



2008-07-07

# A Comparison of the Marriage Checkup and Traditional Marital Therapy: Examining Distress Levels at Intake for Student Couples

Benjamin Richard Erwin  
*Brigham Young University - Provo*

Follow this and additional works at: <http://scholarsarchive.byu.edu/etd>

 Part of the [Family, Life Course, and Society Commons](#)

---

## BYU ScholarsArchive Citation

Erwin, Benjamin Richard, "A Comparison of the Marriage Checkup and Traditional Marital Therapy: Examining Distress Levels at Intake for Student Couples" (2008). *All Theses and Dissertations*. 1464.  
<http://scholarsarchive.byu.edu/etd/1464>

This Dissertation is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in All Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact [scholarsarchive@byu.edu](mailto:scholarsarchive@byu.edu).

A COMPARISON OF THE MARRIAGE CHECKUP AND TRADITIONAL  
MARITAL THERAPY: EXAMINING DISTRESS LEVELS AT INTAKE FOR  
STUDENT COUPLES

by

Benjamin R. Erwin

A dissertation submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Marriage and Family Therapy Program

School of Family Life

Brigham Young University

August, 2008

BRIGHAM YOUNG UNIVERSITY

GRADUATE COMMITTEE APPROVAL

of a dissertation submitted by

Benjamin R. Erwin

This dissertation has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Leslie L. Feinauer, Chair

\_\_\_\_\_  
Date

\_\_\_\_\_  
James M. Harper

\_\_\_\_\_  
Date

\_\_\_\_\_  
Jeffery H. Larson

\_\_\_\_\_  
Date

\_\_\_\_\_  
D. Eugene Mead

\_\_\_\_\_  
Date

\_\_\_\_\_  
Richard B. Miller

BRIGHAM YOUNG UNIVERSITY

As chair of the candidate's graduate committee, I have read the dissertation of Benjamin R. Erwin in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Leslie L. Feinauer, Chair  
Chair, Graduate Committee

Accepted for the School

\_\_\_\_\_  
Richard B. Miller  
Director, School of Family Life

Accepted for the College

\_\_\_\_\_  
Susan Rugh  
Associate Dean, College of Family Home and  
Social Sciences

## ABSTRACT

### A COMPARISON OF THE MARRIAGE CHECKUP AND TRADITIONAL MARITAL THERAPY: EXAMINING DISTRESS LEVELS AT INTAKE FOR STUDENT COUPLES

Benjamin R. Erwin.

Marriage and Family Therapy Program

School of Family Life

Doctor of Philosophy

The Marriage Checkup (Cordova, Warren & Gee, 2001) was introduced as a brief intervention targeting couples at risk for severe marital distress. The purpose of this study was to examine married couples who participated in The Marriage Checkup for levels of individual and relational stress and severity of presenting problems recorded at intake. Differences were investigated between couples who, though initially requesting the brief Marriage Checkup, elected to continue with traditional marital therapy and couples who only participated in traditional marital therapy.

The group means were compared using a structural equation model in order to account for the non-independence of distress within a relationship. Results showed that

Marriage Checkup couples reported lower distress levels than couples who received traditional marital therapy even if they transitioned from the Marital Checkup into marital therapy. Additional analyses compared levels of distress and presenting problems for the two Marriage Checkup groups: couples who only completed the Marriage Checkup and couples who also transitioned into traditional marital therapy. Couples who only participated in the Marriage Checkup had lower levels of individual distress for husbands and lower levels of relational distress than did couples who participated in the Marriage Checkup and then transitioned into traditional marital therapy. Clinical implications are discussed.

## ACKNOWLEDGEMENTS

Many people have been a vital support along this journey and I want to thank them for their encouragement, support, and love they have given to me. First and foremost, I wish to pay tribute to my beloved cohort. Your friendship sustained me through the difficult trench work of this program. I do not know what I would have done without all the laughs, creamery runs, and early morning racquetball battles (I could do without all the bruises though). You all were the smile in my day. I will cherish always our time together.

I wish to say thanks to my chair, Leslie. Without your accepting patience and easygoing demeanor, I don't think I would have made it through this. You were a calm amidst my storm of uncertainty and doubt. Thank you so much for all you gave me and taught me.

I am grateful for the honor and privilege I had of attending Brigham Young University. It was an amazing opportunity to learn through faith and scholarship. I feel as though I have been given a unique gift of being trained at such an excellent institution, and I will do my best to honor this gift I have received. I say thank you to all the faculty, staff, and students that have contributed to my experience.

To my precious family, I want to express the most sincere appreciation. Without you, none of this would mean much to me. Knowing you were there when I came home,

made it so much easier for me. Elisabeth and Benjamin, hearing you scream “Daddy!” is one of the greatest joys I have ever had. Sarah, you are the joy of my life. Your companionship and love make me complete. You are my sunrise that brings me safety and happiness each day. Thank you for loving me and being willing to walk this road with me. I love you.

Finally, I wish to thank my Father in Heaven, and my Savior, Jesus Christ. I owe everything that is good in my life to them. They guide me, sustain me, and empower me. I reverence Their Truth, Mercy and Love.



## Table of Contents

Chapter I: Introduction .....	1
Definition of Terms.....	2
Review of Literature .....	3
Overview of the Marriage Checkup.....	3
Levels of Distress at Intake .....	5
Empirical Findings for the Marriage Checkup .....	6
Transitioning from the Marriage Checkup to Traditional Marital Therapy .....	7
Relationship of Presenting Problem to Marital Therapy .....	7
Relationship of Relational Distress to Marital Therapy .....	8
Relationship of Individual Distress to Marital Distress and Marital Therapy .....	9
Summary.....	10
Research Questions.....	12
Chapter II: Methods .....	14
Subjects.....	14
Recruitment.....	15
Instruments.....	16
Design .....	20
Analysis.....	20
Chapter III: Results .....	24
Chapter IV: Discussion .....	37
Clinical Implications .....	40
Recommendations for Future Research.....	42

Conclusion .....	43
References.....	44

## List of Tables

Table 1. Demographic Characteristics by Group.....	15
Table 2. Treatment Recommendation Rates for Marriage Checkup Couples .....	19
Table 3. Correlation Matrix for Husbands and Wives on the Symptom Distress (SD), Interpersonal Relationship (IR), Social Roles (SR), and the Revised Dyadic Adjustment Scale. ....	23
Table 4. Pattern Matrix of a Factor Analysis for OQ and RDAS scores .....	26
Table 5. Percentages of Couples Clinically Distressed at Intake.....	27
Table 6. Number of Presenting Problems Identified by the Marriage Checkup with Therapy and Therapy Only Groups .....	30
Table 7. Presenting Problem Comparison for the Marriage Checkup Only and Marriage Checkup with Therapy Groups .....	32
Table 8. Means For the Within and Between Group Comparisons .....	33
Table 9. F Scores for Gender and Group Comparisons .....	33

## List of Figures

Figure 1. The Dyadic Group Means Comparison Using a Structural Equation Model.....	21
Figure 2. Comparison of Distress Levels for Marriage Checkup Couples Who Transition Into Therapy Versus Traditional Marital Therapy Couples.....	29
Figure 3. Means of the Social Relationship Subscale for Husbands and Wives by Group .....	34
Figure 4. Means for the Symptom Distress Subscale for Husbands and Wives by Group .....	34
Figure 5. Means for the Interpersonal Relationship Subscale for Husbands and Wives by Group .....	35
Figure 6. Means for the Revised Dyadic Adjustment Scale for Husbands and Wives by Group .....	35

## Chapter I

### *Introduction*

Recently, Cordova, Warren & Gee, (2001) introduced the Marriage Checkup (MC) as a clinical intervention for couples. The MC is a brief intervention (facilitated over two sessions) utilizing assessment and feedback of the couple's strengths and weaknesses. The MC was specifically designed as a clinical intervention to help couples before they become severely distressed in their relationship. Cordova et al. (2001) state the "principle targets [of the MC] are those couples suffering from the early symptoms of marital distress." This state is operationalized as "at-risk," or in other words, these are couples who may be "experiencing one or two problems" in their relationship but have not "caused any irreversible damage" (Cordova et al., 2001). Couples who pass through this "at-risk" stage may experience significant distress, but may not perceive their relationship as needing help (Cordova, et al., 2001). Cordova et al. (2001) also infer that couples who seek traditional marital therapy are severely or chronically distressed. Although untested, based upon Cordova et al.'s (2001) conceptualization, one would expect to find a difference in levels of relational distress between MC and traditional therapy couples.

*The purpose of this study was to compare married couples who participated in the Marriage Checkup and couples who participated in traditional marital therapy. Differences in levels of distress and presenting problems recorded at intake were investigated among Marriage Checkup couples, Marriage Checkup couples who transitioned into marital therapy, and couples who only participated in traditional marital therapy.*

## *Definition of the Terms*

### *Marriage Checkup*

The Marriage Checkup is a brief two to three session professional assessment and feedback intervention. The therapist assesses the strengths and challenges within the relationship via a clinical interview, observation and written assessments. The therapist then provides feedback to the couple as to the strengths and weakness of their relationship.

### *Traditional Marital Therapy*

Traditional Marital Therapy consists of a therapist providing professional help to a couple on issues they identify as problematic in their relationship. Generally, they are seen once a week for 10 to 20 sessions.

### *Relational Distress*

Relational distress is pain or discomfort experienced in a relationship. Busby, Crane, Larson, and Christensen (1995) have isolated three dimensions where couples can experience distress. The distress dimensions include Cohesion (how much time a couple spends together, Satisfaction (how satisfied one is with the relationship) and Consensus (agreement on matters of importance to relationship functioning; Busby et al.). For purposes of this study, the Revised Dyadic Adjustment Scale (RDAS; Busby et al.) was used to determine relational distress.

### *Individual Distress*

Individual distress is the level of intrapersonal, psychological distress (e.g. depression, anxiety) experienced by an individual. Although some external sources such as marital problems may be a primary cause for distress, this distress is manifest in the

functioning of the individual. For purposes of this study, the OQ 45.2 (Lambert, Burlingame, Umphress, Hansen, Vermeersch, Clouse & Yanchar, 1996) was administered to determine the level of individual distress.

### *Presenting Problem*

The presenting problem is the primary problem in a couple's relationship for which they are seeking help. For the purposes of this study, the couple's self reported presenting problem was taken from their initial intake interview.

