

5-2008

Marital Satisfaction and Parental Stress

Jill Hess

Utah State University

Follow this and additional works at: <https://digitalcommons.usu.edu/etd>

 Part of the [Clinical Psychology Commons](#)

Recommended Citation

Hess, Jill, "Marital Satisfaction and Parental Stress" (2008). *All Graduate Theses and Dissertations*. 126.
<https://digitalcommons.usu.edu/etd/126>

This Thesis is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact dylan.burns@usu.edu.



MARITAL SATISFACTION AND PARENTAL STRESS

by

Jill Hess

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

of

MASTER OF SCIENCE

in

Family, Consumer, and Human Development

Approved:

Ann M. Berghout Austin, Ph.D.
Major Professor

Thorana S. Nelson, Ph.D.
Committee Member

Deborah Ascione, M.S.
Committee Member

Byron R. Burnham, Ed.D.
Dean, School of Graduate Studies

UTAH STATE UNIVERSITY
Logan, Utah

2008

Copyright © Jill Hess 2008

All Rights Reserved

ABSTRACT

Marital Satisfaction and Parent Stress

by

Jill Hess, Master of Science

Utah State University, 2008

Major Professor: Dr. Ann M. B. Austin
Department of Family, Consumer, and Human Development

This study examined the correlations between marital satisfaction (MS) and parental stress (PS). The Kansas Marital Satisfaction Scale (KMSS) was used to measure marital satisfaction. Parental stress was measured at the same time through the use of the Parent Stress Index-Short Form (PSI-SF). Twenty-seven traditionally married couples were recruited through the CCAMPIS Grant at Utah State University. Minimum criteria were that at least one of the couple needed to be eligible for Pell grants, registered full time at Utah State University, and have at least one child. This study found that MS and PS correlate in many ways, most significantly in the areas of parental distress and parent child interactions. We found that the variance in mothers' MS was correlated with fathers' MS and fathers' interaction with the target child. Fathers' MS was correlated with mothers' MS.

(69 pages)

ACKNOWLEDGMENTS

I would like to thank all the committee members who made this research possible.

I would especially like to recognize Dr. Ann M. B. Austin for her vital part in planning, implementing, and revising this research. Thank you Dr. Austin for your continued dedication, support, suggestions, recognition, and friendship.

I would also like to thank my family: my mother and father who taught me the principle of determination and finishing what you start; my sisters for the hours spent editing and revising my ideas.

Jill Hess

CONTENTS

	Page
ABSTRACT.....	iii
ACKNOWLEDGMENTS.....	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER	
I. INTRODUCTION.....	1
Theoretical Framework.....	2
What Is Known?.....	3
What Is Not Known?.....	3
Purpose of the Study.....	4
Research Questions.....	4
Summary.....	5
II. LITERATURE REVIEW.....	6
Theoretical Framework.....	6
Introduction to Marital Satisfaction literature.....	7
Marital Satisfaction (MS)	9
Kansas Marital Satisfaction Scale (KMSS).....	17
Summary.....	17
III. METHODOLOGY.....	19
Sample.....	19
Instruments.....	20
Procedures.....	22
IV. RESULTS.....	24
Question 1.....	29
Question 2.....	31
Question 3.....	31

V.	DISCUSSION.....	38
	Correlations between Mothers' and Fathers' Marital Satisfaction.....	38
	Correlations between Marital Satisfaction and Parental Stress.....	39
	Summary.....	44
	Limitations.....	45
	Implications for Practice.....	45
	Implications for Further Research.....	46
	REFERENCES.....	48
	APPENDICES.....	52
	Appendix A: Informed Consent.....	53
	Appendix B: Demographic Survey.....	57
	Appendix C: Kansas Marital Satisfaction Scale.....	60

LIST OF TABLES

Table		Page
1	Means (SD) and Ranges for Mothers' and Fathers' Scores on Overall MS, Overall PS, and PS Subscales.....	26
2	Demographic Characteristics, Percentages of Sample.....	28
3	Correlations Among Marital Satisfaction, Parental Stress, and Demographic Factors ($N = 27$).....	32
4	Summary of Regression Analysis for Variables Predicting Mothers' MS ($N = 27$).....	35
5	Summary of Regression Analysis for Variables Predicting Fathers' MS ($N = 27$).....	36
6	Outliers for KMSS and PSI-SF as Shown in Couples.....	37

LIST OF FIGURES

Figure		Page
1	Boxplots for marital satisfaction scores for fathers and mothers.....	25
2	Distribution of differences among couples MS scores.....	25
3	Boxplots for parental stress scores for fathers and mothers.....	27
4	The proposed relationship between mothers' MS and fathers' MS.....	43

CHAPTER I

INTRODUCTION

Nine out of 10 people are expected to marry sometime in their lives (Bergman, 2006) and this marriage is expected to be a source of happiness and joy. However, first marriages end in divorce at a rate of nearly 50% (Bergman). Kreider (2005), reporting for the U.S. Census Bureau, found that in 2001 the median length of first marriages was about 8 years.

Because of these statistics, some practitioners are concerned about marital stability. “The justification for this emphasis on marriage has been correlational research demonstrating that stable, fulfilling marriages are associated with improved physical and mental health and higher education and economic achievement for parents and children” (Karney & Bradbury, 2005, p. 171). Stable and satisfying marriages thus appear to coexist with positive adult development and healthy adult lifestyles. It is important to identify variables that correlate with more or less satisfying marriages.

During the first 8 years of marriage, many couples become parents. “Becoming a parent is likely to be the biggest and most permanent decision in an individual’s life” (Twenge, Campbell, & Foster, 2003, p. 13). When spouses become parents, a decrease in marital satisfaction is often documented, perhaps as a result of the demands of new roles (Crnic & Booth, 1991; Perren, Von Wyl, Burgin, Simoni, & Von Klitzing, 2005; Purdom, Lucas, & Miller, 2006). Extant literature is sparse in this area, and it is unclear whether the decrease in marital satisfaction is correlated with the overall demands of parenthood or

to the specific demands of parenting an infant.

At present, the literature is too scanty to answer this question, although it is an important issue because of the implications for intervention. If marital satisfaction is linked with age of child or number of children, support can be given to parents specifically targeted to the developmental stage of the child or to the size of the sibling group. It is thus important that we look at the relationships among parental stress (PS), age and number of children, and marital satisfaction (MS). If we learn that MS is correlated with age of child, this information will help practitioners in their work to support healthy marriages.

Theoretical Framework

The theoretical framework for this study is family systems theory (FST). FST was built upon general systems theory (GST; von Bertalanffy, 1968). Each individual is seen in relation to several different systems (e.g., individual, marriage, parenting, immediate family, extended family, work). The individual is not able to completely separate different subsystems or concepts and, therefore, must be viewed as participating in those different interactive media (Becvar & Becvar, 1999). Interaction is part of the system; people are not able to act independently of each other. Each person's behavior builds upon others', thus creating a circular relationship (Becvar & Becvar). Marriage is one subsystem within the family system. Within marriage there are many variables that correlate with satisfaction, and one variable appears to be parenting. As children grow, parenting tasks change and these changes have the potential to influence the marital subsystem in different ways. The purpose of this study was to examine the correlates

among marital satisfaction, parenting stress, and age of child. This investigation will further contribute to our understanding of family systems and the marriage subsystem.

What Is Known?

Most of the literature exploring the relationship between MS and PS has involved the parents of children with disabilities (Hadadian, 1994; Oelofsen & Richardson, 2006). Additionally, a handful of studies have examined the link between MS and work (Crnic & Booth, 1991; Deater-Deckard & Scarr, 1996; Scharlach, 2001), lack of understanding relative to child development (Crnic & Booth) and the age (Faulkner, Davey, & Davey, 2005; Perren et al., 2005; Purdom et al., 2006; Scharlach) and number of children (Abbott & Brody, 1985; Pittman & Lloyd, 1988; Twenge et al., 2003). Parents of children with disabilities consistently report higher PS and lower MS than parents of normatively developing children (Deater-Deckard, 1998; Hadadian). Other significant correlations between MS and PS have been found for parents who work outside the home (Crnic & Booth; Deater-Deckard & Scarr; Scharlach), for parents with younger children (Purdom et al.; Scharlach) and parents who have more than two children (Twenge et al.). As noted above, the literature is sparse for MS and PS by age of children and number of children.

What Is Not Known?

In addition to the paucity of literature regarding MS, PS, and number and ages of children, previous studies correlating MS and PS have investigated PS as a unitary concept. No studies to our knowledge have broken PS into specific factors relative to the

parent-child system and correlated these with MS. The aim of this study was to correct that omission. PS was measured by the Parent Stress Index Short Form (PSI-SF; Abidin, 1995), which breaks PS into three factors. Participants included parents with children from birth to eight years in order to examine the correlates between age and number of children, MS, and PS.

Purpose of the Study

This study examined married mothers and fathers in Cache, Rich, and Box Elder counties with children between birth and 8 years of age. The dependent measure was self-reported MS as measured by the Kansas Marital Satisfaction Scale (KMSS). Using the PSI-SF, PS was also measured through self-report. Correlational analyses were conducted to determine the relationship between MS and PS for parents with children of different ages and varying number of children. The results of this study may provide more specific information for practitioners in supporting healthy marriages.

Research Questions

The following questions were investigated:

1. What are the relationships among MS, overall PS, and PS components?
2. What are the relationships among MS, and age of children and number of children?
3. What are the relationships among overall PS and PS components, and age of children and number of children?

