, insufficient copers.”

Research Question 5. To what extent do coping mechanisms, self esteem, social support and playfulness predict marital satisfaction and postpartum adjustment?

A simultaneous regression analysis of playfulness, social support, self esteem and the five coping mechanisms (active coping, wishful thinking, social support seeking,

denial and acceptance) on relationship satisfaction yielded significant results ($F(8, 158)=14.087$, $p<.01$) and predicted 42.9% of the variance. Both playfulness ($p<.01$, $\beta=.47$) and social support ($p<.01$, $\beta=.22$) emerged as significant individual predictors. Playfulness had a large effect, with a squared semi-partial of .17 and social support had a small effect with a squared semi-partial of .02.

A regression of playfulness, social support, self esteem and the five coping factors on postpartum adjustment was also significant ($F(8, 160)=2.982$) and accounted for 13.6% of the variance. None of the variables emerged as significant individual predictors above the group. However, seeking social support approached significance ($p=.055$, $\beta=.17$)

Research Question 6. How do the three types of social support relate to relationship satisfaction and postpartum adjustment?

A multiple regression of significant other, family and friend support on relationship satisfaction was significant overall ($F(3, 187)=18.11$, $p<.01$) and significant other support emerged as a significant individual predictor ($p<.01$, $\beta=.60$). A regression of the three types of social support on postpartum adjustment was also significant overall ($F(3, 189)=25.88$, $p<.01$) and friend support emerged as the only significant predictor ($p<.01$, $\beta=.27$).

Additional Analyses.

In order to explore whether or not the type of relationship change since the birth of the baby (better, same, mixed or worse) was related to playfulness as relationship satisfaction was, a one way ANOVA was run. This ANOVA was significant ($F(4,179)=6.98$, $p<.01$). Post hoc comparisons using the Tukey HSD test indicated that

playfulness was significantly higher in those who indicated that their relationship was better than in those who indicated their relationship was worse.

Bivariate Correlations. The correlation matrix reveals a number of interesting significant correlations (see Figure 2), some of which are presented here and discussed in the following chapter. Correlations are presented in the following order: relationship satisfaction, postpartum adjustment and enjoyment of motherhood and coping style. Because of the large number of correlations, a more strict alpha ($p > .01$) was used to control for family wise error in these analyses.

Relationship satisfaction positively correlated with the three resource variables: playfulness ($r = .59, p < .01$), self esteem ($r = .33, p < .01$), and social support ($r = .44, p < .01$), meaning that women who were satisfied with their relationships were also playful, perceived high amounts of social support and had high self esteem. There was a large effect for playfulness and medium effects for self esteem and social support. Relationship satisfaction also correlated with SES ($r = .23, p < .01$) and whether or not the baby was planned ($r = -.28, p < .01$), both small effects

Postpartum adjustment positively correlated with playfulness ($r = .23, p < .01$), social support ($r = .38, p < .01$) and enjoyment of motherhood ($r = .30, p < .01$). There was a medium effect for social support and enjoyment of motherhood and a small effect for playfulness. Meanwhile, enjoyment of motherhood only significantly correlated with self esteem ($r = .22, p < .01$) (a small effect) and not with play or social support. Enjoyment of motherhood was also significantly negatively related to age ($r = -.23, p < .01$) and level of education ($r = -.23, p < .01$) while relationship satisfaction and postpartum adjustment were not. Both correlations indicated a small effect size.

It is also of interest to look at how use of the five coping factors correlate with playfulness, self esteem and social support. (The correlations with relationship satisfaction and postpartum adjustment are addressed in research question 2.) Playfulness was negatively correlated with wishful thinking ($r=-.23$, $p<.01$) and positively correlated with seeking social support ($r=.24$, $p<.01$) meaning that individuals scoring higher on playfulness were more likely to seek social support to cope and less likely to daydream about the problem solving itself. Self esteem negatively correlated with wishful thinking ($r=-.23$, $p<.01$) and denial ($r=-.29$, $p<.01$) meaning the higher the mothers' reported self esteem, the less likely they were to report using those coping mechanisms. Finally, social support was negatively correlated with wishful thinking ($r=-.28$, $p<.01$), denial ($r=-.20$, $p<.01$) and acceptance ($r=-.20$, $p<.01$) meaning that the more perceived social support the individual reported, the less likely they were to report using these coping mechanisms. All of the correlations between resource and coping variables were small effects.

Finally, playfulness, social support and self esteem were all related: play and social support had a medium effect ($r=-.32$, $p<.01$), play and self esteem had a small effect ($r=.27$, $p<.01$) and self esteem and social support had a medium effect ($r=.38$, $p<.01$). An individual high in playfulness will also tend to perceive more social support and to report higher self esteem.

An overall summary and discussion of these results are presented at the end of the discussion.

Figure 2: Bivariate Correlations

	RSAT	PPAQ	CPQII	MSPSS	SE	Enjoy	Act.	Wish	SSS	Den	Acc	Age	Marry	Educ	SES	B.age	B.heal	M.heal	Infer	plan
RSAT	1.00																			
PPAQ	0.08	1.00																		
CPQII	0.59	0.24	1.00																	
MSPSS	0.44	0.19	0.32	1.00																
SE	0.33	<u>0.18</u>	0.24	0.32	1.00															
Enjoy	<u>0.15</u>	0.30	<u>0.17</u>	0.14	0.22	1.00														
Act.	0.06	0.06	<u>0.15</u>	-0.13	-0.01	-0.07	1.00													
Wish	-0.26	-0.13	-0.23	-0.28	-0.23	<u>-0.16</u>	<u>0.15</u>	1.00												
SSS	0.08	<u>0.16</u>	0.24	0.00	-0.03	-0.06	0.43	0.24	1.00											
Den	-0.20	-0.04	-0.13	-0.20	-0.29	<u>-0.18</u>	-0.21	0.27	-0.02	1.00										
Acc	<u>-0.16</u>	-0.02	-0.03	-0.20	-0.10	-0.05	<u>0.18</u>	0.27	<u>0.18</u>	0.26	1.00									
Age	0.14	-0.08	0.06	0.09	0.12	-0.23	0.11	0.38	0.02	-0.12	-0.04	1.00								
Marry	-0.10	0.03	<u>-0.17</u>	<u>-0.17</u>	-0.06	<u>-0.18</u>	0.10	<u>0.16</u>	0.00	0.02	-0.02	0.40	1.00							
Educ	0.09	-0.10	0.05	0.12	0.06	-0.23	0.04	0.11	0.13	-0.04	0.00	0.44	0.03	1.00						
SES	0.23	-0.06	0.12	0.21	0.28	-0.11	0.12	-0.10	0.00	-0.09	-0.09	0.30	0.04	0.31	1.00					
B.age	<u>-0.17</u>	-0.04	-0.12	-0.18	-0.08	-0.07	0.13	0.03	-0.09	-0.03	0.01	0.08	0.02	0.03	0.09	1.00				
B.heal	0.06	0.01	0.08	-0.05	0.01	0.08	0.01	-0.10	0.00	0.01	0.01	0.04	0.13	0.09	0.07	-0.01	1.00			
M.heal	0.07	0.20	0.14	<u>0.18</u>	<u>0.17</u>	0.13	-0.01	-0.10	0.06	0.02	0.03	-0.01	0.07	-0.05	0.03	-0.07	0.31	1.00		
Infer.	0.02	-0.06	-0.07	0.01	-0.07	-0.02	-0.06	-0.05	-0.12	-0.06	-0.06	<u>-0.16</u>	-0.29	0.06	0.02	0.03	0.00	0.04	1.00	
Plan.	-0.28	0.04	-0.10	-0.09	-0.01	0.13	-0.13	0.05	-0.10	0.07	0.01	-0.40	<u>-0.20</u>	-0.26	-0.23	0.05	-0.03	-0.04	<u>0.19</u>	1.00
Emp.	-0.04	-0.14	-0.05	0.08	0.04	-0.02	-0.01	0.05	0.10	-0.03	0.07	0.08	-0.08	<u>0.18</u>	0.13	0.13	-0.02	-0.02	-0.03	-0.02

Key to Abbreviations in Figure 2: RSAT (Relationship Satisfaction); PPAQ (Postpartum Adjustment, lower scores are better adjustment); CPQII (Couples Play Questionnaire); MSPSS (Multidimensional Scale of Perceived Social Support, lower scores are more perceived support); SE (Self Esteem, lower scores are higher self esteem); Enjoy (Enjoyment of Motherhood); Act. (Active Coping); Wish (Wishful Thinking Coping); SSS (Seeking Social Support Coping); Den (Denial Coping); Acc (Acceptance/Resignation Coping); Age (Mother's Current Age); Marry (Length of Time Married); Educ (Highest Level of Education Achieved); SES (Socioeconomic Status); B.age (Baby's Age); B.health (Baby's Health, higher scores are more healthy); M.health (Mother's Health During Pregnancy, higher scores are more healthy); Infer (Infertility Treatments, 1 is yes, 1 is no); Plan (Was the baby planned, 1 is yes, 2 is no); Emp (Mother's current employment). Correlations significant at $p < .01$ are shown in **bold**. Correlations significant at $p < .05$ are underlined.

Chapter 6

Discussion

This chapter reviews the descriptive information about the sample and compares it to U.S. Census information to determine generalizability. A discussion of the findings for each hypothesis and research question is presented. This discussion is followed by a discussion of the post-hoc analyses, including the correlational results. Finally, the limitations of this study are addressed and implications for future research and practice are discussed.

Sample

This sample was predominantly White/European American (83.8%) and highly educated (46.7% had a college degree and an additional 41.1% had a graduate degree). In addition, the mothers in this sample had been married for an average of 4 years before the birth of their child and had an average age of 30.98. The average age of their children was 6.52 months. Meanwhile, the U.S. census bureau reports that between 1996 and 1999 64.43% of first time mothers were white, 25.46% of first time mothers had completed a bachelor's degree or higher and the average age for a woman's first birth was 24.9. In addition, while 100% of the women in this sample were married, single mothers make up 40% of first time mothers in the United States. However, this difference was expected given the criteria for participation of this study.

Based on these basic criteria, this sample is not representative of the typical first time mother in the United States in several key ways. This bias is probably due to the nature of recruitment and who is interested and willing to participate in research. The snowball sampling method uses friends and colleagues of the researcher to create an

extended network of possible participants. However, as the researchers were enrolled in graduate school, many of their colleagues were as well. By posting the survey on multiple websites, often targeted at particular minority groups, researchers hoped to increase the racial and educational diversity. However, it is clear from the results that the sample still does not match the U.S. population. These mothers were more likely to be caucasian, older and more highly educated than the average first time mother in the U.S. The limits of these data collection methods are discussed further in the limitations section.

The socioeconomic status and employment data for this sample are more similar to that of the general population. The majority of participants rated themselves as middle class (45.7%) while 37.1% rated themselves as upper-middle class, 10.7% as working class and 3.6% as upper class. Thus, the full spectrum of socioeconomic status was represented. As for employment, 79.2% of women reported working full time before the birth of their baby while 5.1% reported working part time, 5.6% reported student status and only 4.1% reported being unemployed. At the time of sampling (between one and twelve months after the baby's birth), 41.1% of women were working full time, 15.2% of women were working part time, 3.6% of women were students and 35% were not employed/homemakers. Since the average age of the babies in this sample was 6 months, one can make the statement that 56.3% of mothers had returned to work (full or part time) at 6 months postpartum. These data are much closer to the U.S. Census Bureau data, which reported that between 1996 and 1999, 66.38% of women worked during pregnancy and 57.9% had returned to work six months after giving birth to their first child. Thus, regarding income and employment, the sample more clearly reflects characteristics of the U.S. population.