### *Review of the Literature*

The following review of literature contains sections related to both theory and empirical studies regarding each of the variables including the Marriage Checkup, relationship of presenting problems to marital therapy, relational distress as it relates to marital therapy, and individual distress as it relates to marital therapy.

### *An Overview of the Marriage Checkup*

Most people go to a medical doctor for a physical checkup with some degree of regularity. They value the doctor's examination as a way to catch physical health problems before they progress too far. They want to have the peace of mind that they are okay, or that if something is wrong, they want it diagnosed quickly, thus improving their prognosis. The Marriage Checkup (MC) follows this same premise with the focus being on the marital relationship rather than the physical body. The MC is an assessment of a couple's strengths and weaknesses. It involves three tasks: a) face to face assessment between the therapist and couple, b) an written assessment battery completed by the couple, and c) a personalized feedback session. The over-arching goal of the MC is to identify a couple's strengths and weaknesses and then present this information to the

couple. Objective feedback may help create dissonance with the couple's perception of the relationship – thus strengthening a motivation for change (Miller & Rollnick, 1991).

The MC is an intervention designed for couples who are “at-risk” for severe relational distress (Cordova et al., 2001). The goal of the MC was to be attractive to couples who may not otherwise seek treatment, yet were experiencing difficulties in their relationship. The MC was brief, affordable and explicitly not deemed as therapy - thus overcoming common barriers to seeking treatment (Cordova et al., 2001).

The MC was adapted from the Drinker's Checkup (Miller, Sovereign, and Krege, 1988) using motivational interviewing (Miller & Rollnick, 1991) and the Stages of Change (Prochaska & DiClemente, 1984) as a grounding framework. Motivational Interviewing is based upon Transtheoretical Theory which attempts to explicate the change process (Prochaska, DiClemente & Norcross, 1992). Transtheoretical Theory proffers that a person's desire to change is the universal primary component for change. Desire for change is more important than a particular therapy model, therapist characteristics, or other client factors. The theory also states that a primary reason for resistance to change is that the clients are not fully aware that there is a problem. The MC is designed to increase the desire for change by strengthening a couple's awareness of any problems that might be present in the relationship.

The Stages of Change is a conceptual framework to understanding a person's awareness of and a desire to change (Prochaska & Diclemente, 1984). The five stages are: Precontemplation, Contemplation, Preparation, Action, and Maintenance. The Precontemplation stage describes clients who are not cognizant that there is a problem and do not feel that any change is necessary. Clients in the Contemplation stage are cognizant of



their problems and are seriously considering changing their behavior but have not made a commitment to change. Clients who are planning to take immediate action and are already beginning to make some small behavioral changes characterize the Preparation stage. When they are in the fourth stage - Action, clients modify their behavior in order to remedy their problems. Finally, clients in the fifth stage - Maintenance, focus on maintaining the changes they have made (for a further review see Prochaska et al., 1992).

Motivational Interviewing (Miller & Rollnick, 1991) builds upon Transtheoretical Theory and the Stages of Change. The primary goal of Motivational Interviewing is to help the client become motivated for change and help people progress through the Stages of Change (Miller & Rollnick, 1991). Motivation is facilitated not by challenging or confronting problem behaviors, but by focusing on one's values, thinking through the consequences for one's actions and providing psychoeducation about an issue (Miller & Rollnick, 1991).

#### *Levels of Distress at Intake for Marriage Checkup Couples*

Two studies reported distress levels at intake for couples participating in the Marriage Checkup (Cordova et al., 2001 & Cordova et al., 2005). Cordova et al. (2001) reported levels of distress at intake using the *Marital Satisfaction Inventory* (Snyder, 1979). In this study, 61% of couples were classified as "distressed" (Cordova et al., 2001). This was defined as at least one spouse being either severely globally distressed, moderately globally distressed, or globally satisfied but distressed on at least one subscale (Cordova et al., 2001). Of the 61% of couples who were classified as distressed, only 29% were severely globally distressed (Cordova et al., 2001). Cordova et al. (2005) reported levels of distress at intake using the *Marital Satisfaction Inventory*

*Revised* (Snyder, 1997). In this study 77% of couples were classified as “distressed” being defined as at least one spouse being either severely globally distressed, moderately globally distressed, or globally satisfied but distressed on at least one subscale, and 44% of the distressed sample were classified as severely globally distressed.

These two studies provide support that most couples who participated in the MC were not severely distressed. It is interesting to note that a high percentage, 39% and 23%, of couples who participated in the Marriage Checkup were not distressed on any subscale of the *MSI* or the *MSI-R* (Snyder 1979; Snyder, & Aikman 1999). These couples had a healthy relationship and yet still participated in the MC.

#### *Empirical Findings of the Marriage Checkup*

To date, there have been four studies conducted on the Marriage Checkup (MC): Cordova et al., 2001; Cordova et al., 2005; Gee et al., 2002; & Worthington et al., 1995. The results of all of these studies showed that participating in the MC lowered a couple’s level of relational distress compared to a control group. Two of the studies were exploratory studies using a nonrandomized convenience sampling of 31 couples (Cordova et al., 2001) and 48 couples (Worthington et al., 1995) with a control group. The randomized clinical trial of 74 couples (Cordova et al., 2005) provides the strongest evidence for the MC as an empirically based intervention. However, there was insufficient evidence to show that these gains were stable over time. Gee et al. (2002) found that couples who participated in MC maintained the decrease in marital distress two years later. Unfortunately, there was no comparison group to validate Gee et al.’s (2002) findings. In addition, there is no evidence to show any clinically significant change (Jacobson & Truax, 1992). In other words, it is unclear whether or not couples

experienced enough change in the levels of relational distress to take them from the clinically distressed range to the non-distressed range. Participating in the MC may provide some help to reduce relational distress, but it is unclear how much it reduces distress.

#### *Transitioning From the Marriage Checkup to Traditional Marital Therapy*

Gee, Scott, Castellani & Cordova (2002) conducted a follow up study to Cordova et al.'s (2001) pilot study. As part of the Marriage Checkup, a therapist provides the couple with a recommendation as to whether or not traditional marital therapy is advisable. Gee et al., (2002) found that 71% of husbands and 86% of wives transitioned into traditional marital therapy after receiving a treatment recommendation during the MC. This finding highlights the possibility that the majority of couples who participate in the MC decide to continue treatment if their therapist recommends that they do so. In addition, individuals who are experiencing some marital distress may see the MC as an effective way to determine if marital therapy is warranted. What was not reported was whether or not these couples who transitioned into traditional marital therapy were classified as distressed. Recommendations that traditional marital therapy was warranted were most likely given to couples based upon levels of distress, but these details were not reported.

#### *Relationship of Presenting Problem to Marital Therapy*

Research has examined the kinds of problems couples generally experience in marriage. Communication, sexual intimacy, money, children, friends, and relatives have long been identified as common problems faced by couples (Blood & Wolfe, 1960; Cleek & Pearson, 1985). However, it is interesting to note that in a more recent study, Bringle

and Byers (1997) interviews of 222 married individuals found that both husbands and wives perceived only abuse and contemplation of divorce as warranting marital therapy. Additionally, wives included drugs, depression, communication, conflict, extramarital affair, and stress as events that warranted marital therapy (Bingle & Byers, 1997). Their husbands did not identify these as areas needing intervention. Several studies have analyzed the kinds of problems couples self-report when entering traditional marital therapy. The most frequently cited problems are communication, lack of emotional connection, divorce or separation concerns, and a desire to improve the relationship (Doss, Simpson & Christensen, 2004; Miller, Yorgason, Sandberg & White, 2003; & Ward & McCullom, 2005). Additionally, wives reported more presenting problems than their husbands reported (Doss et al., 2004; & Miller et al., 2003). Therapist's ratings of the most prevalent problems of couples seeking traditional marital therapy are similar. Whisman, Dixon, and Johnson (1997) conducted a national study of therapists examining perceptions of significant problems experienced by couples coming into therapy. They found that communication, power struggles, unrealistic expectations, sexual problems, and conflict management were the most frequently encountered problems.

#### *Relationship of Relational Distress to Marital Therapy*

Relational distress is a catalyst for couples seeking traditional marital therapy. In a recent study, Wood, Crane, Schaalje, & Law (2005) conducted a meta analysis of 41 different groups of couples seeking traditional marital therapy. This study found that the mean score on the Dyadic Adjustment Scale (DAS; Spanier, 1976) for each of these studies fell into the distressed range. Additionally, 80% of the groups were either moderately or severely distressed as measured by the DAS (Spanier, 1976). This was an

important finding because multiple studies show that higher levels of relational distress reported by couples prior to entering traditional marital therapy predict less favorable treatment outcomes (Crane, Soderquist & Frank., 1995; Hampson, Prince, & Beavers, 1999; Jacobson & Addis 1993; Snyder, Mangrum, & Wills, 1993; Weasley & Waring, 1996).

Although Wood et al. (2005) report group means of distress, this does not take into account the rates of distress for individual spouses. In a literature search using PsychInfo, only one study was found to report individual levels of distress from a sample of couples seeking traditional marital therapy. Isakson, Hawkins, Harmon, Slade, Martinez, & Lambert (2006) found that in 26% of the sample, both the husband and wife were distressed, in 22% of couples only the husband was distressed, in 24% of couples only the wife was distressed, and in 26% of the couples neither the husband and wife were distressed. This highlights the systemic nature of marital distress and that both spouses may not share the same level of distress. This is important because as mentioned above, if one spouses is distressed, they may not be willing to seek help if the other partner resists. However, there is little in the literature that addresses this issue.

#### *Relationship of Individual Distress to Marital Distress and Marital Therapy*

The literature is replete with individually based problems that effect marital satisfaction. Problems identified as effecting marital satisfaction include: mental illness such as depression (Beach, Finchman & Katz, 1998; Heene, Buysse, & Van Oost, 2005); physical problems such as cancer (Fang, Manne, & Pape, 2001) or diabetes (Trief, Morin, Izquierdo, Teresi, Starren, Shea et al., 2006); alcoholism (Kahler, McCrady, & Epstein, 2003; Whisman, Uebelacker, & Bruce, 2006) or substance abuse (Stuart, Moore, Kahler,

& Ramsey, 2003; Stuart, Moore, Ramsey & Kahler, 2003); contextual factors such as economic stressors (Kinnunen & Feldt, 2004); bereavement over a loved one (Lohan & Murphy, 2005); and occupational stressors (Kinnunen, Feldt, Geurts, & Pulkkinen, 2006; Rogers & May, 2003). These studies show that when one spouse is experiencing distress from individual problems, the marriage is affected and overall marital satisfaction is often lower. For example, occupational difficulties, psychopathology (e.g. depression), or parenting issues could be a primary issue for contention in a marriage. The couple then, in turn, creates a pattern of negative interaction, which heightens relational distress and becomes a problem itself. Individual problems may therefore be a primary catalyst influencing the level of relational distress.