Summary

Most people will be married at one point in their life. Lower MS correlates with higher PS. Being the parent of a younger child also correlates in some studies with lower MS (Crnic & Booth, 1991; Perren et al., 2005; Purdom et al., 2006), as well as parenting more than two children (Twenge et al., 2003). However, the literature is sparse regarding MS, PS, and age and number of normatively developing children. Further, PS has previously been examined only as a unitary construct in the MS/PS literature. If we are able to see how specific factors within PS correlate with MS, age of child, and number of children, we may find better ways to help young couples who are facing lower MS.

CHAPTER II

LITERATURE REVIEW

Theoretical Framework

FST was built upon the GST developed by von Bertalanffy (1968). FST has evolved and developed in an attempt to understand the dynamics of a family (Becvar & Becvar, 1999). From the systems perspective, each individual is seen in relation to other individuals in the family or system (Becvar & Becvar). Each individual affects the others in the system, which in turn affects their experience of the family and family relationships. People must be understood in relation to their context and system (Becvar & Becvar). Groups form subsystems within the family, each with its own set of roles and functions. Marriage is one of the subsystems included in the larger system of the family.

Several key assumptions and concepts in FST relate to this study. First, *recursion* includes the ongoing shared responsibility and mutual influence that members of a subsystem have in each subsystem (Becvar & Becvar, 1999). Through this, it is recognized that all behaviors were preceded by other behaviors, which build upon each other and the individual is the one who places significance on them (Becvar & Becvar). Second, *wholeness* is the understanding that the whole is greater than the sum of the parts within systems. For example, as two people interact, they are not independent of each other. Rather, the interaction is a third element of the system. Therefore, as more people enter the system, a greater degree of complexity is realized (Becvar & Becvar). Finally, *structural coupling* explains the degree to which systems are able to coexist, referring to

the compatibility or congruence of two or more systems. A system survives through fitting with other systems as well as other aspects of their context or environment (Becvar & Becvar).

The notion of triangles is also important in the discussion of MS and PS. Triangles evolve through relationship disharmony and involve the inclusion of a third person into a dyad to relieve the distress (Kerr, 1981). These assumptions provide support for the study of MS, its correlation with PS, and specific family demographics, including family size and age of children. According to FST, marital, parenting, and child systems are assumed to be affected by each other. The MS literature will be discussed next.

Introduction to Marital Satisfaction Literature

A large body of research has been done on MS in the past 15 years (Bradbury, Fincham, & Beach, 2000). Bradbury et al. completed a review of a decade's worth of MS research in 2000. This research has provided a wealth of information regarding the complex topic of MS, including factors that may influence MS. Among those factors are communication, spousal support, individual characteristics, and contextual issues.

Gottman and others have given considerable attention to the ways that communication influences MS (Bradbury et al., 2000; Driver & Gottman, 2004; Gottman & Silver, 1994; Karney & Bradbury, 2005). Embedded within their consideration of communication are affectivity, conflict resolution, and interactional patterns. Regarding affectivity, the overall review of MS has shown that nondistressed couples have lower

levels of negative reciprocity and reactivity (Bradbury et al.). Additionally, Gottman and Silver have found that ways in which couples resolve conflict and their overall patterns of interaction are other potential determinants of MS.

Bradbury et al. (2000), along with other researchers, have found the level of spousal support to be another factor in the amount of MS a couple feels (Bradbury et al.; Heffner, Kiecolt-Glaser, Loving, Glaser, & Malarkey, 2004; Karney & Bradbury, 2005). Employment is part of spousal support and has been linked to levels of MS, specifically including hours worked and loss of job (Faulkner et al., 2005; Karney & Bradbury). Researchers have found that the number of hours the husband works outside the home influences not only his MS but his spouse's as well (Faulkner et al.; Karney & Bradbury).

Bradbury et al. (2000) also indicated that individual characteristics and personal attributions covary with negative behaviors during marital problem-solving discussions. For example, affect or emotional expression seems to influence MS. Research so far has shown that negative affect is detrimental while others show that it may be unrelated to MS; more refinement needs to be done on the role it plays (Bradbury et al.).

Another large area of research into MS includes how the environment and context affect the meaning and implications of interactions between married partners (Bradbury et al., 2000). "Marriages exist in highly complex, multifaceted environments, of course, and a full understanding of how these environments interact and impinge upon marriage is just beginning to develop" (Bradbury et al., p. 969). One such context is parenting. Children influence the way couples experience marriage (Bradbury et al.). There appears to be a statistically significant link between showing compassionate, supportive behavior

to each other as spouses and the positive well being of one's children (Bradbury et al.). Other contextual features examined in this literature include level of stress in regard to parenting tasks, characteristics of the child, parent-child interactions, and number and age of children. This research is especially helpful as it begins to specify characteristics of the individual, child, and marriage that increase the vulnerability of a family as it transitions into parenthood (Bradbury et al.). The research has provided a breadth of information without much depth (Bradbury et al.). That is, findings have not been replicated, nor have the most rigorous instruments been used with regard to PS.

As shown above, MS is influenced by several different factors. These will next be discussed in depth and gaps in the literature will be noted.

Marital Satisfaction (MS)

Communication

MS is the level of commitment a person has towards his or her marriage and spouse. When looking at MS it is important to examine those factors that help or hinder satisfaction. Integral factors involved in MS include communication and spousal support. John Gottman, a leading researcher in the field of marriage, describes key criteria that can lead to dissatisfaction in a marriage. Gottman refers to these as "the four horsemen," which include criticism, contempt, defensiveness, and stonewalling (Gottman & Silver, 1994). Criticism includes an opinion, judgment, or disapproval of what is wrong or bad about a spouse. Contempt is distinguished from criticism by the intention to insult and psychologically abuse a spouse. This includes the use of words and body language and

throwing insults at a spouse's sense of self. Defensive phrases, along with the stance they express, lead to conflict rather than resolution. This defensiveness adds to marital troubles (Gottman & Silver). Finally, stonewalling frequently occurs when a couple is talking things out. A stonewaller removes him or herself from the discussion by becoming a "stone wall." It is a powerful act, and "conveys disapproval, icy disdain and smugness" (Gottman & Silver, p. 5).

Gottman and Silver (1994) also discovered that contrary to some public opinions, expressing anger and disagreement throughout the course of a marriage may help the marriage partners become stronger than those marriage partners that suppress the same information. Research has found that during conflict, happy couples demonstrate a ratio of five positive behaviors to every one negative behavior (Gottman & Carrere, 2000). Problems become apparent in a marriage when complaints are unacknowledged and a spouse continually repeats the same act that precipitated the complaint (Gottman & Silver). Perren et al. (2005) supported this idea by finding that decreases in communication and sensitivity were a major source of declining satisfaction in a marriage. The quality of communication associated with marital outcomes is continuing to gain evidence over time. When spouses experience strain, it can be assumed that their marital interaction and communication might be primed for more critical comments and blaming (Rogers & White, 1998).

Spousal Support

When looking at MS, spousal support must be considered. Research has shown

supportive spouses react more positively to one another. “The more satisfied spouses are with their marriage, the more likely they will approach one another in attempts to elicit support, and the more positively each will respond to these requests” (Heffner et al., 2004, p. 250). Feeling heard and validated by a spouse helps to increase the support felt by each spouse. Also, as spouses work on trying to improve the marriage, the support they feel may also be increased. Individuals who reported higher rates of spousal support were more likely to report higher levels of MS, fewer symptoms of depression, and more manageable stress levels (Purdom et al., 2006). As spousal support increases, MS also increases (Purdom et al.). However, what happens to MS when one or both spouses are stressed by specific day-to-day responsibilities, child characteristics, or parent-child relationships coupled with age and number of children? When demands external to the marriage are high, even those couples with good coping strategies and skills may find it difficult to exercise those skills effectively (Karney & Bradbury, 2005). “Marriages taking place in more stressful contexts may be more challenging simply due to the increased severity of the obstacles that couples face inside and outside of their marriages” (Karney & Bradbury, p. 173).

Contextual Factors: Parenting Stress (PS)

In this study, we will examine the correlation between MS and PS.

Deater-Deckard (1998) reported that “parenting stress is experienced as negative feelings toward the self and towards the child or children, and by definition these negative feelings are directly attributable to the demands of parenthood” (p. 315). The parenting stress

literature can be divided into areas of parent knowledge and skills, ages and number of children, and special family considerations including disabilities of children and stresses associated with student parenthood. Studies linking each area with MS will be reviewed and gaps in the literature discussed.

Parent Knowledge and Skill

Scharlach (2001) reported that a working parent experiences added stress when raising a child. Those same working parents encounter stress in their roles at a greater degree than non-parent working couples (Scharlach). Raising a child can be stressful. Parenting behavior, family functioning, and parenting attitudes, along with many aspects of children's functioning, often indicate a negative link to major life stressors (Crnic & Booth, 1991). Research by Belsky (1984) showed that basic contributors to PS include parent personality, lack of social support, child characteristics, and contextual sources of stress. Similarly, Deater-Deckard and Scarr (1996), and Webster-Stratton (1989) found that parenting adds considerable stress for both mothers and fathers and may show a relationship to MS. "It is well known that people who are stressed in other areas of their life also report being unhappily married" (Katz & Gottman, 1993, p. 941). This is illustrated, among other things, through parents' feelings regarding the distribution of child care and household tasks. Changes in a couple's marital quality were linked with satisfaction specifically in regard to child care and household tasks (Perren et al., 2005).