This sample has a number of strengths in addition to the close match of employment and socioeconomic status to U.S. census bureau data. To begin with, the study is more diverse than previous work looking at the transition to motherhood with regards to age of mother, age of child and geographic location of the mothers. The sample also provided rich variability on the key variables (e.g. relationship satisfaction, postpartum adjustment, etc.) for this study. The variability on the outcome measures is a particular strong point considering the current study was not testing a clinical population.

Hypotheses and Research Questions.

Hypothesis 1a. Higher playfulness scores will correlate with higher marital satisfaction scores.

Hypothesis 1b. Higher playfulness scores will correlate with higher postpartum adjustment scores.

As predicted, participants who scored higher on playfulness also scored higher on marital satisfaction. This finding is not surprising given the number of previous studies that had shown positive correlations between playfulness and relationship satisfaction (Aune & Wong, 2002 and Betcher, 1977), intimacy (Metz & Lutz, 1990) and closeness (Baxter, 1992). This study supports the theory that couples who are more playful are also more satisfied with their relationships; dyadic playfulness is a sign of feeling comfortable and close to ones partner, and thus logically relates to satisfaction with that relationship. Mother's in this sample mentioned a number of types of play including: physical play (i.e. tickling, dancing, wrestling), games (i.e. board games, athletics), doing novel activities together (e.g. trying new foods), teasing, conversational play (telling stories or jokes), sexual play and participating in shared leisure activities. It is important to note

that this correlation of playfulness and relationship satisfaction was found during the transition to parenthood, a possibly stressful situation for a couple.

This study also indicated a significant correlation between playfulness and postpartum adjustment. While previous studies had shown correlations of playfulness to positive emotions such as joy, happiness and positive surprise (Aune & Wong, 2002), and there had been a theorized link of playfulness with healthy coping (Fredrickson, 2001), it was not entirely clear how these two variables would relate. According to the Broaden and Build hypothesis (Fredrickson, 2001), mother's who are more playful (and have that as a coping resource) should also have more varied coping mechanisms. In this study playfulness was positively correlated with both active coping and social support seeking (associated with positive outcome variables) and negatively correlated with wishful thinking (associated with negative outcome variables). Thus, mothers who reported being more playful, also reported using coping mechanisms that seemed to be associated with positive outcomes, including postpartum adjustment. Playfulness leads to a more spontaneous, fun and adventurous look at life; women higher in playfulness may be more able to "roll with the punches" and feel more confident in the unpredictable role of first time mother. In addition, as playfulness relates to positive emotions (Aune & Wong, 2002), women who are more playful may have a greater buffer against stressors.

Hypothesis 2. Higher self esteem scores will correlate with higher playfulness scores.

As predicted, participants who were higher in playfulness also reported higher self esteem. This finding replicated Aune and Wong's (2002) finding in a study of romantically involved adults. Sadler (1966) defined play as a sense of freedom to be oneself and to express that self to the world; it reflects a sense of comfort and allowance

of vulnerability. Thus, it seems logical that the two constructs would be linked. Those who feel free to play and express themselves are also probably confident and have a feeling of self worth.

Hypothesis 3. Higher marital satisfaction scores will correlate with higher postpartum adjustment scores.

Contrary to the hypothesis, marital satisfaction was not significantly related to postpartum adjustment. This finding is in conflict with O'Hara et. al.'s (1992) results in which their postpartum adjustment scale correlated significantly with another measure of relationship satisfaction (DAS; Spanier, 1976). One possible difference is variance between the two relationship assessment scales. However, this seems unlikely given that the DAS (Spanier, 1976) and the RAS (Hendrick, 1988) are strongly correlated ($r=.80$, Hendrick, 1988). Another more likely explanation is the use of one particular subscale from the postpartum adjustment measure rather than a total score for the overall scale. For the purposes of this study, only the "New Baby" subscale was used. This subscale addresses a mother's confidence and comfort with her new baby. Specifically, it asks how much time she spends meeting her baby's physical needs, in physical contact with her baby and engaging in playful activities with her baby. It also asks how satisfactory she would rate this amount of time and how others might rate it. Meanwhile, the overall measure also asks a number of questions about the mother's relationship with her husband. This specific subscale might actually shed more direct light on how a woman is adjusting to new motherhood than the overall scale. The subscale looks at the particular role of new mom rather than the multiple roles that she may be juggling. Thus, results

from this study seem to show that a woman can feel adjusted to her role of new mom, regardless of how she feels about her relationship with her husband.

This explanation for why relationship satisfaction and postpartum adjustment did not significantly correlate can find some support in the qualitative data. Some women responded that the biggest change in their relationship was feeling more in love with their husband while their biggest positive change was a sense of confidence or comfort in the role of being a mom. For example, one participant commented “I appreciate my husband more” and “I think I feel more confident in myself. I am doing a better job as a mother than I thought I would.” Meanwhile, some other mothers reported stress in their relationships and in their role of mother. One participant responded that her biggest relationship change was “lack of sex life/not as much affection” and a negative change of “Much more stress in my life. More fear for her future.” Still others responded in a mixed way, either reporting positive relationship changes with a stress in the role of mother or visa versa. For example, one participant said “Our relationship is more tenuous--I'm more likely to feel vulnerable, unappreciated, or neglected than before” and “I feel privileged to care for this little creature, and awed at what we have created. I love to watch her grow, learn, respond to her environment. I feel like I'm making a difference in her life, and in my own.”

In addition, this finding may be explained by cognitive dissonance, a psychological phenomenon in which individuals tend to try to see consistency between their cognitions and behavior. A large amount of research shows that marital satisfaction declines after the birth of the baby (e.g. Belsky et. al., 1983; Cowan, et. al., 1985). If a woman has a baby and feels a lack of satisfaction with her marital relationship, she may

feel pulled to report being satisfied with her role as a new mother to reduce cognitive dissonance. This way her behavior (“I decided to have a baby”) is consistent with her cognitions (“I am doing well in my postpartum adjustment”).

Research Question 1. What types of coping do new mothers use to help with stress related to first time motherhood?

New mothers were asked to briefly describe the most stressful event related to being a new mother (in the past month) and then to report how they coped with that situation. They reported using a variety of coping mechanisms that fell into five categories: active coping, wishful thinking, seeking social support, denial, and acceptance. The most frequently used categories of coping mechanisms were active coping ($M= 2.3$, $SD=.76$) and wishful thinking ($M=2.1$, $SD=.81$) followed by seeking social support ($M=1.8$, $SD=.55$), acceptance ($M=1.1$, $SD= .39$), and denial ($M=.80$, $SD=.32$). The stressful events that these women described seemed to touch on a number of themes including daily demands of the baby (crying, eating, changing, etc.), feeling tired, financial concerns, larger decisions about work and child care, managing multiple roles and maintaining a relationship with the husband. With these varied stressful events, it seems logical that a variety of coping strategies might be effective.

The items in factor one, active coping, are typically viewed as healthy ways of dealing with a problem. They involved making a change, doing something creative and trying to grow from the challenge. Using this type of active coping meant trying to make things work and being an active participant in learning how to deal with this transition. The third factor (seeking social support) also involved actively trying to deal with the problem. This factor had items that focused on seeking out another person for emotional

support. Perceived social support has been shown to help protect against stress from both physical (Cobb, 1976) and psychological sources (Cohen & Wills, 1985). Thus, it seems logical that seeking social support would be a healthy way to cope. Given that having a baby puts many additional demands on a new mother, it seems healthy for her to seek out help from others. Seeking social support may also serve as a way of normalizing her experience. As first time moms do not have their own experiences to look back on, they may seek out other mothers to ensure that the struggles they encounter are normal. Both of these strategies are typically described in the literature as healthy, but they are not always available or optimal options. For example, if there is nothing to be done about a problem, active coping may only cause frustration. Similarly, if one does not have an accessible social support network or a network that is perceived as being potentially helpful and supportive with the specific ways in which the new mother wants support, seeking social support will not help. Both factors two (wishful thinking) and four (denial) represent less active ways of coping. The wishful thinking factor contained items that represented daydreaming, fantasizing and wishing. Women who used these coping mechanisms did not actively face the problem but simply escaped in their heads. Meanwhile, items in the denial factor involved forgetting or ignoring the problem. Women who used these coping mechanisms tried to act as if the problem did not exist. Both of these coping factors can be adaptive in certain situations. For example, in a trauma situation when one does not have the psychological resources to deal with a fearful event or crisis, it may be helpful to deny its existence. However, neither of these ways of coping are viewed as healthy in the long term. Wishing away or denying a problem still leaves the problem to be dealt with. When applied to the transition to

parenthood, these coping mechanisms may be temporarily helpful when the mother is feeling overwhelmed. However, it might be better in the long term to learn other ways of dealing with problems related to mothering.

The last factor was named acceptance. The items in this factor referred to trying to accept the situation, look on the bright side and move on. It seems that women who reported using this type of coping mechanism might accept a problem, whether changeable or not, and try to push through them. However, internal consistency for this item was low and thus it is difficult to interpret the three items in this factor as one coherent coping mechanism.

Finally, it is interesting to note that four items did not load on any of the factor solutions (eigen values over one and four, five and six forced factor solutions) and two items did not load in the final five factor analysis. Different explanations account for each item. Three items, “Tried to analyze the problem in order to understand it better,” “Talked to someone who could do something concrete about the problem” and “I tried not to act too hastily or on my first hunch” loaded on the active coping and the seeking social support factors. These items involved active coping in that women stepped back from the problem and tried to figure it out. However, the fact that they also loaded heavily on seeking social support suggests that this analysis/stepping back may have involved talking with others. As these women were encountering the stressors of motherhood for the first time, they may have sought advice/support from someone else as they analyzed the problem. The newness of these problems also explains why “Drew on my past experiences” may not have loaded on any factor. New mothers may not have previous related experiences on which they could draw.

The qualitative data may shed some light on why “decided to rediscover what was important in life” did not load. Many new mothers talked about how the most positive change since the birth of their baby was a generalized feeling of a new found perspective. Thus, they may have just been discovering it rather than expressing a need to “rediscover” it.

Thus it seems that new mothers are using a somewhat unique mix of coping mechanisms. Like for many other samples, the most commonly used coping mechanism was active coping. However, in many of the stressful events of new motherhood, active coping may not be an available option, thus they must come up with some other way to cope. The resolution seemed to involve a mixture of seeking out support from someone else, daydreaming, or trying to accept the problem. The transition to motherhood may involve an element of accepting that new motherhood is full of daily stressors, which new mothers might feel they just need to let pass; wishful thinking and emotional venting may be ways of doing so.

Question 2. How do the different types of coping mechanism relate to marital satisfaction and postpartum adjustment?

Once the described five factors of coping were created, their relationship with the dependent variables, relationship satisfaction and postpartum adjustment were examined. Participants who scored higher on relationship satisfaction reported using less wishful thinking, less denial and more acceptance. Thus, it seems that women who are more satisfied in their relationships are also less likely to use coping mechanisms that relate to escaping or simply accepting a problem. In addition, a regression of all five coping factors on relationship satisfaction was significant, with wishful thinking as a significant

individual predictor above and beyond the others. Thus, it seems that women who report more fantasy and daydreaming to cope with their problems related to being a new mother also report lower satisfaction with their marital relationship. It is possible that women who rely on denial and wishful thinking as coping mechanisms may not openly discuss their stressors or concerns, thus harming the relationship they have with their spouse. This behavior may be especially important with the birth of a new child which places strain on both the mother and the relationship.

When postpartum adjustment was correlated with the five coping factors, only one bivariate correlation was significant; women who reported better postpartum adjustment also reported using “seeking social support” coping more often. It is possible that women who sought help from others, whether that help was emotional support or tangible support, were better able to handle the stress of new parenthood. The literature on social support supports this hypothesis: perceived social support has been shown to buffer both physical (Cobb, 1976) and emotional (Cohen & Wills, 1985) stress. A regression with all five types of coping was also significant; seeking social support and wishful thinking emerged as significant predictors above and beyond the others. Thus, like relationship satisfaction, women who rely less on wishing their problem away also report better postpartum adjustment. These findings are also consistent with Terry’s (1991b) findings that coping type relates to general well being after the transition to parenthood.