Absent from the literature is a well-articulated discussion about how individual levels of distress and relational levels of distress are functions of one another. A systemic framework dictates that both types of distress influence each other, and there exists a circular relationship between the two. In addition, there is a paucity of literature regarding gender differences in levels of distress for couples presenting for traditional marital therapy.

#### *Summary of the Review of Literature*

The literature supports the Marriage Checkup's claim that its target population is couples who are "at-risk" for severe and chronic relational distress. Most couples who participated in the MC had some significant level of distress, yet were not categorized as severely distressed (Cordova et al., 2001; Cordova et al., 2005). While no empirical studies were cited to support these assertions, the literature does seem to support that couples who seek traditional marital therapy are more distressed than MC couples are. In

contrast, Wood et al. (2005) found that 80% of couples seeking traditional marital therapy were either severely or moderately distressed. Cordova et al.'s (2001) conceptualization that there should exist a difference in levels of relational distress between MC and traditional therapy couples is indirectly supported by the literature but has not been specifically addressed.

Cordova et al. (2001; 2005) reported 39% and 23% of their samples were couples who were not distressed or were not at-risk for severe or chronic distress. Thus, while the MC may attract "at-risk" couples, it may also attract non-distressed couples who want to participate in the MC for some other reason than to address problems in their relationship. These findings indicate that the MC may have a broader appeal than to the specific population of at-risk couples that it was intentionally targeted

Another noteworthy consideration is that the MC may have the potential to act as a gateway into traditional marital therapy. Gee et al.'s (2002) findings suggest that a significant percentage of couples who receive a treatment recommendation could transition into traditional marital therapy. Considering the high percentage of MC couples who were classified as distressed at intake, many couples may receive a treatment recommendation for traditional marital therapy. The relatively low number of couples who received a treatment recommendation in the original study by Cordova et al. (2001) was surprising. However, Cordova et al.'s (2001) purpose was for the MC to stand alone as a clinical intervention supplanting traditional marital therapy. This purpose may have hindered the study exploration of the MC's potential as such a gateway. If a significant percentage of MC couples were to transition into traditional

marital therapy, this would help maximize the homogeneity of a comparison between the MC and traditional marital therapy.

The literature also points out that presenting problems may be another way to measure levels of distress. Although research has pointed out that husbands and wives tend to see different problems when they present for traditional marital therapy, there is some consensus as to what problems warrant traditional marital therapy. Thus, including the presenting problem at intake may be useful in assessing any differences between MC and traditional marital therapy couples. It is also interesting to note the differences between genders in treatment-seeking behaviors. It appears that wives tend to perceive a problem in the marriage before their husbands and seek traditional marital therapy first (Doss, Atkins & Christensen, 2003). This would suggest that one may expect to see gender differences in the levels of distress between the three identified groups.

#### *Significance of the study*

This study was the first to attempt an empirical examination of Cordova et al.'s (2001) conceptualization that there should be differences in the levels of distress exhibited between couples presenting for the MC and those seeking traditional marital therapy. Providing this empirical evidence would promote the utility of the MC. The MC may be a valuable alternative form of help for couples who may not otherwise seek marital therapy. These couples may be distinctly different from those who do. The MC may also be helpful to couples before they experience severe distress or divorce.

#### *Research Questions*

1. Are there descriptive differences in levels of individual and relational distress as measured by the RDAS (Busby et al., 1995), the OQ 45.2 (Lambert et al., 1996)



between couples who complete the Marriage Checkup when compared to couples who seek traditional marital therapy?

2. Do couples who transition from the Marriage Checkup to traditional marital therapy differ from couples who only participate in traditional marital therapy in levels of distress as measured by the RDAS (Busby et al., 1995), the OQ 45.2 (Lambert et al., 1996) and on types of self reported presenting problems identified at intake?

3. Are there differences between couples who only participate in the Marriage Checkup but do not transition into traditional marital therapy and couples who transition from the Marriage Checkup into traditional marital therapy in levels of distress as measured by the RDAS (Busby et al., 1995), the OQ 45.2 (Lambert et al., 1996) and on types of self reported presenting problems identified at intake?

4. Are there gender differences in levels of distress (RDAS and OQ) between the three groups studied: Marriage Checkup only couples, Couples who transition from the Marriage Checkup into traditional marital therapy and traditional marital therapy only couples?

## Chapter II

### *Method*

#### *Subjects*

All couples who self-referred for the MC and traditional marital therapy in the Comprehensive Clinic at Brigham Young University between 1999 and 2007 were used as potential subjects. Only couples where at least one spouse was a student were included in order to ensure group comparability on demographic characteristics. Exclusionary criteria included incomplete case records, any severe or chronic mental illness, current violence in the relationship, significant legal problems where the therapist may have to testify, substance abuse, and suicidal ideation of either partner. The two marriage checkup groups consisted of 61 couples (122 individuals) who transitioned into therapy, and 39 couples (78 individuals) who did not transition into therapy. The traditional marital therapy group consisted of 63 couples (126 individuals). Kline (2005) indicated that the total sample size used in this study (248 individuals) is sufficient for the structural equation model mean comparison. In addition, the sample size was sufficient to reach statistical significance for a medium or large effect size (Cohen, 1992).

Table 1 shows the demographic characteristics of each group. All three groups were primarily younger couples (24-25 years of age) who had only been married two years with at most one child. Both groups were predominantly Caucasian and secondly, Hispanic. The groups were statistically similar in all demographic areas except for one category, the wife's age. Wives in the traditional therapy group were one year older than both MC groups. However, there is no theoretical reason to believe a one year difference in age would impact distress levels for wives.

Table 1. Demographic Characteristics by Group

	Marriage Checkup n=39			MC +Therapy n=61			Therapy Only n=63		
	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range
Husband's age	25.8	5.3	20-36	25.4	3.7	20-33	25.4	4.7	19-45
Wife's age*	24.9	6.1	19-34	24.9	4.0	19-32	26.2	4.7	19-43
Years married	2.8	4.9	0.2-10	2.4	2.3	0.5-11	2.8	3.7	0-20
# Children	0.7	1.0	0-3	0.85	0.9	0-4	0.9	1.3	0-6
Husband's race	95% Caucasian, 5% Hispanic			95% Caucasian, 5% Hispanic			89% Caucasian, 10% Hispanic, 1 % Asian American		
Wife's race	89% Caucasian, 8% Hispanic, 3% Asian American			99% Caucasian, 3% Hispanic, 1.5% African American			87% Caucasian, 12% Hispanic, 1% Pacific Islander		

\*The Marriage Checkup only & Marriage Checkup with therapy groups were statistically different from the therapy only group;  $p < .01$

### *Recruitment*

The Marital Checkup (MC) was primarily advertised to couples living in married student housing as a public service; there was no charge for the service at the BYU Comprehensive Clinic. Generally, traditional marital therapy is not advertised by the Comprehensive Clinic. The Clinic relied on word-of-mouth and other agency referrals. There is no charge to BYU students for services and no charge or a minimal fee for community clients. The clinic is well known to the community and generally functions at high capacity. Because both the MC and traditional marital therapy were offered as free services, this should not compromise the comparison. For both the MC and traditional marital therapy, couples agreed to have their non-identifying information used for research when giving informed consent before beginning treatment. Data for both groups was collected from the BYU Comprehensive Clinic records between 1999 and 2005. All

participants completed a demographic questionnaire, written assessment of both relational and individual distress and self reported their presenting problem they were seeking to address. These measures are described below.

### *Coding*

Subjects were coded in the data set using a binary tag, a zero for Marriage Checkup (MC) couples and a one for traditional martial therapy couples. A second binary tag was coded in order to further differentiate the two MC groups, a zero for those who only participated in the MC, and a one for those who transitioned into therapy.

### *Instruments*

#### *Demographic Questions Asked at Intake.*

All potential clients went through a telephone intake process where the following information was gathered: problems they thought they needed help to resolve, length of marriage; number of children; occupational status; racial identity of each spouse; age of each spouse; income level; any symptoms of severe or chronic mental illness; any symptoms of domestic violence; any legal problems; and any substance or illicit drug use. In addition, the couple was asked to provide a brief psychosocial history.

#### *Relational Distress.*

Marital distress was measured by the Revised Dyadic Adjustment Scale (RDAS Busby et al., 1995). The RDAS is a measure to assess the level of marital distress and to differentiate between distressed and non-distressed couples. It has 14 items in three subscales: consensus, satisfaction, and cohesion. Previous research indicates that all of the subscales had an internal consistency of .80 or higher, with the total RDAS having a Chronbach's Alpha of .90 and sufficient construct validity to the Dyadic Adjustment

Scale (Spanier, 1976; Busby et al., 1995). The RDAS was chosen over the DAS for three reasons. One, it has been proven to have better criterion validity than the original DAS (Busby et al., 1995). Two, the RDAS is the measure used in the BYU Comprehensive Clinic allowing for convenient data collection. Three, RDAS scores can be converted to DAS scores using a formula created by Crane, Middleton & Bean (2000). Thus, RDAS scores can be used to compare levels of distress with other studies. Possible scores range from 0 to 60 with lower scores indicating greater distress. Clinical cutoff scores that indicate that a couple is reporting relationship distress are 48 or below (Crane et al., 2000). The Chronbach's Alpha for this sample was .69. The RDAS (Busby et al., 1995) was the primary indicator used to create the relational distress latent variable. This variable is defined as the level of relational distress experienced by husband and wife plus the error, or unobserved distress that the instruments did not measure.