Poorer parenting can be associated with more PS (Deater-Deckard, 1998). Parents' level of knowledge regarding child development and children's behavior may

contribute to parents' perceptions of daily hassles or minor stressors (Crnic & Booth, 1991). Crnic and Booth reported that developmental changes in the child, especially when the child is young, may exacerbate the minor stressors that parents face. Parents who understand the intricacies of developmental processes may be less stressed by everyday difficulties of parenting as compared to parents with a less sophisticated, more concrete understanding of children (Crnic & Booth). As a child develops, he or she acquires more abilities and skills and participates in a greater range of situations and behaviors, which in turn may increase PS. The events themselves are not as stressful to parents as are their perceptions of the events (Crnic & Booth). This leads to the suggestion that a parent's attributions and expectations about his or her child's behavior may undergo alterations across developmental periods (Crnic & Booth).

Some research suggests as a parent receives the resources needed to perform his or her role, satisfaction with that role is higher (Rogers & White, 1998). One of these resources is parenting education. Education involves teaching parents new concepts and skills and how to relate them to parenting their children. This can help a parent better understand the developmental level of his/her child, thus leading to less stress about what to expect. Other resources for parents may include therapeutic interventions including individual or group therapy. This study examines specific areas of PS including distress felt in everyday parenting tasks, child characteristics, and distress felt in parent-child interactions. Knowing the specific area(s) of PS that correlate significantly with lower MS will encourage a closer fit between the needs of the parents and the interventions.

Ages and Number of Children

Parenting places a new level of strain on a marriage. Decline in MS is commonly reported after the birth of a first baby as the couple transitions into parenthood (Perren et al., 2005). Increased conflict and negativity within the family relationship can be manifested in the period of time after the arrival of a new family member, shown by some mothers' and fathers' decreases in MS (Deckard-Deater, 1998). It is apparent that children have the potential to add a degree of stress into marriage. For example, in one study, both husbands and wives showed decreased MS when children under the age of 18 were in the home (Faulkner et al., 2005).

Scharlach (2001) found that parents with children under the age of six were more likely to have higher levels of stress in regard to their parenting roles. This led to the discovery made by Purdom et al. (2006) that couples with no children and parents with older children had higher levels of well being than parents of younger children. Therefore, it appears that more stress is perceived by parents of younger children. Less satisfaction felt in regard to parenting seems to be linked to less satisfaction expressed about the marriage (Van den Troost, 2005). General theoretical perspectives such as FST predict that these feelings of satisfaction and reward in one role will increase through extension into satisfaction with other roles (Rogers & White, 1998). Previous work has not examined the relationship between age of child and MS as measured by the KMSS. We will correct this exclusion by examining the possible relationship between age of child and KMSS scores. (For the interested reader, correlations between the KMSS and other MS measures are reported on page 17.)

The literature regarding the number of children and correlation to MS is not definitive (Abbott & Brody, 1985; Pittman & Lloyd, 1988; Twenge et al., 2003). Abbott and Brody found more than two children had a greater negative correlation with MS. Other studies have shown opposite results. Pittman and Lloyd found no negative correlation between the number of children and the amount of MS a couple felt. A more current meta-analysis by Twenge et al. reported that the more children a couple have, the lower their MS as compared to those with fewer children. However, stronger effect size is shown when comparing parents and non-parents than correlating the number of children. This is illustrated by the finding that 38% of women with an infant reported a high degree of MS as compared to 62% of women without children (Twenge et al.). Twenge et al. were unable to determine whether more than two children had a greater negative effect on MS. One of the aims of our study was to look at the number of children a couple has and see if there is a negative, positive, or neutral correlation with degree of MS reported by a couple.

Special Considerations About Parenting

Parenting is often viewed as more stressful for parents who have less knowledge, less perceived competence, and fewer emotional and instrumental supports, or when the parent views the child or children as being behaviorally difficult (Deater-Deckard, 1998). The parent's perceptions of obnoxious child behaviors are an important aspect of PS (Deater-Deckard). Perceptions of child behavior, while integral to the amount of PS felt by parents, are not the sole reason for higher levels of stress.

Other factors associated with PS may include difficult temperament, physical disabilities, congenital diseases, respiratory illness, developmental delay, and cognitive impairment (Deater-Deckard, 1998). Parents of a child with a disability report higher levels of PS than parents of normative developing children (Hadadian, 1994; Oelofsen & Richardson, 2006). Characteristics of the child may also correlate with higher amounts of PS (Deater-Deckard). Reducing PS can improve the psychological health of the parent (Deater-Deckard). As this information is better known, interventions may be more successful in helping parents reduce levels of PS (Deater-Deckard). The PSI-SF provides a measure of difficult child characteristics, thus adding another dimension to our understanding of MS.

Another important factor in this study is that our participants are students as well as parents. Little research has been conducted on parenting and marital satisfaction while being a student (Anderson, 2001). Research done by Lili Anderson focused on this specific area. The demographics of her participants were similar to the participants in our study; participants were mostly Caucasian and members of The Church of Jesus Christ of Latter-day Saints. Anderson found that parents who are students feel as successful in academic life as their non-parent counterparts. However, higher school involvement indicated higher levels of parental distress in both mothers and fathers (Anderson). Anderson also found that student parents reported feelings of lower success in their marriages, which may be related to the finding that parents felt it more difficult to meet competing demands of school, work, and family life than did non-parents. While the parents in Anderson's study indicated lower feelings of success, the majority still rated

themselves as successful rather than unsuccessful.

Kansas Marital Satisfaction Scale (KMSS)

To measure the degree of MS in a marriage, we used the Kansas Marital Satisfaction Scale (KMSS; Schumm, Scanlon, Crow, Green, & Buckler, 1983). There are numerous marital adjustment/satisfaction scales, and many studies have used the Dyadic Adjustment Scale (DAS; Spanier, 1976), the Revised Dyadic Adjustment Scale (RDAS; Busby, Christensen, Crane, & Larson, 1995), the Locke-Wallace Marital Adjustment Test (MAT; Driver & Gottman, 2004; Heffner et al., 2004; Katz & Gottman, 1993) and Enrich Marital Satisfaction (EMT; Purdom et al., 2006). The KMSS has been found to be as effective as the RDAS in distinguishing between maritally distressed and nondistressed individuals (Crane, Middleton, & Bean, 2000).

Summary

With divorce rates from first marriage at nearly 50%, it is important that an examination of the factors relating to MS is made. Our study examined one such factor of MS, that of PS. A large body of research has suggested correlations between the degree of MS and PS (Crnic & Booth, 1991; Perren et al., 2005; Purdom et al., 2006), but specific research has not been done to show the relationship between MS and specific components of PS such as those discussed above. What is the correlation between MS, overall PS, and PS components? Our study measured the amount of MS and PS individual spouses feel in their marriage relationship and then looked for correlations that

could be made from the information received. We know that being the parent of a younger child may decrease marital satisfaction (Crnic & Booth; Perren et al.; Purdom et al.). This information leads us to question what the relationship is between age of child and MS. Our literature review has shown different ideas about how the number of children may affect MS. Abbott and Brody (1985) found that mothers with two or more children reported greater conflict and lower MS whereas Pittman and Lloyd (1988) found no negative correlation between number of children and MS. Twenge et al. (2003) reported that while the number of children is significant in the levels of MS, becoming a parent has a greater effect than how many children one has. The current study has the potential to contribute to the literature by furthering our understanding of MS and the specific factors of PS that significantly correlate with lower MS.

The following questions were investigated: What are the relationships among MS, overall PS, and PS components? What are the relationships among MS, and age of children and number of children? What are the relationships among overall PS and PS components, and age of children and number of children?

CHAPTER III

METHODOLOGY

Sample

Participants for this study included 27 couples with English-as-first-language children ages birth to eight. Participants were drawn from those student parents participating in CCAMPIS, a federally funded research and demonstration project wherein student parents receive day care subsidies to assist them in completing their higher education. To participate in CCAMPIS at least one of the parents must be a student at Utah State University, and their child(ren) must be attending one of approximately 20 family home childcare programs or three daycare centers in Logan, Utah. Although parents in the larger sample include single parents, parents in common-law marriages, and same-sex couples, only parents in traditional marriages were included in this subsample.

Parents were eligible for CCAMPIS day care subsidies if they were enrolled full-time at Utah State University, were Pell Grant recipients, and were working toward completion of an undergraduate, 4-year degree. Children whose parents were participating in this subsample attended child care at least 20 hours per week and did not have any known (frank) developmental delays. Informed consent (Appendix A) was obtained before participating in the data collection phase of the project.

Instruments

Demographic Survey

Parents completed a demographic survey (Appendix B). Questions were asked regarding parental education, marital status, parent occupation (if any), number of people in the family and household, general financial status, ethnic background, and language spoken.

Marital Satisfaction

Parents' marital satisfaction was assessed by the Kansas Marital Satisfaction Scale (Schumm et al., 1983; Appendix C). The KMSS is a short and precise measurement including three questions: "How satisfied are you with your husband/wife as a spouse?," "How satisfied are you with your marriage?," and "How satisfied are you with your relationship with your husband/wife?" Each item on the KMSS has a possible score ranging from one to seven. Scores of seven indicate a high degree of satisfaction while scores of one indicate a low degree of satisfaction. A total score on the KMSS could range from three to 21.

Cronbach's alpha for the KMSS has been reported at .84 (Schumm et al., 1985) and .96 (Jeong, Bollman, & Schumm, 1992). Test-retest reliability was .71 (Schumm et al.). Regarding validity, couples scoring in the distressed range on the KMSS also scored in the distressed range on the RDAS and DAS (Crane et al., 2000). Schumm et al. and Jeong et al. found the KMSS to be valid in discriminating between distressed and nondistressed couples.