Research Question 3a. How will participants respond to the open ended question, “How has becoming a mother affected your relationship with your husband?”

The three parts of research question 3 (a, b, and c) were based on responses to open ended questions. This open format allows participants to elaborate on their experiences and does not limit them to predetermined questions as the other measures used in this study. Adding qualitative data provides richness to the quantitative data and helps researchers see a more comprehensive picture.

The first part of this research question looked more closely at the changes in a marital relationship with the transition to parenthood. Participants provided diverse and thoughtful answers to this question, which were then coded into categories of type of change and content domains. The largest percentage of women (40.6%) indicated that their relationship had gotten worse. For example, one mother remarked, “There’s no time to connect, relax, share fun things. The added responsibility makes for little else. We have very little support. I miss him as my friend and lover.” This is consistent with previous findings indicating a decrease in marital satisfaction after the birth of a couple’s first child (e.g. Belsky, et. al. 1983). One of the most common content domains that represented changes for the worse was the lack of time together for their marital relationship to develop. A full 38% of participants mentioned this concern. One mother remarked “The main thing is that we are so much more busy, it is that much harder to find time to really pay attention to each other.” Other common negative themes mentioned were being tired, more stressed and having less energy (19%), complaints of not being able to give as much to the husband or him feeling left out (17%) and more bickering and fighting (15%).

An additional 25.9% indicated that their relationship changes were mixed and that some things had gotten better while some had gotten worse. One mother commented

“The time we spend alone together is limited because one of us is usually interacting with the baby. We are both tired, which can cause us to have less patience with each other. Our sex life has decreased. However, our bond has strengthened in many ways. There is no one I trust more with our baby. We argue less and for shorter amounts of time...we’re both quicker to forgive. We both do as much as we can to give our baby the best life possible”

An additional 18.3% of the women reported that their relationship had actually gotten better. For example, one mother said, “I think we’re closer. We’re a team now. Our daughter has solidified that.” In addition, 3.5% indicated no change. This is consistent with findings by Feldman (1971) and Shapiro (2000), which demonstrated a range of reactions to the transition to parenthood. The most common reported positive change (and the second most common content domain overall) was feeling more in love with one’s husband; 30% of women mentioned this theme. One mother remarked “I love how he interacts with the baby. He’s a great father and that makes me love him even more.” Thus, it seems that women are experiencing a range of relationship changes during the transition to parenthood. While the experience is entirely negative for some, it is mixed or positive for others.

Research Question 3b. How will participants respond to the open ended question, “What is the most positive change you have experienced since becoming a mother?”

The most common positive change that participants mentioned was the amount of love they felt for the baby; 30% mentioned this theme. One mother commented “I never knew I could love another person so much as I love my baby.” Almost as many people (29%) mentioned that their most positive change was a generalized sense of

confidence in life and a new gained perspective. One mother remarked “I realize that all the things I thought were so important before aren’t so important anymore. I have learned to keep things in perspective.” Another group of women (23.3%) referred to a specific sense of confidence around being a mom: “I feel proud of myself, for getting through the whole birth experience and for being a really good mom to my baby. Before I had a hard time with self esteem, but now I feel needed and I feel like I am accomplishing something really important.” Thus, it seems that new moms are reporting a number of positive changes with their new role as moms. For many, it seems to involve new feelings of love for their baby or themselves.

Research Question 3c. How will participants respond to the open ended question, “What is the most negative change you have experienced since becoming a mother?”

A lack of time for self and day-to-day tasks was the most common theme in this category; 24% of mothers mentioned this idea. One mother said her most negative change was “losing complete freedom to choose to do with my time.” Another mother remarked, “It is harder and it takes longer to do everything. Simple things, like going to the post office, are now a hassle because of needing to get the baby in and out of the car. It’s not easy to run errands anymore. Grocery shopping is near impossible with a baby in tow!” Another common theme echoed one of the biggest relationship changes: feeling tired and sleep deprived. Almost 19% mentioned this content idea. One mother claimed “Sleep deprivation!! By far!!!” The third most common theme (16%) was feeling inadequate or overwhelmed as a mother. “I feel a tremendous burden of responsibility, seeing how much my baby needs me now and will continue to do so for many years. It seems impossible to fulfill that,” remarked one new mother. New mothers report changes such

as a lack of time, sleep and confidence when asked to elaborate on the negative changes that come with new motherhood. It is interesting to note that the lack of time and sleep themes also came up in the relationship change; perhaps much of the time that women had to dedicate to themselves or their husbands is now dedicated to the baby and new mothers feel deprived.

Research Question 4. How do natural groupings of new mothers form with regards to their use of coping mechanisms, playfulness, self esteem and social support?

This research question examined how all of the variables of interest, including playfulness, social support, self esteem, use of the five coping mechanisms, enjoyment of motherhood, postpartum adjustment and relationship satisfaction, worked together to form groups of the women during the transition to motherhood. Because there were few previous data looking at all of these variables together, a cluster analysis was used. This allows researchers to explore how variables relate in new ways without necessarily looking at prediction. In addition, a cluster analysis allows researchers to get a sense of the whole picture without just looking at correlations; it provides a more holistic picture of how women may look during the transition to parenthood. It also permits multiple groups or relationships to emerge. Thus, there is a more diverse and open picture of the transition to parenthood based on these variables. However, it also simplifies the data to some extent as it goes through a process of matching cases based on similarity. Thus, while each cluster is given a name for ease of understanding that cluster and how that cluster compares with the others, it does not completely reflect the experience of each individual mother in that group.

The cluster analysis for this question resulted in four groups of approximately equal size that can be compared to each other and the average score on each variable for the sample as a whole. The groups seem to represent four patterns of adjustment based on the groups' resources and use of coping mechanisms. Some of the patterns seem easier to interpret than others; however each grouping, or cluster, has its own implications for future research and for clinical interventions with new mothers.

The first cluster was called the "happy, healthy copers" (N=30). This group is characterized by scoring positively in all measures. They scored significantly higher than all other groups on playfulness, self esteem and postpartum adjustment. They scored similarly to Cluster 3 ("satisfied wives, insecure mothers") in terms of relationship satisfaction but scored significantly higher than groups 2 ("muddle through it mothers") and 4 ("unsatisfied, insufficient copers") and higher than group 4 in social support. Thus women in this cluster perceived that they have strong resources (play, self esteem and social support) as well as positive outcome variables (relationship satisfaction and postpartum adjustment) during this transition to motherhood.

This group's satisfaction with their marriages and the new baby are also reflected in the qualitative data. This group was significantly more likely than the other clusters to say that their marriages had actually changed for the better since the baby was born. An overwhelming majority of women in this group (73.3%) said that their relationship had changed for the better or at least had a mixed change (some parts better, some parts worse). They were also significantly more likely to mention feeling more in love with and closer to their husbands as the biggest change since the birth of the baby. While in

other groups the percent mentioning this change was as low as 17.1% (group 4), 60% of this group mentioned stronger love and appreciation for their husbands.

In addition, this group of women reported coping patterns that are traditionally seen as healthy and related to positive outcomes (e.g. Folkman & Lazarus, 1980 and Terry, 1991b). They were more likely than group 2 (middle through it mothers”) to use active coping, meaning they were more likely to seek out a solution or way to handle the stressors that the new baby presented. In addition, they were less likely than group 4 (“unsatisfied, insufficient copers”) to engage in wishful thinking or denial; they did not try to dream away their stressors, nor did they try to pretend that those stressors did not exist or would fix themselves. There were no significant differences between this group and group 3 in their use of particular coping mechanisms. This healthy coping pattern fits with Fredrickson’s (2002) Broaden and Build hypothesis. According to her hypothesis, positive emotions (which are correlated with playfulness (Aune & Wong, 2002)) can help broaden ones possible coping responses; positive emotions lead to play, exploration and creativity, which can then become part of an individuals psychological resources or an additional coping mechanism. This broad minded coping can then lead to higher resiliency, which leads to positive emotion in an upward spiral. The women in group one reported higher levels of playfulness compared to the sample as a whole. The average playfulness score for group one was almost a full standard deviation higher than the average for the total sample. Thus, it seems possible that the women in this group had playfulness as a coping resource as well as a wider variety of coping mechanisms because of their ability to think freely and creatively. Playfulness encourages cognitive flexibility, thus allowing them to better cope with the new stressors they faced. This rationale could

be particularly true during this particular stressful situation; since mothers may not have encountered many of the stressors that come with a new baby, thus they could only rely on new and innovative solutions.

Finally, group 1 along with group 3 (“satisfied wives, insecure mothers”), were more likely than the other groups to have planned pregnancies. Groups 1 and 3 are also equal in their reported relationship satisfaction, but show extreme differences in postpartum adjustment. Perhaps if a baby is planned, a couple is more prepared and accepting of any changes in the marital relationship.

Group 3 will be discussed next because they are the most similar to group 1. The third group (N= 32) is called the “satisfied wives, insecure mothers.” This group has a very unique pattern of adjustment as they showed a large amount of variability across the five major measures. They reported relationship satisfaction above the sample average, which was not significantly different from group 1 (“happy healthy copers”). Their relationship satisfaction scores were higher than group 2 (“muddle through it mothers”), who had an average score. They were also higher than group 2 on playfulness, although they were lower than group 1. Meanwhile, they had average scores on self esteem and social support when compared to the other clusters, which were not significantly different from group 2’s scores. However, they reported much lower postpartum adjustment scores as compared to the women in the other clusters. They were lower than all other groups and their average score was more than one standard deviation lower than the overall average. Thus, while these women seem to have good relationships with their husbands during this transition, they report that they are not adjusting well to the role of mother. However, it is also interesting to note that their scores on enjoying motherhood (a single

item measure) are not significantly different than any other group. It is important, then, to consider the specific items on the postpartum adjustment scale. The questions ask how much time the mother spends on a particular type of task with the baby (i.e. playing, caring for, being affectionate with), how satisfied she is with that amount of time and how she feels other's might judge her performance. Perhaps these women are enjoying the role of mom but are very insecure in their performance. They are worried that they are not spending enough time (or spending too much time) on a particular task or they are worried that others might disapprove. While they are satisfied wives, they report being less confident in their mothering and do not feel adjusted to that new role.

Once again, the qualitative data reflected these trends. While the percentage of mother's in this group that said their relationship had changed for the better or saw mixed changes (60%) was not quite as high as the percentage of group 1 (73%), this code (of positive or mixed change) still represented a majority of the group. Women in this group reported higher than average satisfaction with their relationships as compared with the sample as a whole. In addition, 43.3% of women in this group mentioned feeling more in love with their husbands as the largest change in their relationship. While this percentage is not the majority, it is still a much larger percentage than groups 2 (24%) and 4 (17%). It is interesting to note that despite the extremely low postpartum scores for this group, there were no significant differences between groups in mentioning a feeling of confidence in the role of mother. However, as that was one possible answer to the question, "what has been the most positive change since the birth of the baby," it allowed for spontaneous and varied answers. Thus, women may have come up with such a wide

range of answers to that question, that there were not significant differences between groups on the themes.

Group 3 did not score significantly differently from any of the other groups on the use of coping mechanisms. It seems that the other three groups were at opposite ends of the spectrum for some of the coping mechanisms (active coping, denial and wishful thinking). However, the women in group 3 did not make use of any particular coping mechanism, nor did they avoid any particular coping mechanism. To some extent, the broaden and build hypothesis (Fredrickson, 2002) can explain this coping pattern as well. While not as playful as the women in group 1, the women in this group were above average in their playfulness when compared to the sample as a whole, and did score significantly higher than groups 2 and 4. It is possible that these women have some cognitive flexibility and were able to think of varied coping mechanisms, as did the women in group 1. Their creative and explorative thinking (used in play) may have helped them come up with possible active solutions to the stressors of new motherhood. However, they were also average in their use of wishful thinking and denial. Thus, in some situations these women resorted to dreaming away their problems or pretending that they do not exist. These coping mechanisms, while easy, may not be the most adaptive. It is possible that when the women used these coping mechanisms, the stressful situation did not get resolved to their liking and they felt it made them bad mothers, contributing to their low postpartum adjustment. However, there is no clear evidence to support this hypothesis.