#### *Individual Distress.*

Levels of individual distressed were measured by the The Outcome Questionnaire – 45 (OQ-45; Lambert et al., 1996). The OQ-45 is a 45-item, self-report measure that assesses functioning in three areas: Symptom Distress (SD), Interpersonal Relations (IR), and Social Role (SR) performance. The symptom distress subscale is heavily loaded with items that assess depression and anxiety, but it also includes a few items to detect substance abuse. The interpersonal relations subscale assesses problems with friendships, family life, and marriage. The social role performance subscale assesses dissatisfaction or conflict in employment, family role, and leisure activities. This measure assesses the intensity of symptoms as well as items measuring positive mental health or quality of life. Each item was rated on a 5-point scale as follows: 0 never, 1 rarely, 2 sometimes, 3

frequently, and 4 almost always. The OQ-45 shows test-retest reliability of .78 to .84 and internal consistency of .71 to .93 (Lambert et al, 1996). In addition, it shows moderate to high concurrent validity with other measures of symptom distress from .60 to .88 (Lambert et al., 1996). It is widely seen as being both a valid and reliable measure (Doerfler, Addis & Moran, 2002). The OQ provides a total score, which is a combined score of three subscales: symptom distress, interpersonal relationships, and social roles. All three subscales were analyzed in order to examine specific differences on the three subscales between the two groups. Possible scores range from 0 to 180 with higher scores indicating greater distress. Clinical cutoff scores, which indicate that a couple is reporting relationship distress are set at 63 or above (Lambert et al., 1996). The Chronbach's Alpha for this sample was .63. The OQ 45.2 (Lambert et al., 1996) was the primary indicator used to create the individual distress latent variable. This variable is defined as the level of individual distress experienced by husband and wife plus the error, or unobserved distress which the instruments did not measure.

#### *Presenting Problems Identification.*

Both MC and traditional marital therapy couples indicated to an intake worker (a paid and trained employee at the clinic) what they experienced as their current presenting problem and their goals for receiving help. Two co-researchers coded the presenting problem from the intake report independently to ensure objectivity. If the two co-researchers disagreed as to the presenting problems, they discussed it and attempted to reach a consensus. In the one case where consensus was not achieved, the primary investigator made the final decision. Based upon this analysis, the author created the following five categories of presenting problems: 1) a desire to strengthen the marriage,

2) communication problems, 3) lack of intimacy or emotional connection, 4) serious distress with imminent divorce, and 5) other. This last category included such problems as money concerns, and sexual problems. While money and sexual concerns were reported in some studies as a primary presenting problem, they were deemed as not warranting their own category in these analyses.

*Preliminary Analysis*

A preliminary analysis was conducted to see whether or not a sufficient number of couples transition from the Marriage Checkup (MC) into traditional marital therapy to facilitate the comparison. This was relevant in order to explore ways to maximize the homogeneity of the comparison groups. The clinic records revealed that 100 couples participated in the MC between 1999 and 2007. Of these, 61 couples transitioned from the MC into traditional marital therapy. Table 2 summarizes the descriptive characteristics of the MC and traditional marital therapy couples examined in the study.

Table 2. Treatment Recommendation Rates for Marriage Checkup Couples (n=100)

---

Number of couples who transitioned from the MC to traditional marital therapy	61 (61%)
Number of Treatment Recommendations	65 (65%)
Number of Couples who followed their treatment recommendation	55 (84%)
Number of couples who received a Tx Recommendation but did not transition into therapy	10 (16%)
Number of couples who did not receive a Tx recommendation but transitioned into therapy anyway	6 (17%)

---

Almost two-thirds (65%) of MC couples received a recommendation that traditional marital therapy was warranted, and 84% of those couples followed the recommendation. It is also interesting to note that 6 couples out of the other 35, or 17%, who did not receive a treatment recommendation for further therapy, decided to transition into therapy anyway. This analysis provided a significant percentage of MC couples transitioning into traditional therapy. Since so many couples transitioned into therapy after completing the MC, this group (MC couples who transitioned into therapy) became the primary comparison group for the structural equation modeling (SEM). However, couples who only participated in the MC were also examined in the secondary analysis.

### *Design*

The basic statistical analysis of the study was a group means comparison using structural equation modeling (SEM). SEM was important to use in this instance because of the dyadic nature of the data. Normal group mean comparisons are based upon an assumption that observations are independent of one another (Hoffman, 2004). Concerning this study, this assumption of independence required that husbands and wives not influence each other's levels of both relational and individual distress. However, couples' scores of distress violate this assumption (Doss et al., 2003; Kenny, Kashy & Cook, 2006).

### *Analysis*

Due to the dyadic nature of the data, the basic statistical analysis of the study was a group means comparison using structural equation modeling (SEM). Normal group mean comparisons are based upon an assumption that observations are independent of one another (Hoffman, 2004). Concerning this study, this assumption of independence



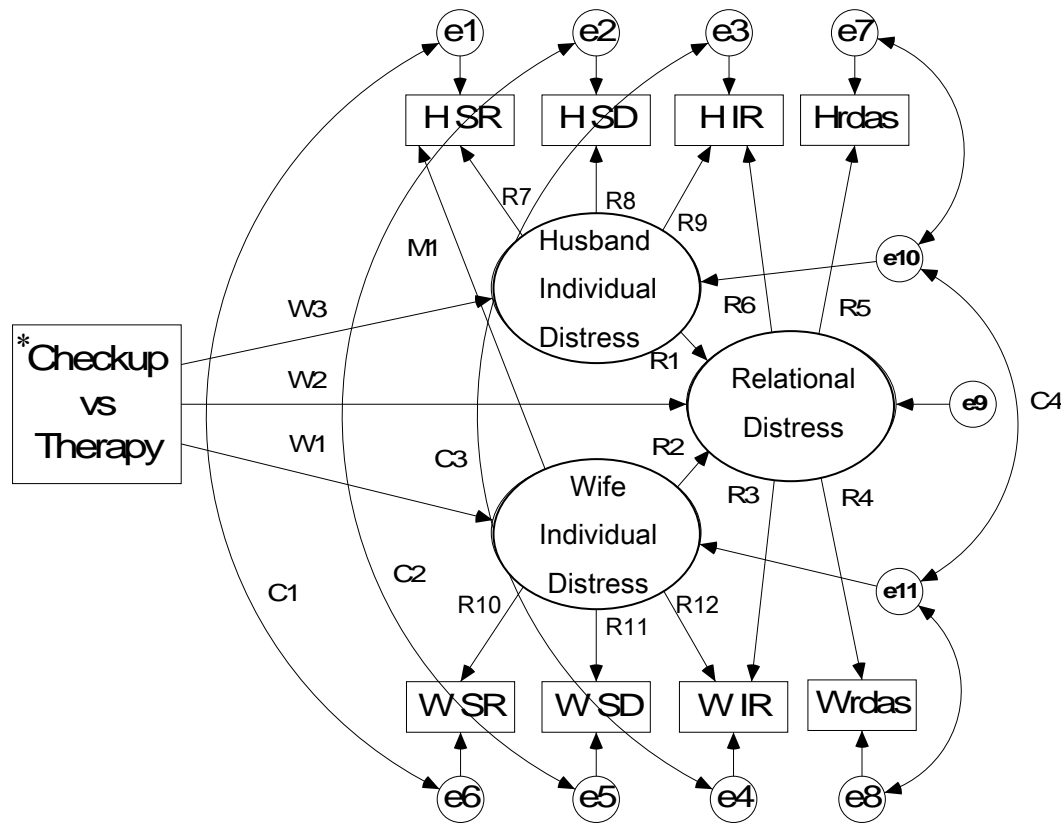
required that husbands and wives not influence each other's levels of both relational and individual distress. However, couples' scores of distress violate this assumption (Doss et al., 2003; Kenny, Kashy & Cook, 2006).

For example, when a husband experiences some level of relational distress, this affects his wife's level of relational distress and vice versa. This systemic influence can take the form of both actor and partner effects (Kenny et al., 2006). Actor effects are such that an individual's score on a measure affects the same individual's score on another measure. With regard to this study, this would be a husband's OQ score affecting his RDAS score. A partner effect is explained as one spouse's score on a measure affects their spouse's score on another measure. With regard to this study, this would be a wife's OQ affecting her husband's RDAS score. SEM accounted for this level of systemic influence in the model and allowed non-independent observations

Figure 1 shows the SEM used in this analysis. This model allowed for the systemic influence of couples' distress with both partner and actor affects. Actor affects include individual's OQ scores influencing their RDAS scores and vice versa (R1, R2, R3, & R6.). Partner effects included one spouse's scores influencing the other's scores (M1). In addition, the systemic influence was also accounted for by allowing scores to covary with each other (C1, C2, C3, C4).

The specific model chosen was a MIMIC model (Kline, 2005, pg. 194, 307-310) which stands for multiple indicators and multiple causes. This model allows for a dichotomous group comparison using cause indicators that are continuous exogenous variables. The model followed established procedures for a MIMIC model as set forth by Kline (2005). The MIMIC model has an opposite layout from a path model in that the

Figure 1. The Dyadic Group Means Comparison Using a Structural Equation Model.



\* This dyadic group means comparison is of Marriage Checkup Couples who transitioned into therapy versus traditional marital therapy only couples.

HSD = Husband Symptom Distress

HSR = Husband Social Role

HIR = Husband Interpersonal Relations

WSD = Wife Symptom Distress

WSR = Wife Social Role

WIR = Wife Interpersonal Relations

HRDAS = Husband Revised Dyadic Adjustment Scale

WRDAS = Wife Revised Dyadic Adjustment Scale

dichotomous variable (or dependent variable) is represented at the left side instead of the right side of the model. (Kline, 2005). This was achieved by making the dyad the unit of analysis rather than the individual. A SEM model allowed levels of distress to be correlated and influence each other. Regression weights from the Checkup vs. Therapy variable (W1, W2, W3) provided the analysis of whether or not there are any group differences for the comparison variables (RDAS, and OQ scores).

Variables used for comparison were levels of relational distressed as measured by the *Revised Dyadic Adjustment Scale* (Busby et al, 1995), levels of individual distress as measured by the *Outcome Questionnaire 45.2* (Lambert et al., 1996). Table 3 provides the correlation matrix for all eight indicators used to construct the latent variables. All correlations fell within appropriate levels (below .85) for use in a SEM (Kline, 2005). While four correlations were moderately high (between .5 to .64) they were not high enough to negatively impact the SEM (Kline, 2005).