Parental Stress

Parental stress was measured using the total stress score from the Parent Stress Index-Short Form (PSI-SF; Abidin, 1995) and three subtest scores. Questions on the PSI-SF are used to measure the stress people experience in their parental roles. The PSI-SF consists of 36 items which factor into three scales: Parental Distress (PD), Difficult Child Characteristics (DC), and Dysfunctional Parent-Child Interactions (PCDI). Another scale, Defensive Responding (DR) is built in to examine the degree to which the parent presents a strong bias to give favorable impressions of him/herself. If the parent scores less than 10, the scores are scrutinized to see which of three options is most likely. These three options include: parent is portraying him/herself as a very competent individual; parent is not invested in his/her role as parent; parent is a very competent parent who has excellent relationships with others and handles the responsibility of parenting very well. The PSI is designed for early detection of problems that hinder the normal psychological development of children as well as to identify parents that may be at risk for dysfunctional parenting (Abidin). The items are presented in the form of statements and require a response on a 5-point scale as follows: that include strongly disagree (1), disagree (2), unsure (3), agree (4), and strongly agree (5). Higher levels of parental stress are indicated by higher scores overall and on subscales (Abidin). The PSI has been empirically validated through numerous studies with a wide variety of uses. Webster-Stratton (as cited in Abidin) found greater levels of stress among single mothers than those in long-term relationships. MS has also been correlated with PSI-SF scores; “maternal stress negatively correlated with and was predictive of marital satisfaction” (as

cited in Abidin, p. 48). Reliability and validity studies show a Cronbach's alpha of .91 for the total stress score, with test-retest reliability for spans of one to three months of .84 (Abidin).

Procedures

Participants were recruited through advertisements placed in the *Herald Journal* and *USU Statesman* newspapers, and the married student housing newsletter.

Participants were also referred to the project from the Cache Valley office of Utah Workforce Services, the Utah State University Registrar's Office, and USU's Reentry Center. Although single parents, cohabitating parents, and nontraditional parents were part of the larger study, only parents in traditional marriages were included in this subsample.

After participants received notification that they had been awarded a CCAMPIS stipend, the project manager sent them an application packet including an enrollment form and a statement of the policy and procedures for receiving child care subsidies. The potential participants returned the packets to the project manager via mail or by dropping them off at the on-campus office of Bridgerland Child Care Resource and Referral (CCR&R). Once the application packet was received and certified by the project manager and informed consent was given, the participants received the second packet with research instruments, which were either picked this up on campus at the CCR&R office or received in the mail. Included in the second packet was the demographic questionnaire and separate PSI-SF and KMSS for both parents. Parents were asked to

complete the KMSS separately from their spouses and to put their completed questionnaire in separate envelopes and seal them. Parents who did not return this packet within a week were called by the project manager and encouraged to complete the instruments. However, all parents received child care subsidies even if they chose not to participate in the research study. Twenty-seven married couples qualified for this subsample and all agreed to participate in the research part of the project.

After research forms were returned to the CCR&R office, they were coded with a participant identification number on all forms. Data were kept confidential, according to IRB procedures.

CHAPTER IV

RESULTS

All analyses were done using SPSS 15.0. Data were entered once each by two individuals and then compared for errors. After errors were corrected, the next step was to look at the general distribution of the data to see if they were normally distributed. The KMSS distribution was skewed to the right (fathers $M = 18.37$, $SD = 2.72$, range = 13-21; mothers $M = 18.59$, $SD = 2.45$, range = 12-21), indicating that participants generally recorded high satisfaction scores as shown in Figure 1. Although the means were high, the scores were still normally distributed (see Figure 2). The PSI-SF subscales (see Table 1) as well as the overall PSI-SF (fathers $M = 70.26$, $SD = 13.63$, range = 46-94; mothers $M = 63.63$, $SD = 13.80$, range = 39-98) indicated that mothers and fathers recorded similar amounts of stress as shown in Figure 3, although mothers indicated more scores in the lower, less stressed end of the distribution.

As summarized above, the participants for this study were 27 married couples, drawn from a larger group of participants in the CCAMPIS grant. As part of the conditions for the grant at least one of the couple was attending Utah State University as an undergraduate student. Participation rate was 100%. None of the couples in the sub sample declined participation. Mothers ranged in age from 19 to 33 years of age ($M = 26.56$, $SD = 3.87$). Fathers ranged in age from 22 to 49 years of age ($M = 29.30$, $SD = 5.44$). Number of children in the family ranged from 1 to 4 (Mode (11) = 1).

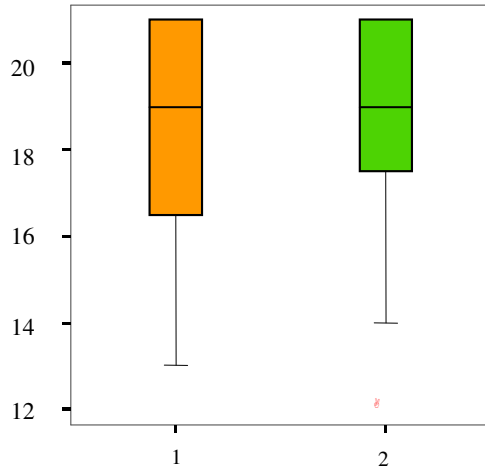


Figure 1. Boxplots for marital satisfaction scores for fathers (1) and mothers (2).

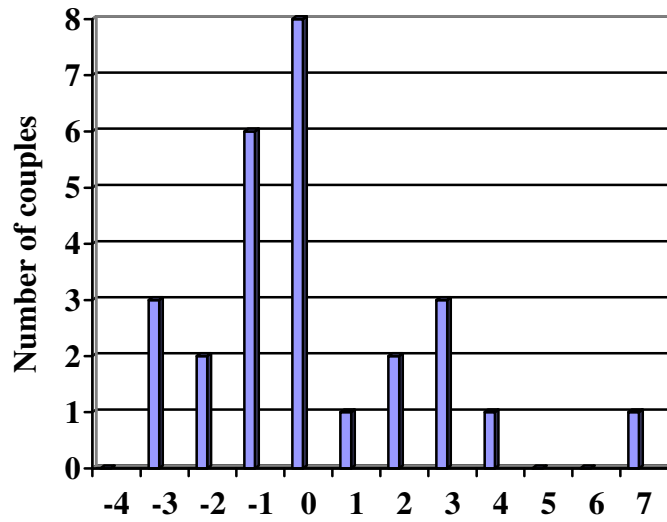


Figure 2. Distribution of differences among couples' MS scores.

Table 1

Means (SD) and Ranges for Mothers' and Fathers' Scores on Overall MS, Overall PS, and PS Subscales

	Mother	Father
	<i>N</i> = 27	<i>N</i> = 27
KMSS total	18.59 (2.45) 12-21	18.37 (2.72) 13-21
PSI DR	14.15 (3.97) 7-22	14.93 (3.98) 7-21
PSI PD	23.70 (6.92) 12-39	25.11 (6.50) 13-37
PSI PCDI	17.04 (4.42)* 12-26	19.96 (4.74)* 13-29
PSI DC	22.89 (5.60) 13-37	24.56 (6.28) 13-36
PSI total	63.63 (13.80)* 39-98	70.26 (13.63)* 46-94

*pairs differ significantly, $p \leq .05$

When completing the PSI, the parents were asked to focus on their relationship with the target child. In families with more than 1 child, parents were specifically asked by the researchers to focus on a particular child in a particular age category as needed for a balanced sample. Thus, 13 couples focused on a child in the preschool age range (2-5) to fill out the PSI, another 10 couples filled out the questionnaire with regard to children younger than 2 years. The remaining 2 couples reported their PS focusing on their kindergarten age child.

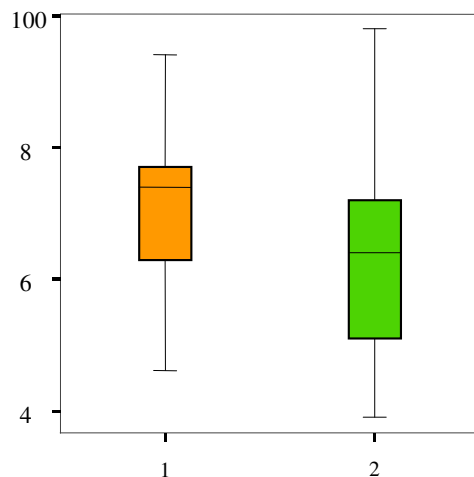


Figure 3. Boxplots for parental stress scores for fathers (1) and mothers (2).

The respondents were mostly European American. Table 2 gives the breakdown for ethnicity. European American mothers constituted 96% (26) of the sample, European American fathers accounted for 82% (22) of the total sample. Sixty-three percent (17) of the mothers were registered as full-time students at Utah State University. Seventy-four percent (20) of the fathers were registered as full-time students. Of all couples in the study, 37% (10) of spouses both registered as students, either full-time or part-time, at the time of the survey. Parents who were registered as students and worked as well constituted 26% (14), with mothers making up 19% (5) and fathers 33% (9).

Twenty-six percent (14) of the couples included a spouse that was employed full-time; see Table 1 for breakdown. Average work week ranged from 4-40 hours per week (mothers $M = 19.07$, $SD = 18.37$, fathers $M = 15.74$, $SD = 16.42$). Fifty-six percent (15) of the couples reported an average income range between \$15,000-\$29,999 per year.