There are also two interesting significant demographic differences to note for this cluster. First, like group 1, the women in this group were significantly more likely to have

planned babies. Second, the women in this group were significantly more likely than any of the other three groups to have hired help with the baby. This finding is of particular interest in light of the low postpartum adjustment for the women in group 3. It is possible that the women in group three felt insecure about their ability to be good mothers and were therefore more likely to hire someone to help them with the baby. It is also possible that the women in group three were more likely to hire help for an external reason (working, other time demands, etc.) and then felt guilty or felt like poor mothers because they have hired help. However, only 30% responded yes to this question; thus, one cannot be certain of any explanations for this difference.

Group 2 (N=51) was named the “muddle through it mothers” as their pattern of adjustment was average across the board. These mothers reported lower playfulness and relationship scores than both groups 1 (“happy healthy copers”) and 3 (“satisfied wives, insecure mothers”). Their self esteem scores were lower than group one and not significantly different from group 3, while their social support scores were not significantly different from either group. In addition, their postpartum adjustment scores were lower than group 1, but higher than group 3. All five of these scores were higher than group four’s (“unsatisfied, insufficient copers”), as was their score on “enjoyment of motherhood.” When one looks at the pattern of Z scores, one sees this group does not show any score above or below one-half a standard deviation. They did, however, report significantly more enjoyment of motherhood than group 4. These women do not seem to revel in the role of mother, but they are not unhappy either. They are simply doing “okay.”

This sense of being in the middle on all variables is also reflected in the qualitative data. While in group 1 (“happy healthy copers”) only 23% of the women mentioned their relationship with their husband changing for the worse, half (50%) the women in this group had responses coded into that category. Meanwhile, the other half of this group (46%) saw their relationship as having improved or reported mixed changes. Thus, this group seemed to be equally divided on how parenthood affects their marriages. In addition, a significantly smaller percentage of women in this group (and group 4) mentioned feeling more in love with their husbands. Only 24.4% of women mentioned this content domain.

Their coping patterns were a mix of adaptive and less adaptive strategies. They used significantly less active coping than group 1 and had the lowest score on this coping mechanism of all four groups. However, they used significantly less denial than group 4. They were not significantly different from other groups in their use of wishful thinking, seeking social support or acceptance. Thus, it seems that in stressful situations, these women do not ignore the problem, but they do not engage in active coping either. It seems that these women acknowledge that a problem exists, but they do not seek to change it. Instead they might simply wish to change it, accept it or seek emotional support from someone else.. This quality really seems to relate to the idea of “muddling through” and trying to survive the transition rather than thrive in it or grow from it.

Interestingly, this group also had the most significant demographic differences. Along with group 4 (“unsatisfied, insufficient copers”), they were more likely to have an unplanned baby; 30% of the babies in this group were unplanned as opposed to 10% and 6% in groups 1 and 3 respectively. This finding is important as women who did not plan

their children may feel more burdened by them or may have been less psychologically prepared for the transition.

In addition, the women in group 2 were less likely than any of the other groups to have hired help around the house. Only 8% of these women had help, while 20-30% of the women in other groups had help. Finally, they were significantly more likely to have a high school education as their highest educational level than the other groups and less likely to have a graduate school education. This finding may relate to the non-significant trend for women in group 2 to be of lower socioeconomic status as well. These demographic differences also may contribute to the idea of surviving the transition. These women were less likely to have hired help and less likely to have an advanced degree. Thus they may have fewer tangible resources for dealing with the challenges of a new baby, which may contribute to their limited use of active coping. If they do not perceive that they can do anything about the problem, they cannot use active coping. These women are relatively happy in the role of mother, feel relatively adjusted to that new role and are relatively satisfied with their relationships, although they are not very satisfied. They are pushing through the transition in the best way they can.

Finally, group 4 was called the “unsatisfied, insufficient copers,” and was characterized by below average scores on all of the variables. They scored below average and significantly below the other three groups on playfulness and self esteem. In addition, they scored below the other three groups on social support and relationship satisfaction. Their average scores on these two dimensions were more than a full standard deviation below the average for the larger sample. Finally, they scored below average on postpartum adjustment. However, while their scores on postpartum adjustment were

significantly lower than groups 1 and 2, they were significantly higher than group 3. Thus, the women in this group were not fairing well with the transition to parenthood. When compared with other clusters, they were not perceiving much social support, they reported lower self esteem and they reported less playfulness. In addition, they did not report satisfaction with their relationships or feeling secure in their role as mother when compared with the overall sample average.

The qualitative data again reflect these findings. The women in this group were much more likely to say that their relationship had changed for the worse; 69% of the women's responses in this group fell into that category. Meanwhile, only 29% said that it had gotten better or that the change was mixed. This pattern is the opposite of that seen in the group one mothers ("happy healthy copers"). They were also significantly less likely to mention that the largest change was feeling more in love with their husbands. They had the lowest percentage of women mentioning this theme (17%). Thus, these women do not report being happy in their relationships and see their new role of mother has having changed their marriages for the worse when compared with the other three clusters.

The coping patterns of group 4 also seem to reflect this pattern of maladjustment and unhappiness. The mothers in this group reported using significantly more wishful thinking and denial coping than group 1. In addition, they use significantly less active coping. Thus, when faced with a stressful situation related to motherhood, these women seem to try to dream it away or deny its existence altogether. When that stressful situation is a crying baby, wishing it away may only prove to be more frustrating as the child gets more upset when its needs go unmet. Part of the process of adjusting to parenthood is being flexible, learning from each new situation and building an arsenal of ways to deal

with the child and the stressors it presents. These women may not have the cognitive flexibility to come up with solutions and instead seek to escape the situation. This escape coping does not solve the problem while it is occurring, nor does it help the mother learn how to work with the same solution in the future. These mothers report not coping well with the transition to parenthood and the personal and relationship stressors it can cause.

As for demographic variables with this group, there are two that are interesting to note. The first is that like group 2, the women in this group were more likely than groups 1 and 3 to report unplanned pregnancies. However, although the percentage of unplanned pregnancies in this group was high (30%) it still represents a minority of the women and thus it is difficult to make any hypothesis about this significant finding. In addition, the women in this group had significantly lower levels of “health during pregnancy” than the other groups. However, it is important to note that their average for this question was 5.46 on a 7 point scale, and thus their score was still self reported as above average. Because the question “Your health during pregnancy” did not clearly define poor or good health, it is possible that these women perceived themselves as having difficult pregnancies but were not extremely unhealthy. It is also possible that some women in this group had cesarean sections. As this is a fairly major surgery, it requires a good deal of recovery. Their recovery may interfere with their physical ability to care for their baby, their feelings about their ability to mother or postpartum adjustment and even their interaction with their husbands. However, because this question was not very specific and because cluster analysis does not allow one to make causal statements, one cannot know for sure.

Research Question 5. To what extent do coping mechanisms, self esteem, social support and playfulness predict marital satisfaction and postpartum adjustment?

Because one cannot make predictive statements from a cluster analysis, it was of interest to see how the resource variables of playfulness, social support and self esteem and the five coping mechanisms would relate to the outcome variables of relationship satisfaction and postpartum adjustment in a regression. The first regression of playfulness, self esteem, social support and coping factors on marital satisfaction (as measured for the “past month”) was significant and accounted for 43% of the variance. This is a large number, especially considering that playfulness is not a common variable used in predicting relationship satisfaction. In addition, both social support and playfulness emerged as significant predictors above and beyond the three variables together. This finding implies that both playfulness and social support contribute unique predictive value beyond that accounted for by the three variables together. It is interesting to note that self esteem did not emerge as a significant predictor. This makes sense in light of some of the mixed findings on the role of self esteem in the transition to parenthood (i.e. Terry, 1991b and Frosch, et. al., 1998). This study seems to suggest that while self esteem may play a role, that role is small. The coping mechanisms also did not contribute unique predictive value beyond the group of variables together. Thus, it is possible that ones resources (playfulness and social support) are more important than the actual coping mechanisms in predicting relationship satisfaction.

The second regression, of playfulness, social support, self esteem and the five coping factors on postpartum adjustment, was also significant; however, it only accounted for 14% of the variance. This is a low amount of variance but is still important.

This regression suggests that while some of the resource variables and coping factors are related to postpartum adjustment (a finding supported by the bivariate correlations), they are not the most important predictors of adjustment and that none of the variables contribute unique variance above and beyond the others.

Research Question 6. How do the three types of social support relate to relationship satisfaction and postpartum adjustment?

Previous studies had found support for the relationship of spousal support (Terry, 1991a), “confidant” support (Paykel, et. al. 1980), community support (Cronic, et. al. 1983) and family support (Terry, 1991a) with various well being measures during the transition to parenthood. While it is clear that social support can play a role in postpartum adjustment, the author also wondered if specific types of social support were more important in predicting positive postpartum outcomes. To explore this question, two regressions were run. The first regression of friend support, significant other support and family support on relationship satisfaction was significant and accounted for 30% of the variance, lending further evidence to the connection of social support and well being. In addition, significant other support emerged as a significant individual predictor above and beyond the other variables. This connection of perceived support from one’s significant other relates to how satisfied a woman is in her relationship with that person.

The second regression, of significant other support, family support and friend support on postpartum adjustment was also significant but only accounted for 7% of the variance. This is not surprising given the low percentage of variance that the three resource variables accounted for in postpartum adjustment. In this regression, only friend support emerged as a significant predictor above and beyond the others. This finding is

similar to that of Paykel et. al. (1980) who found that confidante support was a significant predictor of lower stress and depressive symptoms in postpartum women. It seems that women who perceive support from people outside their family context might fare better during this transition. If they can maintain their friendships, they may feel more able to hold on to their own identity and more confident in their ability to mother. It may also be the case that women who perceive stronger friend support are more likely to utilize that support for help with their child, advice, emotional support or even for a baby-sitting break from time to time.

Additional Analyses.

An additional ANOVA on category of relationship change with playfulness was significant; women who reported higher playfulness levels were also more likely to say their relationship had changed for the better since the birth of their child. This finding lends additional support to the relationship of marital satisfaction and playfulness. It also suggests that this connection holds up during the transition to parenthood. This finding is of particular importance given that the question asked specifically about any changes in the marital relationship since the birth of the child. Since this study was not longitudinal, the change in relationship question at least provides some retrospective reports of any differences in marital satisfaction over time.

Bivariate Correlations. A number of bivariate correlations are of interest in this study. To begin with, relationship satisfaction was correlated with playfulness, self esteem and social support, which represent all three of the resource variables. However, relationship satisfaction was also correlated with socioeconomic status and whether or not the baby was planned. Women in a lower socioeconomic status seem to report lower

satisfaction with their marital relationships, as do women with unplanned children. This second correlation makes sense in light of the cluster solutions. Both groups two (“muddle through it mothers”) and four (“unsatisfied, insufficient copers”) were more likely to have unplanned children and had lower relationship satisfaction.

