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Examining Relationships Among Income, Individual And Relationship Distress, And Outcomes In Marriage And Relationship Education For Low-to-moderate Income Married Couples

Ryan G. Carlson
University of Central Florida

EXAMINING RELATIONSHIPS AMONG INCOME, INDIVIDUAL AND RELATIONSHIP DISTRESS, AND OUTCOMES IN MARRIAGE AND RELATIONSHIP EDUCATION FOR LOW-TO-MODERATE INCOME MARRIED COUPLES

by

RYAN G. CARLSON
B.S. University of Central Florida, 2003
M.A University of Central Florida, 2005

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ABSTRACT

The current study utilized data from a federally-funded healthy marriage grant to examine pre, post, and three-to-six month follow-up changes in relationship satisfaction (as measured by the Dyadic Adjustment Scale total scores) and individual distress (as measured by the Outcomes Questionnaire 45.2). Additionally, the study evaluated income and dosage as predictors of relationship satisfaction and individual distress change at post-assessment and three-to-six month follow-up. Participants included 220 married individuals with children who completed PREP 7.0 (Prevention Relationship Enhancement Program). A repeated measures, split plot, MANOVA indicated statistically significant improvements in relationship satisfaction and individual distress for participants at post-assessment and three-to-six month follow-up. No significant differences existed in relationship satisfaction and individual distress changes between men and women. Hierarchical multiple regression indicated combined monthly income and dosage (as measured by number of lessons attended) did not predict changes in relationship satisfaction and individual distress at post-assessment and three-to-six month follow-up. However, partner scores accounted for the largest percent of variance in relationship satisfaction change. Discussion of results, implications for research and practice, and study limitations are provided.

This dissertation is dedicated to you, dad. You made a choice 31 years ago that changed your life and mine. You showed me the value of family. For that, I'm forever grateful.

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CHAPTER I: INTRODUCTION

Stressors associated with economic disadvantage result in increases in marital distress (Clark-Nicolas & Gray-Little, 1991; Conger, Rueter, & Elder, 1999). Low-income couples consider financial instability and economic security their largest barriers to lasting relationships (Charles, Orthner, Jones, & Mancini, 2006). In addition to enduring economic instability, low-income couples are typically less educated, less likely to be employed, more likely to be minority, and younger in age than middle-income couples (Dakin & Wampler, 2008). Moreover, low-income couples experience high levels of psychological distress resulting from economic hardship (Adler-Baeder et al., 2010; Conger et al., 1992; Dakin & Wampler, 2008).

Poor quality relationships resulting from financial instability may lead to relationship instability. Furthermore, lowered individual psychological distress and parenting quality may result from relationship distress (Conger et al., 1992). Children of maritally-distressed parents experience poor quality relationships and are at greater risk for negative consequences, such as poor coping skills (Wilcox et al., 2011). Associations also exist among parental relationship quality, behavior problems in children, children's engagement in school activities, and depression (Moore, Kinghorn, & Bandy, 2011). In addition, positive correlations exist between poor parental relationship quality and children's future marital discord (Amato & Booth, 2001).

As a result of the systemic influence of economic hardship on couples and their children, the federal government supported initiatives to improve child outcomes through the strengthening of couple relationships (Dion, 2005; Ooms & Wilson, 2004). The United States Congress authorized $150 million per year for five years to support healthy marriage and responsible fatherhood grantees. The Administration of Children and Families (ACF) used this

funding to sustain the Healthy Marriage Initiative that began in 2006 and continued funding grantees for five years (Knox, Cowan, Cowan, & Bildner, 2011). The Office of Family Assistance (OFA) awarded 125 healthy marriage grants to 123 grantees (National Healthy Marriage Resource Center, 2010). The Healthy Marriage Initiative aimed to teach low-income couples skills-based tools through marriage and relationship education (MRE) resulting in more stable relationships with improved quality.

Problem Statement

Prior to funding for the Healthy Marriage Initiative, research found MRE interventions improved couples' communication skills and increased relationship satisfaction (Blanchard, Hawkins, Baldwin, & Fawcett, 2009). However, effectiveness studies using samples comprised mostly of middle-to-upper income Caucasian couples limited the generalizability of the research (Ooms & Wilson, 2004). Emerging research evaluating MRE utility with low-income couples indicated moderate effects (Hawkins & Fackrell, 2010). Furthermore, Hawkins and Fackrell's meta-analysis included only MRE programs evaluating change from pre- to post-intervention. A search of the literature revealed no published studies that contain follow-up data on the changes experienced by low-income married couples participating in MRE.

Because prior research utilizing MRE did not target low-income couples, relatively little is known about effective recruitment and retention strategies. Anticipated challenges associated with providing MRE to low-income couples included recruiting and retaining couples in the treatment intervention, as well as engaging couples in testing and evaluating the effectiveness of the treatment interventions (Dion, 2005; Ooms & Wilson, 2004). Recruitment and retention

barriers in both research and treatment include couples' frequent changes in work schedule, lack of reliable transportation, and the stigma associated with receiving help (Halford, 2004). For example, socioeconomic status is a significant predictor of failing to complete evaluation instruments (assessment attrition) in longitudinal studies (Spoth, Goldberg, & Redmond, 1999). Specifically, Spoth and colleagues also reported associations between lower educational attainment and increases in likelihood of assessment attrition. Additionally, low-income couples experienced skepticism regarding programs funded through the federal government (Baron & Sylvester, 2002). Thus, scholars suggested that grantees incorporate specific marketing and recruiting strategies (Halford, 2004). Despite intentional marketing and recruitment strategies, couples' engagement in follow-up evaluations presents an obstacle to long-term data collection.