Table 2

Demographic Characteristics, Percentages of Sample

	<i>Mothers</i>	<i>Fathers</i>
	<i>% (n)</i>	<i>% (n)</i>
Ethnicity		
European American	96% (26)	82% (22)
Latino	4% (1)	4% (1)
Asian		10% (3)
African American		4% (1)
Student		
Full-time employed	4% (1)	
Part-time employed	19% (5)	33% (9)
Not employed	40% (11)	40% (11)
Non student		
Full-time employed	33% (9)	19% (5)
Part-time employed	4% (1)	8% (2)
Not employed		

Another 25% (7) reported an income range below \$15,000. The remaining 19% (5) reported an income above \$30,000 per year. The majority of mothers (63%, 17) as well as fathers (66%, 18) reported completing some college or vocational training.

Question 1

What is the correlation among MS and overall PS and PS components (i.e., PSI-SF subscales)? For overall scores and subscale scores, Pearson correlations were run between our dependent variable, Marital Satisfaction (KMSS), and Parental Stress (PSI-SF) and PSI-SF subscales. Because the distribution of scores was skewed, we also ran the Spearman correlations; there were no significant differences between the Pearson and Spearman correlations.

Correlation coefficients were also computed for all variables gathered from the married couples. The analyses presented in Table 3 show that 70 out of 262 correlations were statistically significant. Out of those 70, 33 were statistically significant at the .01 level; the remaining 37 were statistically significant at the .05 level.

Regarding Question 1, a statistically significant positive correlation was found between mother-reported KMSS scores and father-reported KMSS scores. Significant negative correlations were found between mother KMSS and the following mother-reported independent variable scores: PSI total, PSI DR, and PSI PD. The following significant negative correlations were found between mother KMSS scores and father-reported independent variable scores: PSI total, PSI DR, PSI PD, and PSI PCDI. Significant negative correlations were also found between father KMSS scores and other father reported independent variable scores including: PSI total, PSI DR, PSI PD, and PSI PCDI.

A paired-samples *t* test was conducted to evaluate whether married couples

reported the same amount of MS as measured by individual KMSS items and by total score. Mothers' and fathers' responses did not differ on any of the items or on total scores. See Table 2 for means and standard deviations and Figure 1 for boxplots of MS for mothers and fathers. A paired-sample t test is widely recognized as an appropriate way to deal with couples' data (Zimmerman, 1997).

The standardized effect size index, d , was .08, indicating significant overlap in the two distributions for the total MS scores for mothers and fathers (see Figure 1). The 95% confidence interval for the mean difference between the two ratings was -.70 to 1.14.

A second paired-samples t test was conducted to evaluate whether married couples felt the same amount of PS as measured by the PSI-SF. Overall, parents did differ on self-reported parenting stress, $t(26) = -2.4, p = .035$. Fathers reported higher parenting stress ($M = 70.26, SD = 13.63$) than mothers ($M = 63.63, SD = 13.80$). The standardized effect size index, d , was .46, indicating moderate difference in the two distributions for the total PS scores for mothers and fathers (see Figure 3). The 95% confidence interval for the mean difference between the two ratings was -.12.28 to -9.75.

Paired-sample t tests were also conducted to evaluate whether couples differed on the PSI subcomponents including DR, PD, PCDI, and DC. Of all these components, one was found to be significantly different between mother and father. The mean stress level for mother's PCDI scores ($M = 17.04, SD = 4.42$) was significantly less than the mean level for father's PCDI scores ($M = 19.96, SD = 4.74$), $t(26) = -2.69, p = .01$. The 95% confidence interval for the mean difference between the two ratings was -5.20 to -.21. Other significant correlations, all significant at .05, were found as follows: mother work

week and father overall PSI ($r = .44$); mother work week and father PD ($r = .37$); father work week and mother PCDI ($r = .48$); father work week and mother overall PSI ($r = .37$). A significant correlation was found between income and mother PSI PD ($r = .37$).

Question 2

What was the relationship among MS and age of child and number of children?

To answer this question we intended to run a 2 (number of children) X 3 (age) ANOVA. The independent variables had the following mutually exclusive levels: number of children = one or two/ three or more; age of children = infants and preschoolers/ school-aged/infants, preschoolers, and school-aged. As Table 2 shows, there were no significant correlations between MS and age or number of children. Therefore, ANOVAs were not performed. Given the small sample size for the school-aged category, we included kindergarten children ($n = 3$) within the preschool category. Still, there were no significant correlations by age category.

Question 3

What was the relationship among overall PS, age of child, and number of children? The PSI-SF was used to determine amount of PS experienced by parents. To answer this question we intended to run a 2 (number of children) X 3 (age of children) ANOVA. As above, the independent variables had the following mutually exclusive levels: number of children = one or two/ three or more; age of children = infants and preschoolers/ school-aged/infants, preschoolers, and school-aged. As Table 2 shows,

Table 3

Correlations Among Marital Satisfaction, Parental Stress, and Demographic Factors (N = 27)

	1	2	3	4	5	6	7	8	9
1. Mother age	---								
2. Father age	.72**	---							
3. Mother work week	-.10	-.34	---						
4. Father work week	.16	.28	-.52**	---					
5. # of children	.72**	.53**	-.18	.29	---				
6. Age of child	.70**	.64**	-.30	.33	.60**	---			
7. Income	.03	.24	.12	.45*	.22	-.01	---		
8. Mother KMSS total	-.27	-.07	-.27	-.17	-.21	-.19	-.24	---	
9. Father KMSS total	-.32	-.26	-.23	-.15	-.12	-.33	-.14	.60**	---
10. Mother PSI DR	.17	.10	-.01	.31	.14	.06	.51**	-.56**	-.29
11. PSI PD	.16	.12	-.01	.21	.01	.01	.37*	-.60**	-.33

(table continues)

	1	2	3	4	5	6	7	8	9
12. PSI PCDI	.17	.02	-.03	.48*	.16	-.08	.32	-.35	-.14
13. PSI DC	.15	.04	-.11	.27	.09	.10	.15	-.35	-.23
14. PSI total	.20	.08	-.06	.37*	.09	.02	.36	-.57**	-.30
15. Father PSI DR	.04	-.05	.32	.29	-.21	-.01	.26	-.41*	-.50**
16. PSI PD	-.01	-.12	.37*	.22	-.24	-.11	.27	-.36*	-.44*
17. PSI PCDI	-.31	-.41*	.32	.10	-.36	-.28	.15	-.49**	-.44*
18. PSI DC	.20	.05	.19	.08	.04	.21	.18	-.33	-.29
19. PSI total	-.03	-.21	.44*	.13	-.20	-.06	.27	-.52**	-.41*

(table continues)

	10	11	12	13	14	15	16	17	18	19
10. Mother PSI DR	---									
11. PSI PD	.93**	---								
12. PSI PCDI	.32	.33	---							
13. PSI DC	.57**	.59**	.52**	---						
14. PSI total	.80**	.85**	.70**	.87**	---					
15. Father PSI DR	.26	.30	.37*	.05	.29	---				
16. PSI PD	.27	.33	.38*	.09	.32	.98**	---			
17. PSI PCDI	.41*	.46*	.23	.34	.44*	.44*	.45*	---		
18. PSI DC	.45*	.36	.17	.49**	.44*	.27	.22	.37*	---	
19. PSI total	.45*	.44*	.30	.34	.46*	.77**	.77**	.78**	.66**	---

* $p \leq 0.05$ level (2-tailed).

** $p \leq 0.01$ level (2-tailed).

there were no significant correlations between PS and age or number of children.

Therefore, ANOVAs were not performed. Given the small sample size for the school-aged category, we included kindergarten children ($n = 3$) within the preschool category. Still, there were no significant correlations by age category.

Regressions to Explain the Variance in MS

Two regressions were performed to explain the variance in the mothers' and fathers' MS. In order to select variables for the regression, only IVs significantly correlating with MS were considered, but where the correlation between IVs $\geq .60$, only one IV of the pair was selected.

The variance in mothers' MS was best explained by the fathers' MS and fathers' parent-child dysfunctional interaction scores, $R^2 = .48$ (see Table 4). The variance in the fathers' MS was best explained by the mothers' MS score, $R^2 = .36$ (see Table 5).

Table 4

Summary of Regression Analysis for Variables Predicting Mothers' MS (N = 27)

	<i>Unstandardized coefficients</i>		<i>Standardized coefficients</i>	<i>t</i>	
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>B</i>	<i>Sig.</i>
Mother KMSS (Constant)	13.88	3.28		4.23	.000
Father KMSS total	.46	.14	.51	3.38	.002
Father PSI PCDI	-.19	.08	-.36	-2.40	.024

Note. $R^2 = .48$

Table 5

Summary of Regression Analysis for Variables Predicting Fathers' MS (N = 27)

	<i>Unstandardized coefficients</i>		<i>Standardized coefficients</i>	<i>t</i>	
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>B</i>	<i>Sig.</i>
Father KMSS (Constant)	6.01	3.33		1.81	.083
Mother KMSS total	.67	.18	.60	3.75	.001

Note. $R^2 = .36$

Outliers on Mothers' and Fathers' MS and PS Scores

When examining outliers for MS and PS scores, we looked at scores 1.5 SDs above or below the mean of each variable. For MS, 8 total outliers below the mean (mothers' $M = 14.91$; fathers' $M = 15.29$) were found; none were found above the mean; see Table 6 for breakdown. When examining the outliers on the PSI, a total of 8 were found, 6 below the mean (mothers' $M = 43.56$; fathers' $M = 49.81$) and 2 above the mean (mothers' $M = 83.70$; fathers' $M = 90.91$). Four out of the 5 couples (H, J, K, L) with outlier PSI total scores below the mean recorded 21 out of 21 on KMSS total scores.