Meanwhile postpartum adjustment was correlated with playfulness and social support, but not self esteem. This finding is interesting given that postpartum adjustment seems to measure a woman’s confidence in her role of mother and ability to mother. Women who are confident in themselves do not necessarily feel confident as mothers. It may be that one of the measures (self esteem) reflects a global or overall sense of confidence and esteem and the other (postpartum) reflects a situation-specific area of confidence. Postpartum adjustment also correlated with enjoyment of motherhood. This correlation was reflected in three of the four clusters. However, group three (“satisfied wives, insecure mothers”) reported average enjoyment of motherhood and significantly below average postpartum adjustment. Thus, while the sample as a whole tended to report being adjusted to motherhood if they enjoyed it, this was not the case for one subgroup. Enjoyment of motherhood also showed a different correlation pattern than postpartum adjustment, suggesting they are not completely linked. Enjoyment of motherhood was not correlated with playfulness or social support but it was correlated with self esteem. In addition, it was significantly correlated with age (older women reported less enjoyment) and level of education (women with less education enjoyed motherhood less). The first correlation may make sense when one thinks about the sample overall. These women were primarily well educated, employed and of high socioeconomic status. It is possible that the older mothers waited until they had

established a certain style of life and career before having children. Once they had children, it altered that lifestyle and it was harder for them to enjoy being a mother. The second correlation may be a bit harder to explain. However, it is possible that women with less education were less well prepared for the changes a baby might bring or how to care for the baby.

Correlations of the coping mechanisms and the resources variables are also of interest (the correlations of coping mechanisms with relationship satisfaction and postpartum adjustment are discussed in research question two). People who were high on playfulness were less likely to use wishful thinking and more likely to use social support. Once again, this makes sense given the theory of playfulness. If playfulness implies a willingness to be vulnerable in front of another (Sadler, 1966) then a person who is playful may be more prepared to ask for help. In addition, the correlation of play and wishful thinking also makes sense given the Broaden and Build hypothesis (Fredrickson, 2001). Women who are more playful may be more able to come up with varied ways to cope with a stressful situation and thus do not need to wish the problem away. Women who were lower in self esteem were more likely to use wishful thinking and denial. This fits well with Chan's (1977) theory of self esteem in coping. Women who are not confident in themselves are also not confident in their ability to cope with a stressful situation. Thus they may spend more time using unhealthy coping mechanisms such as denial or daydreaming. These coping mechanisms then reinforce their low self efficacy around being able to cope with a problem. Finally, women who perceived high levels of social support were less likely to use wishful thinking and denial, and more likely to use

acceptance. Women who perceive themselves as having people to rely on, may not feel the need to dream away the problem and may feel more able to accept it and move on.

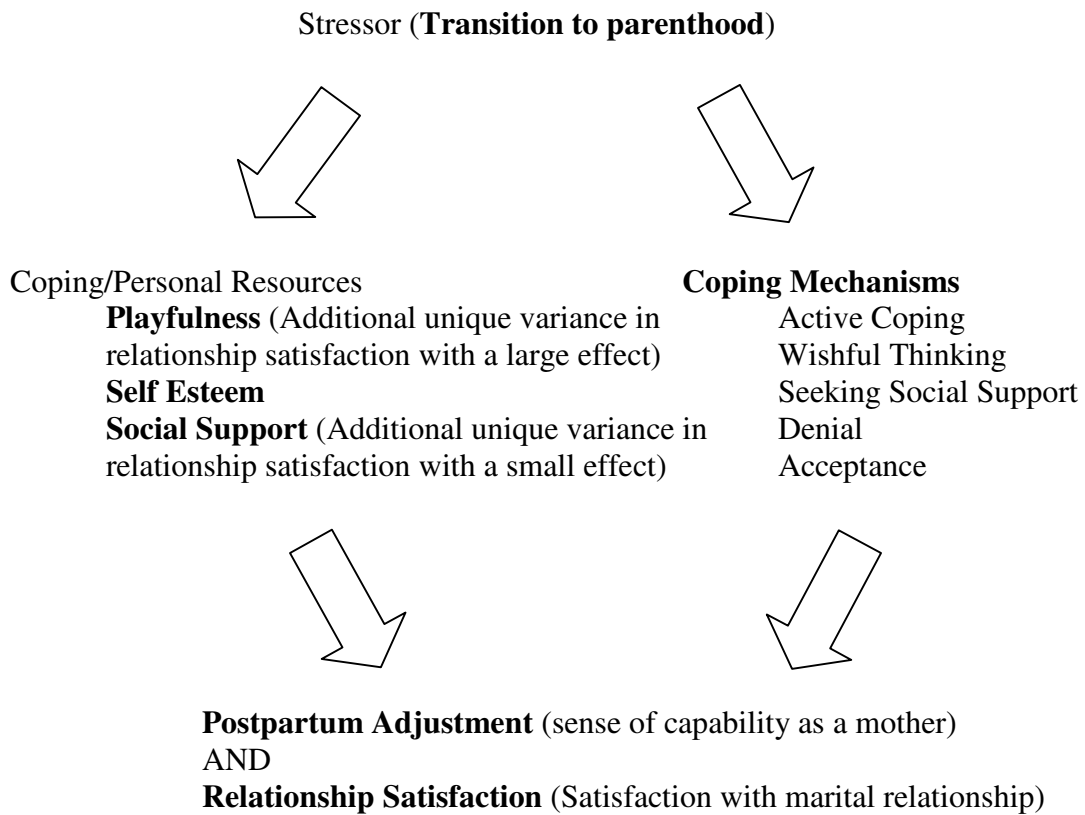
Finally, the three resource variables of playfulness, social support and self esteem all correlated with each other. As each of these variables are positive resources that lead to healthy coping and adjustment, it seems logical that the three would correlate.

Overall Summary of Findings

In order to understand the large number of findings presented in this study, it is helpful to return to the original model presented in chapter 3. Essentially, the idea was that playfulness, social support, self esteem and the use of coping mechanisms would help new mothers deal with the transition to parenthood and would be related to positive relationship satisfaction and postpartum adjustment as depicted in figure 5, below.

Overall, this model was supported. There are four major findings in relation to this overarching construct. The first finding of importance was that playfulness seemed to be of particular importance to understanding positive outcomes associated with the first year of motherhood. It was the only significant individual predictor of relationship satisfaction and was significantly correlated with postpartum adjustment. Related to the importance of play is further evidence for the Broaden and Build Hypothesis (Fredrickson, 2001); playfulness was correlated with both healthy coping mechanisms and with positive outcomes. The second finding of importance was that postpartum adjustment as measured in this study and relationship satisfaction were not significantly correlated, suggesting that the two are different constructs with their own predictors. Related to this finding is the fact that postpartum adjustment and enjoyment of motherhood were only moderately correlated, suggesting feeling adjusted to and

Figure 5: Visual Depiction of Tested Model



confident in the role of mother is not the same as enjoying it. The third major finding is that new mothers seem to use five major types of coping mechanisms: active coping, wishful thinking, seeking social support, denial and acceptance. Acceptance and seeking social support were correlated with positive outcome variables while wishful thinking and denial were correlated with negative outcome variables. The stressful situations in which new mother's reported using these coping mechanisms included both daily demands of the baby and larger issues such as juggling roles and decisions about working and child care. Finally, the fourth major finding was the four clusters of mothers in this

sample. The first cluster (“happy healthy copers”) reported doing well across the board, while the third cluster (“satisfied wives, insecure mothers”) reported doing well in all major measures except postpartum adjustment. Meanwhile, the second cluster (“muddle through it mothers”), which was also the largest cluster, reported average levels of each measure and the fourth cluster (“unhappy, insufficient cluster”) reported below average functioning on all variables. Thus this study sheds light on the varied experiences of new mothers. They report a range of relationship satisfaction and they express a range of adjustments to motherhood. Playfulness and particular styles of coping seem to relate to higher relationship satisfaction and postpartum adjustment.

Limitations

There are several possible limitations of this study. The primary limitation is the racial homogeneity of the sample. While every effort was made to collect data from minority racial groups, including posting on specialty websites such as www.latinamami.com (for Hispanic mothers) and www.sisttermoms.com (for African-American mothers), the sample is still a primarily European-American one (approximately 85%). This makes it hard to generalize the results to multiple populations. However, the sample had some socioeconomic, geographic and age diversity, which can enrich the findings. Future research in this area would benefit from greater diversity.

This research is also limited by the fact that it only looked at married mothers as fathers, unmarried mothers, and lesbian or gay parents also face this transition. Unfortunately, it is not possible to look at all of these populations in one study. Future research should look at these populations individually and comparatively to better understand how the transition to parenthood affects them as well.

The cross sectional nature of this research may also be a limitation. While a cross sectional study gives an important glimpse of how women are feeling and coping at the moment of completing the survey, it is also important to look at how women fare over time. Longitudinal research would help researchers to examine the changes in marital satisfaction and postpartum adjustment over time, as well as how the independent variables affect these changes. This study also used self report measures. It is possible that this technique leads to biased results as women are reporting on their own perceptions of each of the variables. However, as these variables were around personal coping resources, coping mechanisms and their feelings on relationships and adjustment, it seems that self report measures are the most useful. Future research, however, could include behavioral observation or observer/other reports.

Two of the measures in particular were potential limitations in this study. One subscale of the postpartum adjustment measure did not have adequate reliability and could not be used. Thus, future research should further examine the validity and reliability of that measure or look for a new measure of postpartum adjustment. However, the “new baby” scale used did seem to hit upon an important aspect of postpartum adjustment, namely, a sense of confidence and comfort in the role of mother. In addition, the self esteem measure was a potential limitation. It is a very global measure of self esteem; however, it is possible that it was therefore not sensitive to smaller fluctuations in self esteem during the transition to motherhood. In fact, the lack of sensitivity may explain the mixed findings regarding the importance of self esteem during the transition to parenthood in past research as well as in the many types of studies in which the Rosenberg (1989) measure is frequently used.

Another possible set of limitations is due to the nature of internet research. One such limitation is the difficulty in determining an accurate response rate. Because subjects were recruited via forum postings, it is not possible to determine how many people saw the request or how many were eligible to participate. The only response rate researchers have is the number of people who actually went to the website to begin the survey; however, this does not indicate the number of eligible people who heard about the survey and chose not to even visit the website. Related to this limitation, there may be some respondent bias. It is not possible for researchers to determine differences between those who replied to the study and those who did not. In addition, the nature of website design does not allow researchers to counterbalance the order of the measures; all subjects answered the measures in the same order. While significant planning went into the ordering of the measures, there may be ordering effects or participant fatigue effects. Finally, because the researchers recruited subjects via the internet, all the participants had to have computer access. It is unclear how this factor might affect the results, but it should be taken into account.

Finally, collecting data together with the other graduate student may have been a limitation as well as a benefit. As the other student also had a significant number of measures, the overall survey was very long. The length may have contributed to the number of participants that began but did not finish the survey. In addition, as the other student's research asked questions regarding equity and sex-roles, there may have been priming effects when participants were answering questions for this survey. Future research should consider additional modifications to internet surveys in order to account for these limitations.

Implications for Research

This study has a number of implications for both future research and practice. Perhaps the most interesting finding was that postpartum adjustment and relationship satisfaction were not highly correlated and were related to coping, play, self esteem and social support in very different ways. In addition, postpartum adjustment (as measured in this study) is also not the same thing as enjoying motherhood. The majority of previous research in the area of the transition to parenthood has focused on marital satisfaction and its decline (e.g. Belsky, 1983 etc.). However, while marital satisfaction is an important outcome, so is the new mother's individual adjustment to motherhood, her feelings on the new role of mom and her sense of confidence and ability in that role. Marital satisfaction is more dyadic; it also may reflect previous relationship satisfaction. Even though this particular study asked new mothers to reflect on their relationship satisfaction during the past month, it may have been difficult for them to separate recent relationship satisfaction from their relationship satisfaction overall and how it had been before the baby. Even enjoying motherhood may be considered relational as enjoyment may come from a new relationship with one's husband or from the new baby. However, postpartum adjustment is more individual and reflects a specific, time limited event. It is not something that one can measure until the baby is present. Thus, future research should include a measure of postpartum adjustment in addition to relationship satisfaction. In addition, using postpartum adjustment as an outcome, rather than just relationship satisfaction makes generalization to single mothers more possible. As a large percentage of new mothers in the U.S. are not married, it would be beneficial if studies did not only applied to various marital statuses.