The three latent variables were constructed based upon the theoretical relationship between the couples' individual and relational distress. The Relational Distress latent variable is defined as both his and her perception of relational distress plus the measurement error, which is any distress unaccounted by the written assessment. Both the Husband Individual Distress and Wife Individual Distress latent variables are defined as the perception of individual distress by husband and wife plus the measurement error, which is any distress unaccounted by the written assessment.

These latent variables used the RDAS and OQ subscales as indicators. Initially, the OQ subscales were created from the factor loadings of all three subscales. In addition, both the husband and wife's RDAS subscale was its own latent variable.

Table 3. Correlation Matrix for Husbands and Wives on the Symptom Distress (SD), Interpersonal Relationship (IR), Social Roles (SR), and the Revised Dyadic Adjustment Scale (RDAS).

	HSD	HSR	HIR	WSD	WSR	WIR	HRDAS	WRDAS
Husband Symptom Distress	1.00							
Husband Social Role	.561	1.00						
Husband Interpersonal Relations	.597	.421	1.00					
Wife Symptom Distress	.105	-.031	.103	1.00				
Wife Social Role	-.023	-.073	-.105	.654	1.00			
Wife Interpersonal Relations	.284	.109	.408	.539	.487	1.00		
Husband Revised Dyadic Adjustment Scale	-.247	-.245	-.463	.077	.126	-.227	1.00	
Wife Revised Dyadic Adjustment Scale	-.155	-.130	-.314	-.122	-.163	-.409	.521	1.00

However, all three latent variables were modified to account for their actor and partner effects of individual and relational distress. The Relational Distress latent variable was

conceptualized as being similar to the IR subscale in relationship to both OQ latent variables. Therefore, paths for regression weights R1 and R2 were added. Similarly, the Husband Individual Distress and Wife Individual Distress latent variables was conceptualized as being similar to the individual RDAS scores for husbands and wives. Therefore, regression weights R3 & R6 were added so that the Relational Distress latent variable is a reflection of the OQ 45.2 IR subscales as well. While the RDAS scores only focus on the marital relationship and the IR subscales focus on all interpersonal relationships in general, the author felt that these differences were not significant and thus the modifications (R1, R2, R3, & R6) were made.

The conceptualization of the OQ as individual measure and the RDAS as a dyadic measure of the marital system was confirmed by a factor analysis pattern matrix as shown in Table 4. Component one consisted of high factor loadings for the husband's OQ subscales, but not for any of the wife's subscales or RDAS scores. Likewise, component two consisted of high factor loadings for the wife's OQ subscales but neither for the husband's nor the RDAS scores. This suggested that the OQ was an individual measure. However, component three shows high factor loadings for both the wife and husband's RDAS scores. This suggests that the RDAS is a dyadic measure rather than an individual measure. This test substantiates the theoretical conceptualization that the HOQ and WOQ latent variables should be individual while the Couple RDAS latent variable should be a group measure of the marital relationship.

Preliminary testing of the model also called for one empirical modification. Modification indices suggested adding a path for a regression weight, M1, from the Wife OQ latent variable to the Husband SR subscale score. This modification was also

justified theoretically although not part of the original model. The SR subscale measured the stressors associated with work or household duties. The modified regression weight M1 allowed for the husbands level of distress with work or household duties to affect the wife's overall level of distress. The specific population examined in this study was predominantly Christian with specific theology that encouraged traditional gender roles (Duke, 1998). This culture tends to encourage the husband to provide financial support for his family and for his wife to stay at home and raise their children (Duke, 1998). In these circumstances, a wife may be more susceptible to her husband's level of distress regarding his profession because he is thought of as the sole source of financial support for the family. Therefore, M1 is theoretically justified.

Table 4. Pattern Matrix of a Factor Analysis for OQ and RDAS scores

	Component		
	1	2	3
Husband Symptom Distress	<b>.899</b>	.087	.065
Husband Social Role	<b>.674</b>	.033	-.335
Husband Interpersonal Relations	<b>.837</b>	-.074	.092
Wife Symptom Distress	.057	<b>.892</b>	.104
Wife Social Role	.183	<b>.705</b>	-.328
Wife Interpersonal Relations	-.136	<b>.883</b>	.067
Husband Revised Dyadic Adjustment Scale	-.109	.196	<b>.841</b>
Wife Revised Dyadic Adjustment Scale	.110	-.151	<b>.870</b>

Extraction Method: Principal Component Analysis.

### Chapter III

#### *Results*

##### *Research Question 1*

Are there descriptive differences in levels of distress between couples who complete the Marriage Checkup when compared to couples who seek traditional marital therapy?

Table 5 shows the descriptive characteristics of levels of distress for couples participating in the study. The sample was distributed into three categories: couples who only participated in the Marriage Checkup, couples who participated in the Marriage Checkup and traditional marital therapy, and couples who only participated in traditional marital therapy. Levels of clinical distress were examined for husbands and wives on the RDAS with a score of 48 or below (Busby et al., 1995) and the OQ-45.2 with a clinical

Table 5. Percentages of Couples Clinically Distressed at Intake

Measures	Marriage	Marriage Checkup	Marital Therapy
	Checkup Only	& Therapy	Only
Husband OQ	13% (n=5)	14% (n=9)	33% (n=21)
Wife OQ	3% (n=1)	26% (n=16)	43% (n=27)
Husband RDAS	8% (n=3)	34% (n=21)	57% (n=36)
Wife RDAS	8% (n=3)	39% (n=24)	73% (n=46)
At least one spouse clinically distressed	28% (n=11)	62% (n=38)	84% (n=53)
	n=39	n=61	n=63

score of 63 or above (Lambert et al., 1996). In addition, percentages of couples where at least one spouse was clinically distressed on either the RDAS or the OQ-45.2 were measured.

These comparisons clearly demonstrate a descriptive difference between couples who participated in the MC (lowest levels of distress) and those who initiated traditional marital therapy (highest levels of distress). It is also evident from Table 5 that couples who requested the MC and then transitioned into traditional marital therapy reported higher levels of distress than those who did not transition into marital therapy.

### *Research Question 2*

Do couples who participate in the Marriage Checkup and transition into traditional marital therapy differ from couples who self-refer directly for traditional marital therapy in levels of distress and types of problems identified at intake?

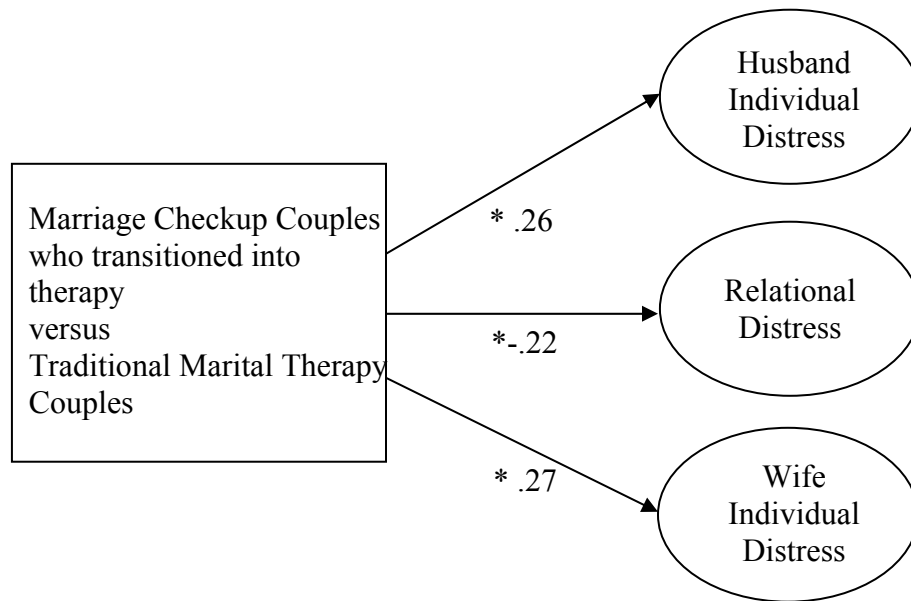
Figure 2 shows the MIMIC model's results for the comparison of Marriage Checkup couples who transitioned into traditional marital therapy and traditional marital therapy couples. This model yielded appropriate fit for the data:  $\chi^2(14, N = 248) = 17.6$ ,  $p = .226$ ; CFI = .990; RSMEA = .046. Significant differences between the MC and Therapy groups were found. MC couples had lower levels of individual distress for husbands ( $\beta = .26$ ,  $p \leq .01$ ) and for wives ( $\beta = .27$ ,  $p \leq .01$ ).

Additionally, MC couples had lower levels of relational distress ( $\beta = -.22$ ,  $p \leq .01$ ). This negative result refers to the scoring nature of the RDAS (Busby et al., 1995) in which lower scores indicate greater distress. These differences were significant and showed that couples who self-referred to the MC and then progressed into marital therapy



had lower levels of individual and marital distress as opposed to couples self referring directly into traditional marital therapy.

Figure 2. Comparison of Distress Levels for Marriage Checkup Couples Who Transition Into Therapy Versus Traditional Marital Therapy Couples



\*  $p \geq .05$  Standardized Scores are reported

The MIMIC model used in this analysis as seen in Figure 1 above used many other regression weights are error measurements. Most of these were found to show significant loadings. Loadings from the Husband Individual Distress latent variable to the Social Role subscale ( $\beta = .85, p \geq .01$ ), the Symptom Distress subscale ( $\beta = .45, p \geq .01$ ), and Interpersonal Relationship subscale ( $\beta = .59, p \geq .01$ ) were significant. Loadings from the Wife Individual Distress to the Social Role subscale ( $\beta = .62, p \geq .01$ ), the Symptom Distress subscale ( $\beta = .87, p \geq .01$ ), Interpersonal Relationship subscale ( $\beta = .55, p \geq .01$ ) and Husband's Social Role subscale ( $\beta = -.26, p \geq .01$ ) were significant. Loadings from the Relational Distress latent variable to the Husband Revised Dyadic

Adjust Scale ( $\beta = .74, p \geq .01$ ), Wife Revised Dyadic Adjust Scale ( $\beta = .82, p \geq .01$ ), Husband Interpersonal Relationship Scale ( $\beta = -.37, p \geq .01$ ), and Wife Interpersonal Relationship Scale ( $\beta = -.34, p \geq .01$ ) were significant. Factor loadings from the Wife Individual Distress latent variable to the Relational Distress latent variable was significant ( $\beta = -.37, p \geq .05$ ) while the loading from the Husband Individual Distress latent variable to the Relational Distress latent variable ( $\beta = -.07, p = .58$ ) was not.