Couple D included a father with a KMSS score below the mean, while the mother scored a perfect 21. The PSI scores on this couple showed that the mother recorded a score below the mean, with a DR score in the extremely low category.

Table 6

Outliers for KMSS and PSI-SF Total as Shown in Couples

<i>Outlier Couple</i>	<i>KMSS</i>		<i>PSI-SF</i>
	Below Mean	Below Mean	Above Mean
A	M, F		
B	M, F		M
C	F		
D	F	M	
E	F		
F	F		
G			F
H		F	
I		F	
J		F	
K		F	
L		F	

Note. M = mother, F = father

CHAPTER V

DISCUSSION

Nine out of 10 people are expected to marry sometime in their lives (Bergman, 2006), and first marriages end in divorce at a rate of nearly 50% (Bergman). Kreider (2005), reporting for the U.S. Census Bureau, found that in 2001, the median length of first marriages was about 8 years.

This study focused on the relationship between MS and PS in parents and had three main purposes: first, to better understand the relationship among MS, PS, and components of PS; second, to investigate the relationship among overall MS, and age of child and number of children; third, to investigate the relationship among overall PS, and age of child and number of children. The dependent variable was MS. The independent variables included overall PS, components of PS, and demographic factors such as gender, work hours, income, and so forth.

Correlations Between Mothers' and Fathers' Marital Satisfaction

Our research found that mothers' KMSS scores were positively correlated with fathers' KMSS scores. Thus, if one spouse feels satisfied in the marriage, the other spouse usually also feels satisfied in the marriage. Consequently, when one feels a lack of satisfaction, the other also feels lower levels of satisfaction (Rogers & White, 1998). This supports much of the research that has been done in regard to marital satisfaction.

Correlations Between Marital Satisfaction and Parental Stress

Our research supports the systems theory concept of *structural coupling* (Becvar & Becvar, 1999). Within each family there are many subsystems that operate within the context of the family. Marriage and parenting are examples of the subsystems within the family systems. The negative relationship found between mothers' MS and her overall PS suggests that as a mother's level of MS increases her level of PS decreases and visa versa. This corroborates extant literature indicating that mother's parenting stress is correlated with lower MS (Webster-Stratton, 1989). The negative correlation between mother's and father's MS and PS shows that parents who are more satisfied in their marriage are less stressed in their parenting roles or that lower MS correlates with higher PS. Thus the family system is strengthened as the marriage system is highly satisfied. As less stress is seen in parenting, the marriage subsystem is strengthened and visa versa. For example, mothers who feel a greater degree of marital satisfaction show lower stress over parenting issues. Lower parent stress correlates with a stronger marriage system. We see the two systems, parenting and marriage, as correspondents that give and take, both influencing and supporting each other. This also supports the research by Rogers and White (1998), who found that happiness in marriage is the strongest predictor of satisfaction in parenting.

Correlations Among MS and Specific Areas of PS

Although correlations between MS and PS have been well established, the unique finding of this study is the significant relationship found between MS and specific areas

of PS. Specific areas of PS that correlated with more strain on mothers' MS included her DR (defensive responding) and PD (parental distress) scores. An extremely low DR score suggests that the parent may be: (a) trying to portray the image of a competent parent, (b) not invested in the role of parent, or (c) a very competent parent with an excellent relationship with spouse (Abidin, 1995). A specific example of an extremely low DR score will be discussed below.

With regard to the PD score, the correlations in this study suggest that mothers' lower MS scores are significantly related to: lack of parenting competence, stresses on other life roles, lack of social support, possible depression, and clashes with their spouses. MS may also be lower for over-controlling mothers who deny the difficulties associated with parenting (Abidin) although nothing in our data supported or refuted this statement.

Recursion, a concept in systems theory, explains that a member of a subsystem shares ongoing responsibility and mutual influence within each subsystem. Although our study did not examine precipitating events, it is recognized that all behaviors are preceded by other behaviors; the individual is the one who places significance on them.

Accordingly, as the mother experiences higher satisfaction in marriage, her stress related to personal circumstances decreases. This is correlated with the father's behaviors.

Mothers' high MS is correlated with lower fathers' PS. Of course, the previous scenario could be reversed by discussing the father's behaviors first.

Looking more closely at the specific area of PS that correlated with the mothers' MS led us to scrutinize our outliers more closely. We found several couples that reported very low scores on the DR scale. In order to eliminate bias, we asked two of the assessors

who visited the couples' homes (as part of the CCAMPIS grant) questions about 5 of the different couples to determine which hypothesis stated in the previous paragraph was the most likely. Assessors were questioned about 2 out of the 5 couples (Couples G and H) who both reported scores below the cut off for DR; these parents both scored above the mean on the KMSS, indicating they were satisfied in their marital relationship. After examining the scores, the assessors were presented with the three hypotheses regarding these couples. However, the researchers did not share PS scores with the assessors nor was there an indication of low or high score. The mother in Couple D reported a very low DR score as well as a very satisfied MS score. Looking further at her husband's scores we found very different responses, including a MS score below the mean and DR score that was significantly higher than his wife's. Given the discrepancies between the couple's scores, we looked at this outlier more closely. After questioning the assessors, we felt it appeared that this low score may have resulted from the mother being very involved in her work role, which may have distracted her from her parenting issues at home.

Prediction of Variance in MS

One of the most interesting findings of our study is the relationship between the mothers' MS scores and the fathers' MS and PCDI scores (see Figure 4). Almost half of the variance in the mothers' MS was predicted by the father-reported variables of PCDI and MS. The fathers' high PCDI scores indicate that the parent-child bond is either being threatened or was never sufficiently established (Abidin, 1995). This suggests that the

father perceives his relationship with his child as unattached and this perception predicts some of the variance in the mothers' MS scores. We suggest that as the mother observes the relationship between her spouse and child and is troubled by it, her MS is directly impacted by this observation. This supports the systems concept of *wholeness*, where interactions become part of the system (Becvar & Becvar, 1999). In therapy this can also be explained as a triangle (Kerr, 1981). Cohesion between the mother and the father then becomes dependent on the father's relationship with a third person, in this case their child. Based on the explained variance in mothers' MS scores, we suggest that the mother sees her husband's interactions with their child as one way to assess her own marital satisfaction.

On the other hand, neither the fathers' or mothers' PS scores explained any of the variance in the fathers' MS. The best predictor of fathers' MS was mothers' MS with one-third of the variance predicted by mothers' MS. Therefore, the father's MS appears to be indirectly correlated to his relationship with their child, but his relationship with their child is related to his wife's MS, which in turn is related to his MS.

Another unique aspect of this study includes the use of university students who are married and have children. Our research supports the findings of Anderson (2001) who found that married parents in school reported feelings of lower success in their marriage than non-parent students; however, the majority of the married parents still rated themselves as successful rather than unsuccessful. The majority of the students in our study scored above the non-distressed range on the KMSS, indicating that although there is some degree of distress, the participants in this study felt satisfied in their marriages.

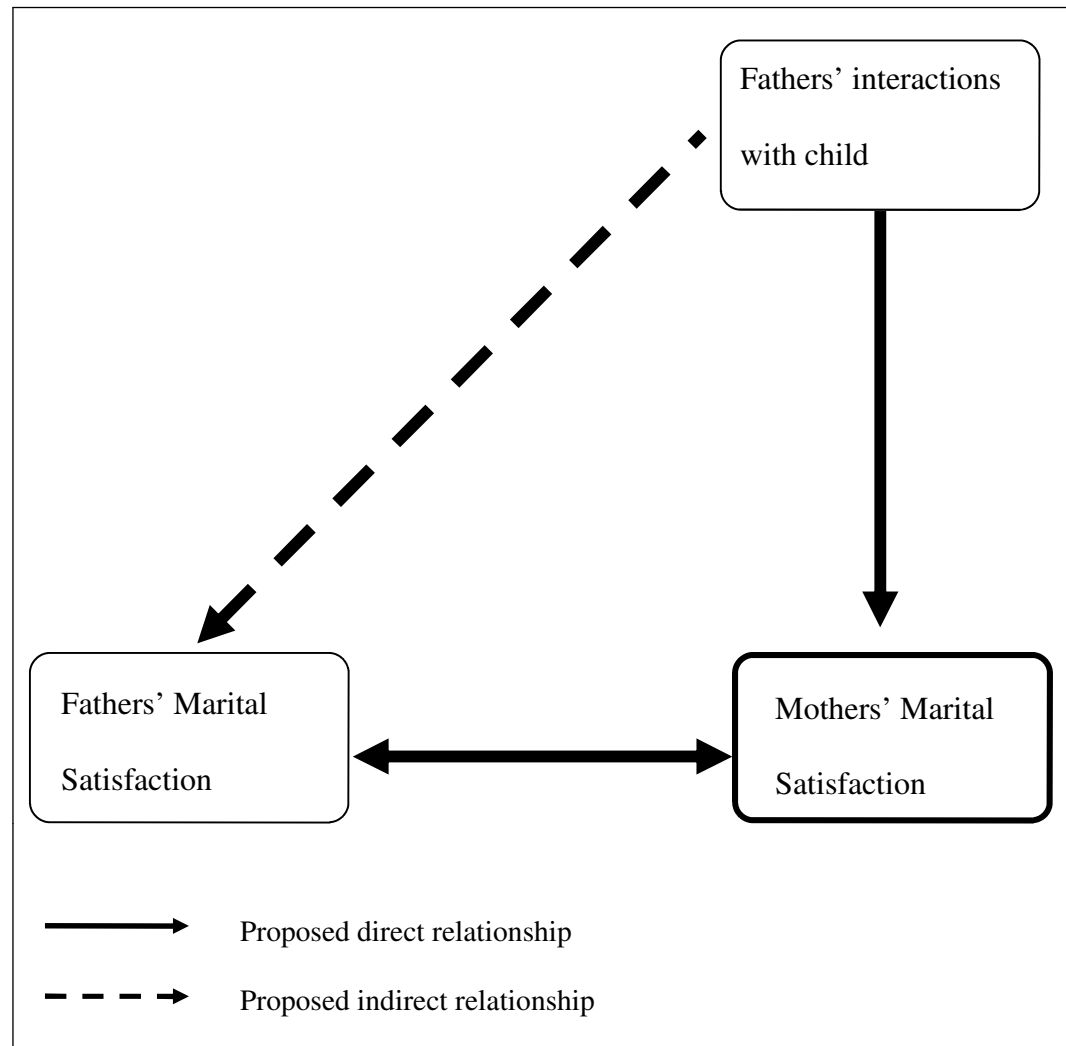


Figure 4. The proposed relationship between mothers' MS and fathers' MS.