Future research should also make sure to include a more diverse sample. In addition to unmarried mothers, future studies could look at lesbian or gay couples, single fathers or just fathers in general, more racially diverse groups, groups with a wider range of educational backgrounds and a larger range of socioeconomic status. In addition, future research should continue to look at planned versus unplanned pregnancies during this transition as this demographic variable was one of the few that significantly correlated with relationship satisfaction.

As playfulness seemed to be an important predictor of both marital satisfaction and relationship satisfaction, future research should continue to look at its role in the transition to parenthood. Playfulness as conceived of by Betcher (1977) and Sadler (1966) is a dyadic dimension, thus future research should examine both members of the couple and how playfulness effects the transition to parenthood for the individual parents and the parenting couple. Playfulness seems to be important for relationship satisfaction in mothers during the transition to parenthood, but it is unknown whether or not that connection exists for fathers as well. It is also unclear how playfulness and relationship satisfaction effect each other due to the correlational nature of the study. Furthermore, while playfulness seems to help with the transition to parenthood, research has not yet looked at its usefulness with other stressful situations or transitions. Future research should look at how playfulness is a resource in other situations. It would also be interesting to see if playfulness must always be a couples dimension. It is possible that playfulness is more of an individual trait. Also, it is unclear whether playfulness is a constant, situation-specific, or if it is changeable. Future research could further explore the nature of play.

This study also provided some insight on the use of various coping mechanisms by first time mothers. By using a short version of the ways of coping scale and factor analyzing it for this specific population, coping was not forced into specific groups and the study was able to catch some of the idiosyncrasies of how new moms cope with stressful situations directly related to motherhood. However, while one can see general patterns of coping with this list, it might be interesting to see if women use coping mechanisms not on this list. Perhaps there are ways of coping that are specific to the situation of new motherhood and thus were not captured by this measure. For example, new mothers seek out information more frequently on the internet or in books, or perhaps they are more likely to reconnect with their own mothers. In addition, it would be interesting to explore whether or not the type of stressful situation described by the participant was associated with the coping mechanism used. For example, some situations may be viewed as more changeable than others and new mothers might be more able to use active coping with those situations.

Finally, as this study provided a wealth of information on how playfulness, social support, self esteem and coping mechanisms relate to postpartum adjustment and relationship satisfaction, future research could look at how interventions based on this knowledge improve the transition to parenthood for new mothers. Some of these variables may be more amenable to change than others and thus it might be better to intervene with those variables. In addition, it might be more important to intervene before the birth of the baby with some of these variables, while with others it might be important to intervene after the baby is born. Future research could develop possible interventions and see how effective they are at easing the transition to parenthood for new mothers.

Implications for Practice

In addition to implications for future research, this study has a number of implications for practice as well. To begin with, the four clusters help clinicians understand how various groups of mothers might react to parenthood. They might thrive in the role of mother and in their marriages, they might fare average and just survive the transition, they might continue to be satisfied with their marriages but feel terrible about their ability to mother, or they might do poorly across the board. Knowing these various possible reactions can help give clinicians a broader schema for what the transition to parenthood looks like. In this way, it improves over previous research which tends to look at women as one large group for whom new motherhood is either difficult or easy without seeing what other variables might relate to the ease of this transition. The use of cluster analysis allows for variability on multiple dimensions creating a more diverse picture of the transition. For example, for the women in group 3 (“satisfied wives, insecure mothers”), it might be helpful to use some psychoeducation on the concept of “good enough mothering” to help them feel more secure and confident in their ability to mother. Meanwhile, groups four and two might benefit more from interventions that increase their playfulness, increase their coping repertoires or enhance their relationships through counseling.

The qualitative data also help broaden the picture of the transition to motherhood. Mothers mentioned a number of positive changes and negative changes in themselves overall, in themselves as a mother and in their relationships. Clinicians can use these data to enrich their knowledge of how these women are coping and the changes they perceive. In addition, practitioners can use this knowledge to help inform expectant mothers. They

can explain that women have varied reactions to this transition and will often experience changes for the better and for the worse. If expectant mothers are better informed about the coming changes, they may feel more psychologically prepared to face them.

In addition, looking at the women in group 1 (“happy, healthy copers”) can shed some light on what might be useful for new mothers in general. It may be important that they make use of active coping. Active coping is a skill that can be taught, just as avoiding the use of wishful thinking and denial can be taught. If clinicians teach their clients how to cope with all the stressors of new parenthood in a healthy way, the new mothers might feel more satisfied in their relationships and confident in their parenting abilities.

The importance of playfulness in this transition can also inform practice with expectant and new mothers. In this study, playfulness was positively correlated with postpartum adjustment and relationship satisfaction, appeared as a significant individual predictor of both variables and seems to relate to healthy coping. Thus, encouraging women to be playful might help them in the transition to motherhood. If women can learn to feel a bit more free and think creatively, they may be more able to cope with the stressors of a new baby. In addition, if women are more willing to appear vulnerable in front of their husbands and others through being playful, they may also be more able to ask others for help. It is unclear at this point whether playfulness is more trait-like or learned; however, either way clinicians could develop interventions to encourage playfulness.

Finally, the examination of self esteem and social support in this study can also inform practice. Global self esteem as measured in this study does not seem to be an

important predictor of relationship satisfaction or postpartum adjustment. However, self esteem and self efficacy are related constructs and postpartum adjustment seems to measure, in part, domain specific self efficacy around parenting. Clinicians could help women practice their parenting skills, discuss their fears of being a “bad” mother, or discuss the concept of “good enough” parenting in an effort to help their confidence as a mother and their postpartum adjustment. Meanwhile, global self esteem was related to how much women reported enjoying motherhood, so interventions looking at overall self esteem may be important as well. In addition, clinicians should encourage the use of social support. Social support as a whole, as well as spousal support in particular, was an important predictor of relationship satisfaction. However, friend support seemed to be the most important type of support based on its relationship with postpartum adjustment. Thus, clinicians should help women build and maintain their support networks and encourage women to seek help from friends other than their spouse in coping with this transition. In addition, they may want to encourage new moms to seek out friendships with other moms, in particular, as they can provide the new mother with advice and normalization of any struggles the new mother is facing.

While these results have broad implications for practice, it should be remembered that each woman is different and will have a unique reaction based on her unique circumstance. As the cluster analysis and bivariate correlations alluded, demographics such as socioeconomic status and education level can play an important role, as can baby related demographics such as whether or not the baby was planned. In addition, it should be noted that this study was correlational in nature and causal implications cannot be made. Thus it is important that future research demonstrate causal relationships before

basing interventions on them. In addition, it would be helpful for future research to examine this transition with these variables in a longitudinal fashion. Nonetheless, this study can lead to future research in this area and inform future practice. The transition to parenthood does not have to be a crisis, as early research in the area suggested (Lemasters, 1957), and can be a transition in which some women thrive, growing as a person, building confidence, finding a new larger capacity for love and relatedness and growing in love for their husband and new child; playfulness and effective coping seem to be very important in helping women adjust in the effects of parenthood on their marriages and to their new role of mother.

Appendix A

Recruitment email

Are you a new mother? If you are married and have had a baby within the last year, PLEASE consider completing a questionnaire designed to examine the experiences of new mothers and their marriages during the transition to parenthood.

Your participation will assist researchers interested in understanding more about the reasons for satisfaction or dissatisfaction in marital relationships. It may also prove interesting for you as you reflect on some of your answers to the questions!

The questionnaire should take you about 15-20 minutes to complete and can be accessed by visiting the following web site:

<http://surveymonkey.com/s.asp?u=426831221436>

Your participation will be greatly appreciated. Thank you so much for your time.

Whether or not you qualify, please consider passing this email along to others who do.

Thank you.

Catherine Sullivan & Anne Cavanaugh
University of Maryland, College Park

Are you a new mother?

Researchers at the University of Maryland are conducting a study on the experiences of new mothers and their marriages during the transition to parenthood. If you are married and your baby is less than a year old, please consider participating in this study. If you are interested in helping with this research, please visit our website:

<http://surveymonkey.com/s.asp?u=42683122143>

6

The study involves completing an online questionnaire that will take 15-20 minutes.

Appendix C

Relationship Assessment Scale (Hendrick, 1988)

Please click on the letter that best corresponds to your answer.

1. How well does your partner meet your needs?

A	B	C	D	E
Poorly		Average		Extremely well

2. In general, how satisfied are you with your relationship?

A	B	C	D	E
Unsatisfied		Average		Extremely satisfied

3. How good is your relationship compared to most?

A	B	C	D	E
Poor		Average		Excellent

4. How often do you wish you hadn't gotten in this relationship?

A	B	C	D	E
Never		Average		Very often

5. To what extent has your relationship met your original expectations?

A	B	C	D	E
Hardly at all		Average		Completely

6. How much do you love your partner?

A	B	C	D	E
Not much		Average		Very much

7. How many problems are there in your relationship?

A	B	C	D	E
Very few		Average		Very many

Appendix D

Couples Playfulness Questionnaire II (Betcher, 1977)

For the following questions, please click on the number that best corresponds to your degree of agreement about the question. The scores are as follows:

- 1= Very strong disagreement
- 2= Disagreement
- 3= Neutral
- 4= Agreement
- 5= Very strong agreement

	Very Strong Disagreement	Disagreement	Neutral	Agreement	Very Strong Agreement
1. We rarely do things together.	1	2	3	4	5
2. I enjoy my partner's sense of humor.	1	2	3	4	5
3. My partner likes to play much more than I do.	1	2	3	4	5
4. We have our own unique and creative ways of having fun together.	1	2	3	4	5
5. When we play games, winning and losing become more important.	1	2	3	4	5
6. We tend to play the same games over and over again.	1	2	3	4	5
7. Our play is often stimulating and refreshing.	1	2	3	4	5
8. I enjoy being spontaneous with my partner.	1	2	3	4	5
9. Many times when one of us feels like playing, the other isn't in the mood.	1	2	3	4	5
10. I don't enjoy acting irrational with my partner	1	2	3	4	5
11. We usually don't have time to play.	1	2	3	4	5
12. I am happiest when we have time to relax and be spontaneous with each other.	1	2	3	4	5
13. We tend to make love the same way every time.	1	2	3	4	5
14. Sometimes the same humorous thought crosses our minds at the same time.	1	2	3	4	5
15. When we play, one of us is always the more dominant one.	1	2	3	4	5
16. I don't like my partner to act like a child.	1	2	3	4	5
17. I like to play much more than my partner does.	1	2	3	4	5

	Very Strong Disagreement	Disagreement	Neutral	Agreement	Very Strong Agreement
18. I have fun acting silly with my partner.	1	2	3	4	5
19. We play together in many different ways.	1	2	3	4	5
20. We often try out new things with each other.	1	2	3	4	5
21. I don't like being surprised by my partner.	1	2	3	4	5
22. We engage in a lot of sex play when the two of us are alone.	1	2	3	4	5
23. We have similar senses of humor.	1	2	3	4	5
24. I find that our play is often meaningful and rewarding for me.	1	2	3	4	5
25. We never kid around in our love-making.	1	2	3	4	5
26. I much prefer having a serious talk to playing together with my partner.	1	2	3	4	5
27. We invent novel things to do together.	1	2	3	4	5
28. Our spontaneity can be so complementary, it feels like we're playing a duet.	1	2	3	4	5

29. In what ways do you and your husband play together?

Appendix E

Self Esteem Scale (Rosenberg, 1989)

For each statement, click the number corresponding to your level of agreement with that statement. The numbers correspond to the following levels:

- 1= Strongly Agree
- 2= Agree
- 3= Disagree
- 4= Strongly Disagree

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

Appendix F

Stressful Event Description

To respond to the next set of statements, you will need to have a specific stressful situation in mind. Please take a minute to think about the most stressful situation related to being a new mother that has occurred during the PAST MONTH.