Differences in the number of presenting problems self reported by clients in these two groups were found. Table 6 shows the count of presenting problems by group. The comparison yielded a result of  $\chi^2(4, N=124) = 45.5, p \leq 0.1$  and a statistical difference between these two groups. MC couples had lower numbers of presenting problems in every category except communication problems than did traditional marital therapy couples. MC couples often indicated that they wanted to strengthen their marriage and had experienced some communication problems.

Table 6. Number of Presenting Problem Identified by the Marriage Checkup with Therapy and Therapy Only Groups

	*Strengthen Marriage	Communication Problems	*Intimacy Problems	*Divorce/Conflict	*Other
Marriage Checkup	25	22	2	4	8
percent of total N=61	41.0%	36.0%	3.3%	6.7%	13.1%
Therapy	1	25	9	7	21
percent of total N=63	1.6%	39.7%	14.3%	11%	33.4%

\* significant differences between the two groups at  $p \leq 0.5$ .

The most striking difference between the groups was the high percentage of MC couples (41%) who were seeking to strengthen their marriage while only one couple seeking traditional marital therapy reported this as the reason for seeking help.

### *Research Question 3*

Are there differences between couples who only participate in the Marriage Checkup and do not transition into traditional marital therapy and couples who participate in the Marriage Checkup and do transition into traditional marital therapy in levels of distress and types of problems identified at intake?

The same MIMIC model used above, was also used to test these two MC groups. The model yielded appropriate fit for the data:  $\chi^2(15, N = 200) = 21.103$ ,  $p = .134$ ; CFI = .982; RSMEA = .061. Significant differences between the MC only and the MC who transitioned into therapy were found. MC only couples who did not transition into therapy had lower levels of individual distress for husbands ( $\beta = .357$ ,  $p \leq .01$ ) but not for wives ( $\beta = .050$ ,  $p = .642$ ). Additionally, MC only couples had lower levels of relational distress ( $\beta = -.22$ ,  $p \leq .01$ ). This negative beta refers to the scoring nature of the RDAS (Busby et al., 1995) in which lower scores indicate greater distress which is opposite of the OQ 45.2 (Lambert et al., 1996).

There were differences in the types of presenting problems reported between the MC only and MC with traditional marital therapy groups. Table 7 shows the presenting problems for these two groups. A comparison yielded a result of  $\chi^2(4, N = 100) = 26.5$ ,  $p \leq 0.5$  and provided a statistical difference of the difference for these two groups. The predicted probability ratios were statistically different for each category of problems between the two groups at  $p \leq 0.5$ . About 93% of the MC only couples indicated that they were seeking help in strengthening their marriage. Another major difference was the lack of couples in the MC only group reporting communication problems, where over one third of the MC and therapy couples reported this as their presenting problem.

Table 7. Presenting Problem Comparison for the Marriage Checkup Only and Marriage Checkup with Therapy Groups

	<i>*Strengthen Marriage</i>	<i>*Communication Problems</i>	<i>*Intimacy Problems</i>	<i>*Divorce/ Conflict</i>	<i>*Other</i>
Marriage Checkup Only	36	2	0	0	1
percent of total N=39	92.3%	5.1%	0.0%	0.0%	2.6%
Marriage Checkup & Therapy	25	22	2	4	8
percent of total N=61	41.0%	36.0%%	3.3%	6.7%	13.1%

\* significant at  $p \leq 0.5$ .

#### *Research Question 4*

Are there any gender differences in levels of distress among the groups of couples participating in the MC only, couples participating in the MC and traditional marital therapy, and couples participating in only traditional marital therapy?

The MANOVA conducted on the distress levels demonstrated a significant effect associated with gender (Wilk's  $\lambda = .798$ ,  $F = 4517.9$  (4)  $p \leq .01$ ). Table 8 shows the means, standard deviations for distress levels by group. Univariate analyses were conducted as a follow up to the multivariate analyses shown in Table 9. Within group gender differences for every subscale of the OQ-45 were found, as well as between group gender differences for the SR and IR subscales. Overall, Husbands tended to have lower levels of individual and relational distress than did wives as shown on Figures 4, 5, and 6 with the exception of the Social Role subscale of the OQ45.2 as shown in Figure 3.

Table 8. Means, Standard Deviations of Distress Levels by Gender

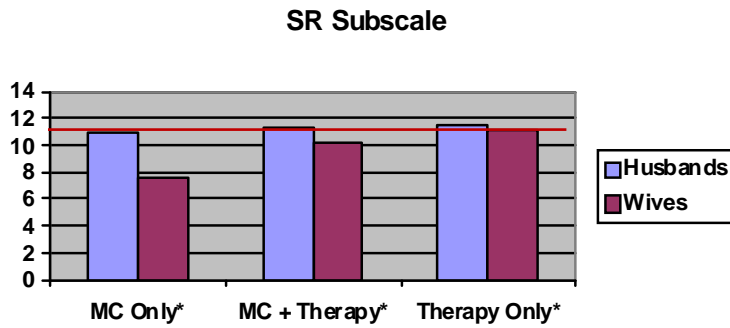
Measurements	Group					
	MC Only n=39		MC plus Therapy n=61		Therapy Only n=63	
	M	SD	M	SD	M	SD
Husband Symptom Distress	21.92	8.56	23.14	5.21	28.76	5.73
Husband Social Role	11.00	4.11	11.33	3.68	11.52	3.47
Husband Interpersonal Relationship	7.27	5.21	11.33	3.68	11.52	3.47
Husband Revised Dyadic Adjustment Scale	54.00	5.73	50.28	9.38	46.10	7.01
Wife Symptom Distress	22.48	9.32	28.14	12.09	34.21	11.56
Wife Social Role	7.52	3.17	10.10	4.36	11.12	4.75
Wife Interpersonal Relationship	6.27	4.51	12.10	6.04	15.24	5.48
Wife Revised Dyadic Adjustment Scale	52.95	6.38	49.22	7.49	44.23	8.63

Table 9. Univariate Analyses of Variance on Distress Levels by Group and Gender

Source	df	<i>F-Values</i>			
		Social Role Subscale	Symptom Distress Subscale	Interpersonal Relationship Subscale	Revised Dyadic Adjustment Scale
Gender	1	**13.78	**8.58	*4.47	2.22
Group	2	**6.19	**18.68	**45.00	**28.29
Group x Gender	2	*3.52	1.31	**6.22	0.11

\*  $p \leq .05$  \*\*  $p \leq .01$

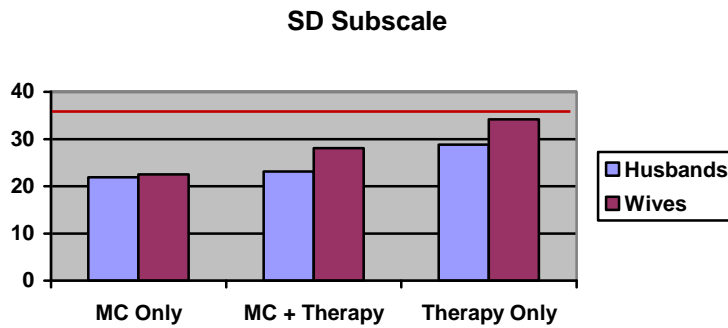
Figure 3. Means of the Social Role Subscale for Husbands and Wives by Group



\*Statistical differences for gender within groups

† The red line indicates the clinical cutoff score of 12

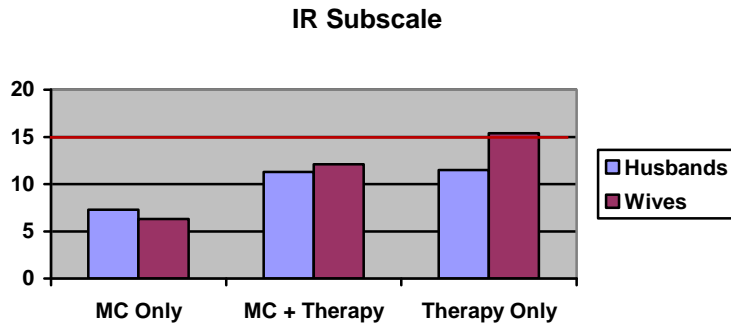
Figure 4. Means for the Symptom Distress Subscale for Husbands and Wives by Group



\*Statistical differences for gender within groups

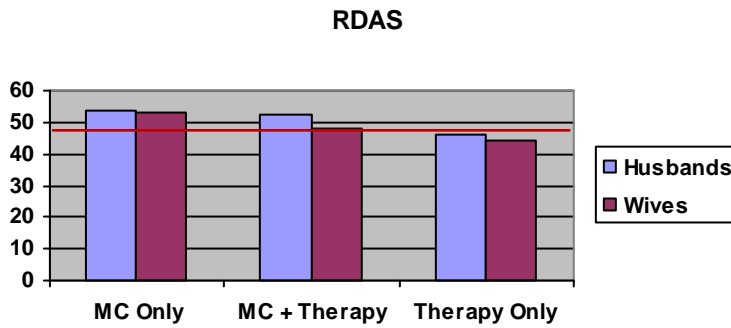
† The red line indicates the clinical cutoff score of 36

Figure 5. Means for the Interpersonal Relationship Subscale for Husbands and Wives by Group



\*Statistical differences for gender within groups  
 † The red line indicates the clinical cutoff score of 15

Figure 6. Means for the Revised Dyadic Adjustment Scale for Husbands and Wives by Group



\*Statistical differences for gender within groups  
 † The red line indicates the clinical cutoff score of 48 or below (opposite of the OQ 45.2)

In summary, the results showed significant differences to all the research questions asked. There were descriptive differences found between the Marriage Checkup only, Marriage Checkup with therapy, and traditional marital therapy only groups in answer to research question one. In answer to research question two, the MIMIC model revealed that MC couples had lower levels of individual distress for husbands ( $\beta = .26, p \leq .01$ ) and for wives ( $\beta = .27, p \leq .01$ ) and lower levels of relational distress ( $\beta = -.22, p \leq .01$ ). In addition, more MC couples reported a lack of presenting problems than did traditional marital therapy couples. In research question three, couples who only participated in the MC had lower levels of individual distress for husbands ( $\beta = .357, p \leq .01$ ) but not for wives ( $\beta = .050, p = .642$ ) and lower levels of relational distress ( $\beta = -.22, p \leq .01$ ) than did couples who participated in the MC and transitioned into traditional marital therapy. In addition, MC only couples almost exclusively (93%) reported a lack of presenting problems. Finally, in answer to research question four wives tended to have higher levels of distress than did their husbands.