This could be explained by the fact that the participants in this study are in their first marriages; many of these marriages have not reached the 8 year mark, which was reported by Bergman (2006) to be the median length of first marriages. Because the MS means are similar to non-students in other studies (Schumm et al., 1983, 1985), this suggests married couples who are students may experience levels of MS similar to those

couples who are not students. Another possible explanation could be that the couples in our study were receiving subsidies for childcare as well as financial assistance for school, which may result in less stress over the financial aspect of their relationship and greater overall MS.

Examination of the PS outliers found that 7 of the 10 participants were students only and not employed. Only one of the participants worked full time, but was not a student; the other two were students and employed part time. This is similar to the research in regard to working and PS. Although their sample did not include student couples, Scharlach (2001) found that working parents experience a greater degree of strain in the roles they have than non dual-career couples, suggesting that the added role of work or parenting may increase the stress felt by couples. This in turn may lead to less satisfaction in marriage. For example, a father can have many roles including but not limited to the following: son, brother, father, student, husband, employee, volunteer, and so forth. Therefore, it can be suggested that the less parents work, the more time they have for each role and ultimately, the less stress they feel in their overall roles.

Summary

The first research question investigated the correlations between MS and PS. This study found that MS and PS correlate in many ways: most significantly, the correlations in the areas of parental distress and parent child interactions. The second and third research questions appeared to have no correlation with age/number of children and MS, so the tests were not conducted. With regard to variance, we found that mothers' MS was

explained by fathers' MS and fathers' interaction with their child, while the fathers' MS was explained by the mothers' MS only.

Limitations

One limitation of this study is the small sample size. Additionally, this study focused only on student parents at Utah State University, thus education level and SES were limited in variability. The majority of our subjects were European American and the population of Utah State University includes a distinct religious subculture with predominant values in traditional family roles, making generalizability low.

Implications for Practice

Communication, awareness, and planning can help to minimize the effect of relationship stressors (Twenge et al., 2003). Understanding the correlation between MS and PS can help parents to have more realistic expectations about what to expect when having children. As Rogers and White (1998) found, parents who received resources to help negotiate a role found more satisfaction in that role. Knowing this can help clinicians, social workers, child care providers, and others to intervene in a way that will promote greater satisfaction in roles, especially in regard to marriage and parenting. If mothers and fathers are struggling with their role as parents, help can be given by way of developmental knowledge, parenting techniques, guidance, and so forth. Parental distress correlated with both mothers' and fathers' MS. This area of PS measures lack of spousal support, conflict with the other parent, and restrictions on their roles, as well as the

presence of depression. When parents indicate a list of parenting issues they are concerned about, the clinician can also assess for the areas of parental distress to see which the couple may be experiencing.

The variance in mothers' MS was explained in part by fathers' interaction with children, as proposed in Figure 4. As educators, clinicians, and others understand this fact, the mother's concerns can be explored and explained to the father and visa versa. This may help to encourage a more accurate representation of the needs of their marital relationship, which in turn may help to indirectly strengthen the parenting system, without involving the child.

Implications for Further Research

Areas of further research could include specific areas of MS, specific variables of PCDI, and initial interventions. Looking at more specific areas of MS, such as spousal support or commitment to the marital relationship as compared to PS could help to determine which aspects of marriage can be most helpful to sustaining a strong relationship with less stress in regard to parenting. More specific variables that account for the PCDI, such as attachment, time spent together, and expectations are needed to examine the amount of the variance explained by each one. More research is needed to ascertain whether initial interventions are needed in the marriage system first and then parenting, or visa versa. For example, when a couple comes in for therapy presenting for aspects of PS, should the clinician start intervening in this area or is it more helpful to intervene with the marital relationship first? Our findings show that mothers' MS is the

only predictors of fathers' MS and fathers' MS is a strong predictor of mothers' MS. The negative correlation between MS and PS shows that as MS increases, PS decreases and visa versa. However, since it is often less threatening to look at parenting issues rather than marital issues, clinicians may want to focus on PS rather than MS. MS may thereby increase as PS is addressed.

REFERENCES

- Abbot, D. A., & Brody, G.H. (1985). The relation of child age, gender, and number of children to the marital adjustment of wives. *Journal of Marriage and the Family*, 47(1), 77-84.
- Abidin, R. R. (1995). *Parent Stress Index*. Odessa, FL: Psychological Assessment Resources.
- Anderson, L. D. (2001). A comparison of stresses of married student parents and non-parents at Brigham Young University. Unpublished doctoral dissertation, Brigham Young University, Provo, UT (UMI No. 3026448)
- Becvar, D. S., & Becvar, R. J. (1999). *Systems theory and family therapy: A primer*. New York: University Press of America.
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55, 83-96.
- Bergman, M. (2006, December). U.S. Census Bureau News, U.S. Census Bureau. Retrieved January 31, 2007, from http://www.census.gov/Press-Release/www/release/archives/marital_status_living_arrangement.htm
- Bradbury, T., Fincham, F., & Beach, S. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and the Family*, 62, 964-980.
- Busby, D. M., Christensen, C., Crane, D. R., & Larson, J. H. (1995). A revision of the Dyadic Adjustment Scale for use with distressed and nondistressed couples: Construct hierarchy and multidimensional scales. *Journal of Marital and Family Therapy*, 21(3). 289-308.
- Crane, D. R., Middleton, K. C., & Bean, R. A. (2000). Establishing criterion scores for the Kansas Marital Satisfaction Scale and the Revised Dyadic Adjustment Scale. *Psychology and Behavioral Sciences Collection*, 28(1), 5 3-60.
- Crnic, K. A., & Booth, C. L. (1991). Mothers' and fathers' perceptions of daily hassles of parenting across early childhood. *Journal of Marriage and the Family*, 53(4), 1042-1050.
- Deater-Deckard, K. (1998). Parenting stress and child adjustment: Some old hypotheses and new questions. *Clinical Psychology: Science and Practice*, 5(3), 314-332.

- Deater-Deckard, K., & Scarr, S. (1996). Parenting stress among dual-earner mothers and fathers: Are there gender differences? *Journal of Family Psychology, 10*, 45-59.
- Driver, J., & Gottman, J. M. (2004). Daily marital interactions and positive affect during marital conflict among newlywed couples. *Family Process, 43*(3), 301-314.
- Faulkner, R. A., Davey, M., & Davey, A. (2005). Gender-related predictors of change in marital satisfaction and marital conflict. *The American Journal of Family Therapy, 33*, 61-83.
- Gottman, J. M., & Carrere, S. (2000). Welcome to the love lab. *Psychology Today, 33*(5), 42-50.
- Gottman, J. M., & Silver, N. (1994). *What makes marriage work?* New York: Simon & Schuster.
- Hadadian, A. (1994). Stress and support in fathers and mothers of young children with and without disabilities. *Early Education and Development, 5*(3), 226-235.
- Heffner, K., Kiecolt-Glaser, J. K., Loving, T. J, Glaser, R., & Malarkey, W. B. (2004). Spousal support satisfaction as a modifier of physiological responses to marital conflict in younger and older couples. *Journal of Behavioral Medicine, 27*(3), 233-254.
- Jeong, G. J., Bollman, S. R., & Schumm, W. R., (1992). Self-reported marital instability as correlated with the Kansas Marital Satisfaction Scales for a sample of midwestern wives. *Psychological Reports, 70*, 243-246.
- Karney, B. R., & Bradbury, T. N. (2005). Contextual influences on marriage. *Current Directions in Psychological Science, 14*(4), 171-174.
- Katz, L. F., & Gottman, J. M. (1993). Patterns of marital conflict predict children's internalizing and externalizing behaviors. *Developmental Psychology, 29*(6), 940-950.
- Kerr, M. E. (1981). Family systems theory and therapy. In A. S. Gurman & D. P. Kniskern (Eds.), *Handbook of family therapy* (pp. 226-264). New York: Brunner/Mazel.
- Kreider, R. M. (2005). *Number, timing, and duration of marriage and divorces: February 2005*. Current Population Reports, U.S. Census Bureau, Washington, DC, 70-97.