In this case, “stressful” refers to a situation that was difficult or troubling because you felt distressed over what happened or because you had to use considerable effort to deal with the situation. The situation should be related to your experience as a new mom. Please consider the details of the situation such as where it happened, who was involved, how you acted and why it was important to you. You may still be involved in the situation, or it can be in the past, as long as it was the most stressful experience for you in the past month. Please continue to keep this in mind as you answer the following statements.

Use the lines below to describe your situation.

The most stressful situation regarding new motherhood:

Appendix G

Ways of Coping (Lazarus & Folkman, 1984)

Please read each item below and indicate, by marking the appropriate category, to what extent you use it to deal with your mother's breast cancer diagnosis and treatment.

0=Does not apply or not used

1=Used somewhat

2=Used quite a lot

3=Used a great deal

1. I tried to analyze the problem in order to understand it better.
2. I felt that time would make a difference and the only thing to do was to wait.
3. Talked to someone who could do something concrete about the problem.
4. Hoped a miracle would happen.
5. Went along with fate; sometimes I just have bad luck.
6. I went on as if nothing had happened.
7. Looked for the silver lining, so to speak, tried to look for the bright side of things.
8. Accepted sympathy and understanding from someone.
9. I was inspired to do something creative.
10. Tried to forget the whole thing.
11. Tried to make changes and grow as a person in a good way.
12. Decided to wait and see what would happen before I did anything.
13. Tried to come up with a plan of action and follow it.
14. I tried not to act too hastily or my first hunch.
15. Tried to let feelings out.
16. Decided to rediscover what was important in life.
17. Asked a relative/friend for advice.
18. Decided to try to change something so that things would turn out right.
19. Talked to someone about how I was feeling.
20. Drew on my past experiences.
21. Thought about what could be done and doubled my efforts to make things work.
22. Came up with a couple of different solutions to the problem

23. Tried to accept the situation, since nothing could be done.
24. Tried to keep my feelings from interfering with other things too much.
25. Wished that I could change what had happened or how I felt
26. I daydreamed or imagined a better time or place than the one I'm in.
27. Wished that the situation would go away or somehow be over with.
28. Had fantasies or wishes about how things might turn out.
29. I went over in my mind what I would say or do.
30. Tried to see things from another person's point of view.

Appendix H

Multidimensional Scale of Perceived Social Support (Zimet, 1988)

Please rate the extent to which you agree with the following statements, on a scale of 1 to 7:

- 1 = very strongly agree
- 2 = strongly agree
- 3 = agree
- 4 = neutral
- 5 = disagree
- 6 = strongly disagree
- 7 = very strongly disagree

	Very strongly agree	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Very strongly disagree
1) There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2) There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
3) My family really tries to help me.	1	2	3	4	5	6	7
4) I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5) I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6) My friends really try to help me.	1	2	3	4	5	6	7
7) I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8) I can talk about my problems with my family.	1	2	3	4	5	6	7
9) I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10) There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11) My family is willing to help me make decisions.	1	2	3	4	5	6	7
12) I can talk about my problems with my friends.	1	2	3	4	5	6	7

Appendix I

Postpartum Adjustment Questionnaire (O'Hara & Hoffman, 1991)

We are interested in finding out how you have been doing since the birth of your baby. The particular time period that we would like you to keep in mind is the past month. Various aspects of your life will be covered ranging from household tasks to relationships with your spouse, family, and friends. Circle the number corresponding to the answer that best describes how you have been in the past month.

Changes in role performance subscale

	Much Better Worse	Same	Slightly Worse	Much Worse	Very Worse
1. How has your performance in cooking/preparing food for your family changed since the birth of your baby?	1	2	3	4	5
2. How has your performance in maintaining your household changed since the birth of your baby?	1	2	3	4	5
3. How has your job performance changed since your baby was born?	1	2	3	4	5
4. How have your relationship(s) with your close friends changed since your baby was born?	1	2	3	4	5
5. How have your relationship(s) with your casual acquaintances changed since your baby was born?	1	2	3	4	5
6. How has the quality of your relationship(s) with your sibling(s) changed since your baby was born?	1	2	3	4	5
7. How has the quality of your relationship(s) with your parent(s) changed since your baby was born?	1	2	3	4	5
8. How has the quality of your relationship(s) with your in-laws changed since your baby was born?	1	2	3	4	5
9. How has your display of affection toward your spouse changed since your baby was born?	1	2	3	4	5
10. How has the quality of your efforts to participate in shared activities with your spouse changed since your baby was born?	1	2	3	4	5
11. How has the quality of your efforts to confide in your spouse about yourself and your problems changed since your baby was born?	1	2	3	4	5

New Baby Subscale

1. How much time do you spend caring for your baby's needs (i.e. bathing, feeding, changing diapers)?
 1. Too much time.
 2. About the right amount of time.
 3. Not quite enough time.
 4. Much below what is necessary/desirable.
 5. No time.
2. How would you evaluate your performance in regard to caring for your baby's needs?
 1. Excellent.
 2. Average/good.
 3. Somewhat below average.
 4. Poor.
 5. Very poor.
3. How have others (i.e. spouse, family, and friends) evaluated your performance in regard to caring for your baby's needs?
 1. Others have commented on my good performance.
 2. No one has commented on my performance one way or the other.
 3. It is clear that others have recognized that my performance is below average, but no one has expressed any concern or criticism.
 4. Others have expressed concern or criticism about my poor performance.
 5. Others have expressed significant concern or criticism about my poor performance.
4. How much time do you spend engaging in physical contact with your baby (i.e. holding, rocking, kissing)?
 1. Too much time.
 2. About the right amount of time.
 3. Not quite enough time.
 4. Much below what is necessary/desirable.
 5. No time.
5. How would you evaluate the quality of the time you spend engaging in physical contact with your baby?
 1. Excellent.
 2. Average/good.
 3. Somewhat below average.
 4. Poor.
 5. Very poor.
6. How have others (i.e. spouse, family, and friends) evaluated the quality of the time you spend engaging in physical contact with your baby?

1. Others have commented on how well I engage in physical contact with my baby.
 2. No one has commented one way or the other on the quality of the time I spend engaging in physical contact with my baby.
 3. It is clear that others have recognized that I have had some problems with the quality of the time I spend engaging in physical contact with my baby, but no one has expressed concern or criticism.
 4. Others have expressed concern or criticism about the quality of the time I spend engaging in physical contact with my baby.
 5. Others have expressed significant concern or criticism about the quality of the time I spend engaging in physical contact with my baby.
7. How much time do you spend engaging in play activity with your baby (singing, playing patty-cake, etc)?
1. Too much time.
 2. About the right amount of time.
 3. Not quite enough time.
 4. Much below what is necessary/desirable.
 5. No time.
8. How would you evaluate the quality of the time you spend participating _ in play activity with your baby?
1. Excellent.
 2. Average/good.
 3. Somewhat below average.
 4. Poor.
 5. Very poor.
9. How have others (i.e. spouse, family, friends) evaluated the quality of the time you spend participating in play activity with your baby?
1. Others have commented on how well I participate in play activity with my baby.
 2. No one has commented one way or the other on the quality of the time I spend participating in play activity with my baby.
 3. It is clear that others have recognized that I have had some problems with the quality of the time I spend participating in play activity with my baby, but no one has expressed concern or criticism.
 4. Others have expressed concern or criticism about the quality of the time I spend participating in play activity with my baby.
 5. Others have expressed significant concern or criticism about the quality of time I spend participating in play activity with my baby.

Please answer these open-ended questions

How has becoming a mother affected your relationship with your husband?

What is the most positive change you have experienced since becoming a mother?

What is the most negative change you have experienced since becoming a mother?

Appendix J

Demographics

Instructions: Please provide the following information about yourself.

1. Age: _____

2. Race/Ethnicity

- _____ African-American/Black
- _____ Asian-American/Pacific Islander
- _____ Asian-Indian/Pakistani
- _____ Biracial/multiracial
- _____ Hispanic/Latino(a)
- _____ Middle Eastern/Arab
- _____ Native American/Native Alaskan
- _____ White/European American
- _____ Foreign National (please specify): _____
- _____ Other (please specify): _____

3. Highest level of education completed:

- _____ Grade school _____ College
- _____ High School _____ Grad School

4. Employment status:

- Self: not employed _____ employed part-time _____
- employed full-time _____ Student _____
- Partner: not employed _____ employed part-time _____
- employed full-time _____ Student _____

5. What was your employment status before the birth of the baby?

- not employed _____ employed part-time _____
- employed full-time _____ Student _____

6. Socioeconomic status:

- _____ Working class _____ Upper-Middle Class
- _____ Middle Class _____ Upper class

7. Religious affiliation: _____

8. Please indicate the number of years and months that you have been married to your husband:

_____ Years _____ Months

9. Please indicate the number of years and months that you were in a relationship with your current husband **prior to your marriage**:

_____ Years _____ Months

10. How old is your baby? _____(in months)
11. What is the sex of your baby? _____ Male _____ Female
12. Was the pregnancy planned? _____ Yes _____ No
13. Did you receive infertility treatments? _____ Yes _____ No
14. Was your baby adopted? _____ Yes _____ No
15. Do you have any hired help with the baby? _____ Yes _____ No
16. Do you have any hired help with the house? _____ Yes _____ No
17. How near (in miles) does your family live? _____
18. How near (in miles) does your husband's family live? _____

Please rate your experience on the following items:

Your health during pregnancy	Extremely unhealthy	1	2	3	4	5	6	7	Extremely healthy
Health of baby	Extremely unhealthy	1	2	3	4	5	6	7	Extremely healthy
Enjoyment of motherhood	Not at all	1	2	3	4	5	6	7	A great deal

Appendix K

Debriefing Form

Thank you very much for participating in this study.

Prior research has suggested that the transition to parenthood involves tremendous change in the family system as parents are confronted with the demands of the new task of childcare, the coordination of this task with other tasks, as well as the role organization with the partner. This period is often characterized by a dramatic decrease in positive marital interchanges, a dramatic increase in marital conflict, and decrease overall in marital satisfaction (Belsky & Pensky, 1988).

There are exceptions to these findings, instances where marital satisfaction does not decrease, or can even increase, during this period. This project will help explicate how satisfied and committed women are to their marriages during this critical transition. In addition, this project will illuminate whether there are certain types of women for whom this transition is more or less difficult. The purpose of the study is to investigate women's experiences and marriages during the transition to parenthood so that we can better understand, work with, and meet the needs of new mothers.

Please be certain that your responses to the questionnaires will be held in strict confidentiality. Under no circumstances will this be violated.

Due to the fact that many individuals have not yet participated in this study, we must ask you not to discuss this study with anyone. This is crucial to maintaining the study's validity.

If you would like additional information on maintaining a healthy relationship with your partner, please visit <http://www.apa.org/topics/>. If you are interested in locating a psychologist to discuss any of the concerns that may have arisen for you while completing this questionnaire, please visit <http://helping.apa.org/> or call **1-800-964-2000**.

Please contact us if you have any questions or concerns about your participation in this study. We are appreciative of your time and effort in assisting us with this important study.