## Chapter IV

### *Discussion*

The purpose of this study was to investigate differences in distress levels between couples who participated in the Marriage Checkup (MC) versus couples who participated in traditional marital therapy. The dyadic group means comparison showed that levels of distress were statistically lower for MC couples. This provides support for Cordova et al.'s (2001) conceptualization that the MC is designed for and could be attractive to couples who are at-risk for severe and chronic relational distress.

Three distinct groups emerged from this analysis supported both by the patterns of distress levels and presenting problems. The least personal and relationship distress was found in couples who only participated in the MC. Couples who continued into therapy after completing the MC had more distress, and couples who only participated in traditional marital therapy had the highest level of distress. People respond differently to different approaches of professional help. Robertson & Fitzgerald (1992) found that males prefer alternative forms of helping over traditional personal counseling. Specifically, advertising services as a “class” or “seminar” increases the attractiveness for males (Robertson et al., 1992). Similarly, alternative forms of traditional marital therapy may be more attractive for some couples. Perhaps some couples who would not normally seek traditional marital therapy would respond to the MC. Cordova et al. (2001) state that the MC was designed to attract couples who might not otherwise seek professional help.

The possibility that the MC attracts a different type of couples than traditional marital therapy does is of tremendous importance. Many couples appear reluctant to seek

traditional marital therapy (Bowen & Richman, 1991) even when experiencing divorce or dissolution (Wolcott, 1986). Lack of resources, availability, time, and social stigma may all be factors in this unwillingness (Cordova et al., 2001). Some couples may think that it is just “too late” and may not believe therapy would help (Wolcott, 1986). Often, when couples do seek professional help, they wait until they are experiencing high levels of distress. Another challenge to beginning the therapeutic process is that one partner (typically the wife) is often more cognizant of problems and wants to seek help before the other (Doss et al., 2003; Friedlander, Escudero & Heatherington, 2006). Additionally, couples who do seek help are more likely to consult clergy or a doctor over a trained mental health professional (Doherty, Lester, & Leigh, 1986). Given the empirically validated efficacy of marital therapy (Dunn & Schwebel, 1995; Shadish & Baldwin, 2005) and the negative effects of marital distress (e.g. Keicolt-Glaser & Newton, 2001), the treatment gap of distressed couples who do not seek professional help is a salient issue. Certainly, the MC is not a panacea to marital distress. However, if some couples may participate in the MC who would not otherwise seek help, the MC should be utilized.

The MC is a unique intervention. In essence, the MC is a highly individualized form of marital education intermingling some of the benefits of traditional marital therapy. Rather than learning general trends or patterns of distress in a class or from a book, the couple learns about their specific strengths and areas of improvement. In addition, they receive this information in a one on one setting allowing them the opportunity to receive personal attention. Yet, the couple does not have to expend considerable financial resources, commitment of time, or suffer any social stigma that

may be associated with traditional marital therapy. In short, the MC offers a unique type of intervention to couples highlighting common benefits from other forms of help.

A secondary focus on this study showed that wives had higher levels of distress than their husbands did. Doss et al. (2003) found that wives were the barometers of the relationship and were aware of distress sooner. They speculated that sociocultural gender differences influence women to be more relationship oriented, thus more sensitive to any distress. It is not known whether these differences are a function of a developmental difference in stages of distress or an innate gender difference. They also assume that husbands experience similar levels of distress, but at different points in time.

In this study, the only measure that indicated husbands had higher levels of distress was the Social Relationship subscale of the OQ 45.2 (Lambert et al., 1996). This may be explained by the adherence to traditional gender roles by many within this population where the husband is seen as the primary provider and the wife as the homemaker (Duke, 1998). In addition, the recent transition into married life, or having a new baby may have exacerbated the stress of traditional gender roles for husbands in this sample.

It is well documented that women have more favorable attitudes towards therapy and are more likely to initiate traditional marital therapy than are husbands (e.g. Doss et al., 2003). It is vitally important for therapists to be aware of this potential circumstance when joining with a couple. Therapist neutrality (is imperative when initiating traditional marital therapy. Both spouses will have different experiences and realities which a competent therapist needs to validate. Because of these gender differences, therapists may want to focus some attention on the husband's areas of stress related to his social

environment as well as on the relationship distress in the marriage. Such awareness will influence his willingness to participate in therapy.

### *Limitations*

The major limitation of this study was the sample. It consisted predominately of European American, middle class, religious couples. In addition, at least one spouse had to be a student to be included in the analysis. This restricted the sample to primarily young newlywed couples. This was necessary in order to maximize the group homogeneity on demographic factors. Because this sample is so specific, one should use caution when generalizing these findings to other populations. Specifically, culture, age, socioeconomic status, and what stage in the family life cycle, should be taken into consideration. In addition, the lack of a culturally diverse sample supports criticism that mental health is ethnocentrically focused on European American culture at the expense of and covertly discriminating against other cultures (Sue & Sue, 2004).

### *Clinical Implications*

The Marriage Checkup (MC) has the potential to be a tremendous resource. The preventative aspect of the MC provides a unique tool to address problems before they become significant. The MC is a brief, non-threatening intervention that can be used to assess the state of the marriage, provides an experience of therapy without a long-term commitment. It can help identify problems or needs. Clients who would be hesitant to initiate therapy may be more willing to participate.

Wolcott (1986) found that the number one reason divorced couples did not seek out professional help was because their levels of relational distress eroded any hope that they could reconcile. If couples participated in the MC before reaching this point, they

could lower their distress (Cordova, et al., 2005) and such outcomes may be avoided. In this sense, the MC could be utilized as a preventative intervention.

The MC may attract couples who may not otherwise seek help (Cordova et al., 2001). The marketability of the MC as a unique service provides yet another option for couples. It is less expensive and requires less time than traditional marital therapy. It may also be less threatening for couples and not carry the same social stigma as traditional marital therapy. The potential for the MC to reach a couple who otherwise would not seek help and divorce is a salient issue.

The MC may be a mechanism to attract couples to explore therapy prior to becoming severely distressed. In this study, 84% of couples who received a treatment recommendation that traditional marital therapy was warranted followed the recommendation. This finding is similar to prior research, in that brief, focused assessment or evaluation can increase couples' motivation and interest in more therapeutic interventions (Larsen, Keigin & Holman, in press). In addition, Crane et al. (1995) indicated that couples might have better treatment outcomes if they enter therapy before the levels of distress get too high. This highlights the potential utility of the MC as a gateway into traditional marital therapy.

Further, the MC is simple and easy to facilitate. It can be implemented in a variety of settings: private practice, university counseling centers, EAP settings, hospitals, community mental health centers, as well as in conjunction with seasonal events such as Valentine's day. It would take little preparation and or resources to implement. Most mental health professionals already provide the basic mechanisms of the MC, assessment and feedback. Thus, professionals could merely offer the assessment

and feedback as a separate service, promoting it as the MC with no additional sessions of therapy.

While, Cordova et al. (2001) have set forth specific criteria for facilitating the MC, the idea itself has value and can be utilized in different ways. The MC can be tailored to best fit the organizational constraints of a specific venue as well as the demands of the clinical population served. Instead of performing an entire battery of written assessments over two to three sessions, only one or two assessments could be used over one session. Couples seeking help are not cognizant of any such differences. They are merely responding to the idea of the checkup. Modifying the MC may negate the empirically supported reduction of distress (Cordova et al., 2001; Cordova et al., 2005). However, couples may still respond with lower levels of distress than couples seeking traditional marital therapy may. Thus, mental health professionals, religious leaders, administrators, and policy makers can employ the concept of the MC to help couples and marriages.

#### *Recommendations for Future Research*

There are several areas for further research regarding the Marriage Checkup (MC). This study supports Cordova et al.'s (2001) conceptualization that the MC targets a different population of couples than does traditional marital therapy. However, no empirical evidence has been provided to explain this assumption. Qualitative research could be done investigating couple's attitudes regarding the MC in an attempt to ascertain how the MC is perceived. Qualitative research may also provide direct support that the MC targets a different population of couples than traditional forms of help.

Additionally, research investigating the utility of using the MC as a gateway into traditional marital therapy would provide useful insights. What processes help a couple transition into therapy from the MC? Do couples who transition into therapy from the MC have better treatment outcomes than couples who directly enter traditional marital therapy?

As indicated earlier, the sample was primarily a white, middle to upper class population who were young and well educated. It would be helpful to replicate the study using a much more diverse population. It would be interesting to see if clients from specific backgrounds respond more readily to the MC as an intervention or as a way to transition into treatment.

### *Conclusion*

This study supports Cordova et al.'s (2001) conceptualization that the Marriage Checkup (MC) targets couples who are at-risk for severe or chronic relational distress. Specifically, couples who participated in the MC had lower levels of relational distress as measured by the RDAS (Busby et al., 1995), lower levels of individual distress as measured by the OQ45.2 (Lambert et al., 1996), and less severe presenting problems.

The results of this study provide some support to the notion that the MC may attract couples who would otherwise not seek help, help couples receive help before severe distress leads them to dissolve their relationship, and provide a gateway for couples to transition into traditional marital therapy. Although the MC is not a panacea, it does offer couples an alternative to traditional marital therapy that may be more attractive. In short, the MC provides a useful tool to help address epidemic levels of relational distress and divorce.