- Oelofsen, N., & Richardson, P. (2006). Sense of coherence and parenting stress in mothers and fathers of preschool children with developmental disability. *Journal of Intellectual & Developmental Disability, 33*(1), 1-12.
- Perren, S., Von Wyl, A., Burgin, D., Simoni, H., & Von Klitzing, K. (2005). Intergenerational transmission of marital quality across the transition to parenthood. *Family Process, 44*(4), 441-459.
- Pittman, J. F., & Lloyd, S. A. (1988). Quality of family life, social support, and stress. *Journal of Marriage and the Family, 50*(1), 53-67.
- Purdom, C. L., Lucas, J. L., & Miller, K. S. (2006). Couple type, parental status, and the mediating impact of social support. *North American Journal of Psychology, 8*(1), 1-8.
- Rogers, S. J., & White, L. K. (1998, May). Satisfactions with parenting: The role of marital happiness, family structure, and parents' gender. *Journal of Marriage and the Family, 60*(2), 293-308.
- Scharlach, A. (2001). Role strain and working parents: Implications for workplace and community. *Community, Work & Family, 4*(2), 215-230.
- Schumm, W. R., Scanlon, E. D., Crow, C. L., Green, D. N., & Buckler, D. L. (1983). Characteristics of the Kansas Marital Satisfaction Scale in a sample of 79 married couples. *Psychological Reports, 53*, 583-588.
- Schumm, W. R., Anderson, S. A., Benigas, J. E., McCutchen, M. B., Griffin, C. L., Morris, J. E., et al. (1985). Criterion-related validity of the Kansas Marital Satisfaction Scale. *Psychological Reports, 56*, 719-722.
- 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.
- Twenge, J. M., Campbell, W. K., & Foster, C. A. (2003). Parenthood and marital satisfaction: A meta-analytic review. *Journal of Marriage and the Family, 65*(3), 574-583.
- Van den Troost, A. (2005). *Marriage in motion: A study on the social context and processes of marital satisfaction*. Belgium: Leuven University Press.
- von Bertalanffy, L. (1968). *General systems theory*. New York: Braziller.

Webster-Stratton, C. (1989). The relationship of marital support, conflict and divorce to parental perceptions, behaviors, and childhood conduct problem. *Journal of Marriage and the Family*, 51, 417-430.

Zimmerman, D. W. (1997). A note on interpretation of the paired-samples *t* test. *Journal of Educational and Behavioral Statistics*, 22, 349-360.

APPENDICES

Appendix A: Informed Consent

Informed Consent

Early Care and Development

Dear Parent,

Introduction/Purpose: The purpose of this letter is to invite you to participate in a research project examining the role of children's early care and developmental outcomes. Your participation will allow us to learn more about how families and child care can help children's development and school readiness skills. We are doing an evaluation of children and their parents who are enrolled or are waiting to be enrolled in the CCAMPIS Child Care Subsidy Program. Approximately 120 children and their parents will be involved in this study.

Procedures: If you agree to participate in this project, developmental assessments of one child per family will be made. These assessments are not IQ tests. Children ages 0-3 will be assessed using the Bayley Scales of Infant Development-III (BSID-III). The purpose of this assessment is to measure cognitive functions in young children. Children, ages 3-5 will be assessed using the Peabody Picture Vocabulary Test (PPVT) which measures early language development, the TEMA (early mathematics concepts), and the PALS, (early literacy skills). Children usually enjoy these assessments because they are presented in a game-like format. The PPVT, PALS, and the TEMA will be administered in two different sessions. Each session will take approximately 40 to 50 minutes.

BSID-III assessments will be done quarterly. The PALS, PPVT, and TEMA assessments will be done twice yearly. The PALS, PPVT, and TEMA assessments will be done at the child's day care center. These assessments will be done individually with each child in a quiet place provided by the child's daycare provider. The BSID-III will be done with the parent present at the child's home. In addition, depending on your child's age, you will be asked to complete the Devereux Early Childhood Assessment (DECA) or the Bayley Social Emotional and Adaptive Behavior Questionnaire based on your observation of child behavior in the home. You will also be asked to complete a few other surveys including the Parent Stress Index (PSI), the Family Ritual Questionnaire (FRQ), the Kansas Marital Satisfaction Survey, and a demographic questionnaire. The purpose of these questionnaires is to measure the overall care-giving environment, including parental stress, marital satisfaction, and family practices.

You will also be asked to agree to a visit to your home where one or two assessors will observe the care giving environment. The purpose of this measurement is not to label you as a "good" or "bad" parent. Rather, it is to observe the child's environment while they are at home. This observation will be done twice a year.

Dr. Ann Austin, Melanie Williamson, graduate student, and Tanya Jensen will train the assessors. All assessors will have completed a background check. We will share the

results of these assessments with you and the child's provider and we will give you an opportunity to ask any questions you may have on the measures and on the child's development. Our purpose in these assessments is to learn how children's early care environments affect early skills and development. We want the entire process to be useful and beneficial for you.

Informed Consent Early Care and Development

You will be asked:

1. To complete a demographic questionnaire,
2. To complete the Family Ritual Questionnaire
3. To complete the DECA
4. To complete the Parent Stress Index
5. To complete the Marital Satisfaction Survey
6. To participate in an hour visit in your home with one or two assessors where Home Observation for Measurement of Environment (HOME) will be completed.

Your child care provider will be asked:

1. To allow assessors to assess your child while he/she is at child care.
2. To complete the DECA (depending on the child's age)

New Findings: During the course of this study, you will be informed of any significant new findings (either good or bad), such as changes in the risks or benefits resulting from participating in the research, or new alternatives to participation that might cause you to change your mind about continuing in the study. If new information is provided to you, your consent to continue participating in this study will be obtained again.

Risks/Benefits: There is minimal risk in participating in this study. There may be a direct benefit to the parent participants, child participants and child care provider in participating in this project. Parent participants will learn about their child's developmental status via letter. The investigator may learn more about children's development in the context of early environments. If at any time you have questions or if you would like to meet with the researchers about this study, you may contact Melanie Williamson at (435) 797-3012 or Ann Austin at (435) 797-1527.

Voluntary nature of participation and right to withdraw without consequence: Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without consequence or loss of benefits.

Confidentiality. Research records will be kept confidential. Only Dr. Ann Austin, Melanie Williamson, and Tanya Jensen will have access to the data, and it will be kept in

a locked file cabinet in a locked room. To protect your privacy and confidentiality, your name and all identifying information will be replaced with a code. The code will be kept separate from the data collected and will also be stored in a locked file cabinet in a locked room. It will be destroyed at the conclusion of the study (approximately three years). Any information obtained from you for this study will not affect any services you are now receiving or may receive in the future.

IRB Approval Statement: The Institutional Review Board (IRB) for the protection of human subjects at Utah State University has reviewed and approved this research project. If you have any concerns or questions about this study, you may call the IRB office at (435) 797-1821.

Informed Consent Early Care and Development

Copy of Consent. You have been given two copies of this Informed Consent. Please sign both copies and retain one copy for your files.

Investigator Statement: “I certify that the study has been explained to the individual identified as the subject in the next section, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part in this research study. Any questions that have been raised have been answered”. ***We are so excited about this opportunity to share with you. We hope that you will take advantage of this invaluable experience and consent to work with us!***

Dr. Ann M. Berghout Austin
Principle Investigator
435-797-1527

Signature of Parent: “By signing below, I agree to participate”.

Parent’s signature

Date

Appendix B: Demographic Survey

Date: _____

Parent Questionnaire

 Full Name (please print)

 Pre-K Child's Full Name (please print)

 Address

City, State

Zip Code

 Phone Number

E-mail Address

Family Background

1. Person completing this questionnaire:

Mother Stepmother Father
 Stepfather Other Relative Guardian

2. What is your marital status?

single – never been married common law divorced / separated
 widowed married remarried

3. Please list all the members of your household, their age, and their current occupation.

	<i>Age</i>	<i>Current Occupation</i>	<i>Hours/week at job</i>
<i>Mother</i>			
<i>Father/Step/Partner</i>			

4. Please list all children in your family (foster, step, adopted, etc.). Place a star by the child in this study.

<i>Child #</i>	<i>Sex</i>	<i>Birthdate</i>	<i>Child #</i>	<i>Sex</i>	<i>Birthdate</i>
1			6		
2			7		
3			8		
4			9		
5			10		

Do you give your permission for researchers to use the above birthdates? YES NO

5. Please mark all services your family is receiving.

- CHIP Any Medicaid Program FEP Food Stamps
 WIA Tier Two or Three FANF Non-FEP training Child Care
 Refugee WIC UDH

6. Please check the highest education level that the child's *father* has completed.

- 1-8th grade vocational or some college college/university graduate
 9-11th grade high school graduate or GED graduate or
 professional school

7. Please check the highest education level that the child's *mother* has completed.

- 1-8th grade vocational or some college college/university graduate
 9-11th grade high school graduate or GED graduate or
 professional school

8. Please check yearly family income:

- less than \$4,999 \$10,000-\$14,999 \$30,000-\$44,999 \$60,000+
 \$5,000-\$9,999 \$15,000-\$29,999 \$45,000-\$59,999

9. Which best describes the ethnic background of your child?

- White/Anglo African American/Black Asian, Pacific Islander
 Latino/Hispanic American Indian, Alaskan Native Other

10. Which is the primary language spoken in the home?

- English German Other _____
 Spanish French

Appendix C: Kansas Marital Satisfaction Scale

Please circle the one that applies Male/Female

Parents: Please fill this out separately from your spouse. Please don't discuss with your spouse. When finished please put in the envelope and seal. Thanks

KANSAS MARITAL SATISFACTION SCALE

Item	Extremely Dissatisfied	Very Dissatisfied	Somewhat Dissatisfied	Mixed	Somewhat Satisfied	Very Satisfied	Extremely Satisfied
1. How satisfied are you with your marriage?	1	2	3	4	5	6	7
2. How satisfied are you with your husband/wife as a spouse?	1	2	3	4	5	6	7
3. How satisfied are you with your relationship with your husband/wife?	1	2	3	4	5	6	7