Sincerely,

Catherine Sullivan, M.A., Ed.M.
Doctoral Student
University of Maryland, College Park
cms13@umd.edu

Mary Ann Hoffman, Ph.D.
Dept. of Counseling & Personnel Services
University of Maryland, College Park
mhumd@aol.com

Anne Cavanaugh
Doctoral Student
University of Maryland, College Park
acavanau@mail.umd.edu

References

- Aune, K. S., & Wong, N. H. (2002). Antecedents and consequences of adult play in romantic relationships. *Personal Relationships, 9*, 279-286.
- Baxter, L. A. (1992). Forms and functions of intimate play in personal relationships. *Human Communication Research, 18*, 336-363.
- Bell, R. A., Buerkel-Rothfuss, N. L., & Gore, K. E. (1987). "Did you bring the yarmulke for the cabbage patch kid?" The idiomatic communication of young lovers. *Human Communication Research, 14*, 47-67.
- Belsky, J., & Rovine, M. (1990). Patterns of marital change across the transition to parenthood: Pregnancy to three years postpartum. *Journal of Marriage and the Family, 52*, 5-19.
- Belsky, J., Spanier, G. B., & Rovine, M. (1983). Stability and change in marriage across the transition to parenthood. *Journal of Marriage and the Family, 45*, 567-577.
- Berant, E., Mikulincer, M., & Florian, V. (2003). Marital satisfaction among mothers of infants with congenital heart disease: The contribution of attachment style, and the coping process. *Anxiety, Stress and Coping, 16*, 397-415.
- Betcher, R. W. (1977). Intimate play and marital adaptation: Regressing in the presence of another. *Dissertation Abstracts International, 38 (4-B)*, 1871B.
- Betcher, R. W. (1981). Intimate play and marital adaptation. *Psychiatry, 44*, 13-33.
- Borgen, F.H., & Barnett, D.C. (1987). Applying cluster analysis in counseling psychology research. *Journal of Counseling Psychology, 34(4)*, 456-468.

- Bost, K. K., Cox, M. J., Burchinal, M. R., & Payne, C. (2002). Structural and supportive changes in couples' family and friendship networks across the transition to parenthood. *Journal of Marriage and the Family*, *64*, 517-531.
- Bouchard, G., Sabourin, S., Lussier, Y., & Wright, J. (1998). Predictive validity of coping strategies on marital satisfaction: Cross sectional and longitudinal evidence. *Journal of Family Psychology*, *12*, 112-131.
- Breuss, C. J. S., & Pearson, J. C. (1993). "Sweet-pea" and "pussy cat:" An examination of idiom use and marital satisfaction over the life cycle. *Journal of Social and Personal Relationships*, *10*, 609-615.
- Burns, D. , Sayers, S. L., & Moras, K. (1994). Intimate relationships and depression: Is there a casual connection? *Journal of Consulting & Clinical Psychology*, *62*, 1033-1043.
- Chan, K. (1977). Individual differences in reactions to stress and their personality and situational determinants: Some implications for community health. *Social Science and Medicine*, *11*, 89-103.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*, 300-314.
- Cohen, S. & Wills, T. A. (1985) Stress, social support and the buffering hypothesis. *Psychological Bulletin*, *98*, 310-357.
- Colletta, W.D., Hadler, S. & Gregg, C. H. (1981). How Adolescents cope with the problems of early motherhood. *Adolescence*, *16*, 499-512

- Cowan, P.A., & Cowan, C. P. (1988). Who does what when partners become parents: Implications for men, women and marriage. *Marriage and Family Review*, 12, 105-131.
- Cowan, C. P., Cowan, P. A., Heming, G., Garrett, E., Coysh, W. S., Curtis-Boles, H., & Boles III, A. J. (1985). Transitions to parenthood: His, hers, and theirs. *Journal of Family Issues*, 6, 451-481.
- Cox, M. J., Paley, B., Burchinal, M., & Payne, C. C. (1999a). Marital perceptions and interactions across the transition to parenthood. *Journal of Marriage and the Family*, 61, 611-625.
- Cox, M. J., Paley, B., Payne, C. C., & Burchinal, M. (1999b). Marital Conflict and withdrawal: Associations with parent-infant interactions. In M. Cox & J. Brooks-Gunn (Eds.), *Conflict and closeness in families: Consequences for children and youth development*. Mahwah, NJ: Erlbaum.
- Crinic, K.A., Greenberg, M. T., Ragozin, A. S., Robinson, N. M. & Basham, R. B. (1983). Effects of stress and social support on mothers of premature and full term infants. *Child Development*, 54, 209-217.
- Cutrona, C. E. (1984). Social support and stress in the transition to parenthood. *Journal of Abnormal Psychology*, 93, 378-390.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125, 276-302.
- Edmonds, V. H. (1967). Marital conventionalization: Definition and measurement. *Journal of Marriage and the Family*, 29, 681-688.

- Erel, O. & Burman, B. (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. *Psychological Bulletin, 118*, 108-132.
- Feldman, H. (1971). The effects of children on the family. In A. Michel (Eds.), *Family issues of employed women in Europe and America*. Lieden, Germany: E. J. Brill.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*, 219-239.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986a). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology, 50*, 992-1003.
- Folkman, S., Lazarus, R. S., & Gruen, R. J , DeLongis, A. (1986b). Appraisal, coping, health status and psychological symptoms. *Journal of Personality and Social Psychology, 50*, 571-579.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218-226.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology, 2*, 300-319.
- Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science, 13*, 172-175.
- Frosch, C. A., Mangelsdorf, S. C., & McHale, J. L. (1998). Correlates of marital behavior at 6 months postpartum. *Developmental Psychology, 34*, 1438-1449.
- Glenn, P. J., & Knapp, M. L. (1987). The interactive framing of play in adult conversations. *Communication Quarterly, 35*, 48-66.

- Goldberg, W. A., Michales, G. Y., & Lamb, M. E. (1985). Husbands' and wives' adjustment to pregnancy and first parenthood. *Journal of Family Issues*, 6, 483-503.
- Harriman, L. C. (1986). Marital adjustment as related to personal and marital changes accompanying parenthood. *Family Relations*, 34, 233-239
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family*, 50, 93-98.
- Hobbs, D. F., & Cole, S. P. (1976). Transition to parenthood: A decade of replication. *Journal of Marriage and the Family*, 38, 413-417.
- Hoekstra-Weebers, J., Jaspers, J. P. C., Kamps, W. A., & Klip, E. C. (1998). Marital Dissatisfaction, psychological distress, and the coping of parents of pediatric cancer patients. *Journal of Marriage and the Family*, 60, 1012-1021.
- Hooper, R., Knapp, M. L., & Scott, L. (1981). Couples personal idioms: Exploring intimate talk. *Journal of Communication*, 31, 23-33.
- Huston, T. L. & Kramer-Holmes, E. (2004). Becoming Parents. In Anita L. Vangelisti (Ed.), *Handbook of Family Communication* (pp. 105-133). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ishii-Kunz, M. & Coltran, A. (1992). Predicting the sharing of household labor: Are parenting and housework distinct? *Sociological Perspectives*, 35, 629-647.
- Johnson, E. M. (2000). The child care and employment decision making process of expecting parents. Unpublished doctoral dissertation, The University of Texas at Austin.

- Koeske, G. F., & Koeske, R. D. (1991). Underestimation of social support buffering. *Journal of Applied Behavioral Science, 27*, 475-489.
- Lazarus, R. S., & Folkman, S. (1984). *Stress Appraisal and Coping*. New York: Spring Publishing Company.
- LeMasters, E. E. (1957). Parenthood as crisis. *Marriage and Family Living, 19*, 352-355.
- Levy-Shiff, R. (1994). Individual and contextual correlates of marital change across the transition to parenthood. *Developmental Psychology, 30*, 591-601.
- McCannell, K. (1988). Social Networks and the Transition to Motherhood. In R. Milardo (Ed.), *Families and Social Networks* (pp. 83-106). Newbury Park, CA: Sage.
- McCrae, R. R., & Costa, P. T. (1986). Personality, coping and coping effectiveness in an adult sample. *Journal of Personality, 54*, 385-406.
- McHale, S. M., & Huston, T. L. (1985). The effect of the transition to parenthood on the marriage relationship: A longitudinal study. *Journal of Family Issues, 6*, 409-433.
- Metz, M., & Lutz, G. (1990). Dyadic playfulness differences between sexual and marital therapy couples. *Journal of Psychology and Human Sexuality, 3*, 169-182.
- Monge, P. & Contractor, N. (1988). Communication networks: Measurement techniques. In C. Tardy (Ed.), *A handbook for the study of human communication: Methods and instruments for observing, measuring, and assessing communication processes* (pp. 107-138). Norwood, NJ: Ablex.
- Mount, M. (2005). Exploring the role of self disclosure and playfulness in adult attachment relationships. Unpublished doctoral dissertation, The University of Maryland at College Park.

- O'Hara, M. W., Hoffman, J. G., & Phillips, L. H. C. (1992). Adjustment in childbearing women: The postpartum adjustment questionnaire. *Psychological Assessment, 4*, 160-169.
- Osofsky, H. J. (1985). Transition to parenthood: Risk factors for parents and infants. *Journal of Psychosomatic Obstetrics and Gynecology, 4*, 303-315.
- Paykel, E. S.; Emms, E. M.; Fletcher, J (1980). [Life events and social support in puerperal depression](#). *British Journal of Psychiatry, 136*, 339-346.
- Pearlin, L.I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*, 2-21.
- Ptacek, J. T., Dodge, K. L. (1995). Coping strategies and relationship satisfaction in couples. *Personality and Social Psychology Bulletin, 21*, 76-84.
- Rosenberg, M. (1989) *Society and the Adolescent SelfImage* . Middleton, CT: Wesleyan University Press.
- Ruble, D. N., Flemming, A. S., Hackel, L. S., & Stangor, C. (1988). Changes in the marital relationship during the transition to first time motherhood: Effects of violated expectations concerning division of household labor. *Journal of Personality and Social Psychology, 55*, 78-87.
- Russel, C. (1974). Transition to parenthood: problems and gratifications. *Journal of Marriage and the Family, 36*, 294-302.
- Sadler, W. (1966). Play: A basic human structure involving love and freedom. Review of *Existential Psychology and Psychiatry, 3*, 237-245.

- Scherer, R. F., Wiebe, F. A., Luther, D. C., & Adams, J. S. (1988). Dimensionality of coping: Factor stability using the ways of coping questionnaire. *Psychological Reports, 62*, 763-770.
- Shapiro, A. F., Gottman, J. M., & Carrere, S. (2000). The baby and the marriage: Identifying factors that buffer against decline in marital satisfaction after the first baby arrives. *Journal of Family Psychology, 14*, 59-70.
- Skinner, E. A., Edge, K., Altman, J. & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin, 129*, 216-269.
- Spanier, G. B. (1976) Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family, 38*, 15-28.
- Stemp, P.S., Turner, R. J., Noh, S. (1986). Psychological distress in the postpartum period: The significance of social support. *Journal of Marriage and the Family, 48*, 271-277.
- Terry, D. J. (1991). Predictors of subjective stress in a sample of new parents. *Australian Journal of Psychology, 43*, 29-36.
- Terry, D. J. (1991b). Stress, coping and adaptation to new parenthood. *Journal of Social and Personal Relationships, 8*, 527-547.
- Tietjen, A. M., & Bradley, C. F. (1985). Social support and maternal psychosocial adjustment during the transition to parenthood. *Canadian Journal of Behavioral Science, 17*, 109-121.
- Vaillant, G. E. (1977). *Adaptation to life*. Boston: Little, Brown.

- Vaillant, G. E. (1994). Ego mechanisms of defense and personality psychopathology. *Journal of Abnormal Psychology, 103*, 44-50.
- Wallace, P. M., & Gotlib, I. H. (1990). Marital adjustment during the transition to parenthood: Stability and predictors of change. *Journal of Marriage and the Family, 52*, 21-29.
- Wandersman, L., Wandersman, A., & Kahn S. (1980). Social support in the transition to parenthood. *Journal of Community Psychology, 8*, 332-342.
- Ward, J.H. (1963). Hierarchical Grouping to Optimize an Objective Function. *Journal of the American Statistical Association, 58*, 236-244.
- White, L. K., & Booth, A. (1985). The transition to parenthood and marital quality. *Journal of Family Issues, 6*, 435-449.
- Zimet, G. Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment, 52*, 30-41.