## References

- Beach, S. R. H., Fincham, F. D., & Katz, J. (1998). Marital therapy in the treatment of depression: Toward a third generation of therapy and research. *Clinical Psychology Review*, *18*, 635-661.
- Blood, R., & Wolfe, D. (1960). *Husbands and wives: The dynamics of family living*. Oxford, England: Free Press Glencoe.
- Bowen, G. L., & Richman, J. M. (1991). The willingness of spouses to seek marriage and family counseling services. *Journal of Primary Prevention*, *11*, 277-293.
- Bringle, R. G., Byers, D. (1997). Intentions to seek marriage counseling *family relations*, *46*, 299-304.
- Busby, D. M., Crane, D. R., Larson, J. H., & Christensen, C. (1995). A revision of the Dyadic Adjustment Scale for use with distressed and non distressed couples: Construct hierarchy and multidimensional scales. *Journal of Marital and Family Therapy*, *21*, 289-308.
- Cleek, M., & Pearson, T. (1991). Demographic subgroup contributions to divorce cause constellations. *Journal of Divorce & Remarriage*, *15*(1), 33-49.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*, 155-159.
- Cordova, J. V., Scott, R. L., & Dorian, M. (2005). The marriage checkup: An indicated preventive intervention for treatment-avoidant couples at risk for marital deterioration. *Behavior Therapy*, *36*, 301-309.
- Cordova, J.V., Warren, L.Z., & Gee, C.B. (2001). Motivational interviewing as an intervention for at-risk couples. *Journal of Marital and Family Therapy*, *27*, 315-326.



- Crane, D. R., Middleton, K. C., & Bean, R. A. (2000). Establishing criterion scores for the kansas marital adjustment scale and the revised dyadic adjustment scale. *The American Journal of Family Therapy*. 28,53-60.
- Crane, D. R., Soderquist, J. N., & Frank, R. L. (1995). Predicting divorce at marital therapy intake: A preliminary model. *American Journal of Family Therapy*. 23, 227-236.
- Doerfler, L. A., Addis, M. E. & Moran, P. F. (2002). Evaluating mental health outcomes in an inpatient setting: Convergent and divergent validity of the oq-45 and the bassis-32. *The Journal of Behavioral Health Services and Research*. 29, 394-403.
- Doherty, W.J., Lester, M.E., & Leigh, G.K. (1986). Marriage enhancement weekends; Couple who win and couples who loose. *Journal of Marital and Family therapy*, 12, 49-61.
- Doss, B. D., Atkins, D. C., & Christensen, A. (2003). Who's dragging their feet? Husbands and wives seeking marital therapy. *Journal of Marital and Family Therapy*. 29, 165-176.
- Doss, B. D., Simpson, L. E., Christensen, A. (2004). Why do couples seek marital therapy? *Professional Psychology: Research and Practice*. 35, 608–614.
- Duke, J. T. (1998). Cultural continuity and tension: A test of stark's theory of church growth. In J. T. Duke's (Ed.) *Latter-day Saints Social Life: Social Research on the LDS Church and People*. pp. 71-103.
- Dunn, R. L., & Schwebel, A. I. (1995). Meta-analytic review of marital therapy outcome research. *Journal of Family Psychology*. 9, 58-68.

- Fang, C., Manne, S., & Pape, S. (2001). Functional impairment, marital quality, and patient psychological distress as predictors of psychological distress among cancer patients' spouses. *Health Psychology, 20*(6), 452-457.
- Friedlander, M., Escudero, V., & Heatherington, L. (2006). *Therapeutic alliances in couple and family therapy: An empirically informed guide to practice*. Washington, DC, US: American Psychological Association.
- Gee, C.B., Scott, R.L., Castellani, A.M., & Cordova, J.V. (2002). Predicting 2-year marital satisfaction from partner's discussion of their marriage checkup. *Journal of Marital and Family Therapy, 28*, 399-407.
- Hampson, R. B., Prince, C. C., & Beavers, W. R. (1999). Marital therapy: Qualities of couples who fare better or worse in treatment. *Journal of Marital and Family Therapy, 25*, 411-424.
- Heene, E., Buysse, A., & Van Oost, P. (2005). Indirect Pathways Between Depressive Symptoms and Marital Distress: The Role of Conflict Communication, Attributions, and Attachment Style. *Family Process, 44*(4), 413-440.
- Hoffman, J. P. (2004). *Generalized linear models: An applied approach*. New York: Pearson, Allyn & Bacon.
- Isakson, R. L., Hawkins, E. J., Harmon, S. C., Slade, K., Martinez, J. S., & Lambert, M. J. (2006). Assessing couple therapy as a treatment for individual distress: When is referral to couple therapy contraindicated? *Contemporary Family Therapy, 28*, 313-322.

- Jacobson, N. S. & Truax, P. (1992). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. In Kazdin, A. E. (Ed). US Methodological issues & strategies in clinical research. pp. 631-648.
- Jacobson, N. S., & Addis, M. E. (1993). Research on couples and couples therapy: What do we know? Where are we going? *Journal of Consulting and Clinical Psychology, 61*, 85-93.
- Kahler, C., McCrady, B., & Epstein, E. (2003). Sources of distress among women in treatment with their alcoholic partners. *Journal of Substance Abuse Treatment, 24*(3), 257-265.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic Data Analysis*. New York: Guilford Press.
- Kiecolt-Glaser, J. K., & Newton, T. L. (2001). Marriage and health: His and hers. *Psychological Bulletin. 127*, 472-503.
- Kinnunen, U., & Feldt, T. (2004). Economic stress and marital adjustment among couples: Analyses at the dyadic level. *European Journal of Social Psychology, 34*(5), 519-532.
- Kinnunen, U., Feldt, T., Geurts, S., & Pulkkinen, L. (2006). Types of work-family interface: Well-being correlates of negative and positive spillover between work and family. *Scandinavian Journal of Psychology, 47*(2), 149-162.
- Kline, R. B. (2005). *Principles and Practice of Structural Equation Modeling*, 2<sup>nd</sup> Ed. New York: Guilford Press.

- Lambert, M. J., Burlingame, G. M., Umphress, V., Hansen, N. B., Vermeersch, D. A., Clouse, G. C., & Yanchar, S. C. (1996). The reliability and validity of the Outcome Questionnaire. *Clinical Psychology and Psychotherapy*, 4, 249–258.
- Larson, J. H., Keigin, M. L., Holman, T. B. (in press). At-risk individual's needs for premarital interventions following the relationship evaluation. *Journal of Couple and Relationship Therapy*.
- Lohan, J., & Murphy, S. (2005). Mental distress and family functioning among married parents bereaved by a child's sudden death. *Omega: Journal of Death and Dying*, 52(4), 295-305.
- Miller, R., Yorgason, J., Sandberg, J., & White, M. (2003). Problems That Couples Bring To Therapy: A View Across the Family Life Cycle. *American Journal of Family Therapy*, 31(5), 395-407.
- Miller, W. R., Sovereign, R. G., & Krege, B. (1988). Motivational interviewing with problem drinkers: II. The drinker's checkup as a preventative intervention. *Behavioral Psychotherapy*, 16, 251-168.
- Miller, W.R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York: Guilford.
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications for addictive behaviors. *American Psychologist*. 47, 1102-1114.
- Prochaska, J.O., & DiClemente, C.C. (1984). *The transtheoretical approach: Crossing traditional boundaries of therapy*. Homewood, IL: Dow Jones/Irwin.

- Robertson, J. M. & Fitzgerald, L. F. (1992). Overcoming the masculine mystique: Preferences for alternative forms of assistance among men who avoid counseling. *Journal of Counseling Psychology*. 39, 240-246.
- Rogers, S.J., & May, D.C. (2003). Spillover between marital quality and job satisfaction: Long-term patterns and gender differences. *Journal of Marriage and Family*. 65, 482-495.
- Shadish, W., & Baldwin, S. (2002). Meta-analysis of MFT interventions. *Effectiveness research in marriage and family therapy* (pp. 339-370). Alexandria, VA, US: American Association for Marriage and Family Therapy.
- Snyder, D. K., Mangrum, L. F., & Wills, R. M. (1993). Predicting couple's responses to marital therapy: A comparison of short and long term predictors. *Journal of Consulting and Clinical Psychology*. 61, 61-69.
- Snyder, D., & Aikman, G. (1999). Marital Satisfaction Inventory-Revised. *The use of psychological testing for treatment planning and outcomes assessment (2nd ed.)* (pp. 1173-1210). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Snyder, D. K. (1979). Development of a multidimensional inventory of marital satisfaction. *Dissertation Abstracts International*. 39(7-B), pp. 3540.
- 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.
- Stuart, G., Moore, T., Kahler, C., & Ramsey, S. (2003). Substance abuse and relationship violence among men court-referred to batterers' intervention programs. *Substance Abuse*, 24(2), 107-122.

- Stuart, G., Moore, T., Ramsey, S., & Kahler, C. (2003). Relationship aggression and substance use among women court-referred to domestic violence intervention programs. *Addictive Behaviors, 28*(9), 1603-1610.
- Sue, D., & Sue, D. (1999). *Counseling the culturally different: Theory and practice (3rd ed.)*. Hoboken, NJ, US: John Wiley & Sons Inc.
- Trief, P., Morin, P., Izquierdo, R., Teresi, J., Starren, J., Shea, S., et al. (2006). Marital quality and diabetes outcomes: The IDEATel Project. *Families, Systems, & Health, 24*(3), 318-331.
- Ward, D. B. & McCollum, E. E. (2005). Treatment effectiveness and its correlates in a marriage and family therapy training clinic. *The American Journal of Family Therapy, 33*, 207-223.
- Wesley, S., & Waring, E. M. (1996). A critical review of marital therapy outcome. *Canadian Journal of Psychiatry, 41*, 421-428.
- Whisman, M., Dixon, A., & Johnson, B. (1997). Therapists' perspectives of couple problems and treatment issues in couple therapy. *Journal of Family Psychology, 11*(3), 361-366.
- Whisman, M., Uebelacker, L., & Bruce, M. (2006). Longitudinal association between marital dissatisfaction and Alcohol use disorders in a community sample. *Journal of Family Psychology, 20*(1), 164-167.
- Wolcott, I. H. (1987). Seeking help for marital problems before separation. *Australian Journal of Sex, Marriage and Family, 7*, 154-174.

Wood, N. D., Crane, D.R., Schaalje, G.B., & Law, D.D. 2005. What works for whom: A meta-analytic review of marital and couples therapy in reference to marital distress. *The American Journal of Family Therapy*. 33,273–287.

Worthington, E. L., Jr., McCullough, M. E., Shortz, J. L., Mindes, E. J., Sandage, S. J., & Chartrand, J. M. (1995). Can couples assessment and feedback improve relationships? Assessment as a brief relationship enrichment procedure. *Journal of Counseling Psychology*, 42, 466-475.