In an effort to provide workshops to large numbers of couples and participants, grantees utilized standard approaches to MRE modalities and dosage, such as workshop formats (e.g., weeknight or weekend workshops) and length of curriculum (e.g., 12 hours or 30 hours). Thus, participants enter treatment with varying levels of relationship quality and individual functioning, but receive standard curriculum delivery. Further, the OFA mandated that MRE programs funded under the Healthy Marriage Initiative offer voluntary program services. Therefore, external validity challenges exist because of differences between couples who volunteered to participated versus those who did not wish to participate (Morris, McMillan, Duncan, & Larson, 2011). Morris et al. examined the differences in intrapersonal and interpersonal characteristics of couples who chose to attend compared to those who chose not to attend MRE. Program attendees reported increased levels of marital conflict, lower levels of self-esteem, marital communication quality, marital commitment, marital satisfaction, family strengths, consensus and intimacy, fulfillment of marriage expectations than non-participants.

Additionally, couples who volunteer for MRE programs experience higher levels of relationship and individual distress than couples who choose not to attend (Adler-Baeder et al., 2010). The findings of Morris et al. (2011) and Adler-Baeder et al. (2010) contradict the previously-held belief that MRE is a preventive intervention because couples who participate are already experiencing higher levels of distress. Instead, their findings support literature linking economic disadvantage to relationship distress, thus validating the need for programs targeting low-income couples to consider these couples as distressed and in need of treatment.

A framework of best-practices was published as a guide for MRE programs seeking to serve and evaluate low-income married couples (Hawkins, Carroll, Doherty, & Willoughby, 2004). The framework was designed to help reduce programmatic barriers to participation and included tailoring the intensity, or dosage, of the MRE curriculum to the target population. For example, Hawkins and colleagues recommended choosing dosage carefully; however, I found no studies examining baseline levels of distress and MRE dosage. It is unclear whether couples with higher initial distress levels experience better outcomes in one-day workshop formats with lower dosage (i.e., time spent in relationship education workshops), compared to shorter workshops provided over longer time-periods. Ignoring effects of MRE treatment modality on outcomes may enable participant attrition, thereby reducing the beneficial effects of MRE. Consequently, MRE dosage and attrition ameliorates benefits to the relationship for the participating couples (Wood, McConnell, Moore, Clarkwest, & Hsueh, 2010).

Social Significance

Marital Distress in Low-income Couples

The funding allocated through the Healthy Marriage Initiative targeted economically disadvantaged couples because of associated stressors and their systemic influence on child outcomes. Typical stressors include concern over how to pay current bills, find a job, and maintain reliable transportation. These stressors, tied to economic disadvantage, contribute to decreases in relationship satisfaction and reduced access to relationship assistance (Karney and Bradbury, 2005). Environmental stressors also influence spouses' perceptions of marital quality (Clark-Nicolas & Gray-Little, 1992; Neff & Karney 2004). Clark-Nicolas and Gray-Little found perceived economic adequacy better predicts marital quality than more concrete measures, such as combined monthly income and years of education. Further, stressful events, such as loss of a job, aid in reducing perceptions of marital quality within relationships (Neff & Karney, 2004).

Men and women differ in their responses to income-related environmental stressors (Conger, Lorenze, Elder, Simons, & Ge, 1993; Neff & Karney, 2004). For example, wives' perceptions of relationship events become more negative when they experience higher-than-normal stress (Neff & Karney, 2004). Further, negative events within the family affect women, while men report more distress from work and financial incidents (Conger et al., 1993). However, economic stressors lead to hostility in marital interactions, reducing warm and supportive behaviors in both men and women (Conger et al., 1990).

In addition to monthly income or perceived economic disadvantage, relationships exist between higher levels of relationship distress and socioeconomic factors such as age, years of education (Dakin & Wampler, 2008), and ethnicity (Bulanda & Brown, 2007). Other factors

such as type of employment influence marital quality as well. For example, Black couples engage in more shift work, and changing work schedules, and report lower levels of relationship quality than other ethnicities (White & Keith, 1990). In short, both researchers and practitioners should structure marital interventions targeting low-income couples to accommodate the unique life situations as well as factors contributing to relationship distress.

Individual Distress in Low-income Couples

Low-income couples who participate in MRE have high baseline levels of individual distress (Adler-Baeder et al, 2010). Additionally, low-income couples who participate in traditional counseling have higher levels of baseline individual distress than middle-income couples (Dakin & Wampler, 2008). These findings support other research that linked individual psychological functioning with relationship distress (Choi & Marks, 2008; Dehle & Weiss, 2002; Denton, Golden, & Walsh, 2003). For example, marital conflict leads to increases in depression and functional impairment (Choi & Marks, 2008) while poor mental health contributes to marital conflict (Wade & Pevalin, 2004). Kaslow and colleagues (2000) found that suicide attempts in African American women could be predicted by relationship discord. Fincham and Beach (2010) reviewed the literature on trends in marriage research between the years 2000 and 2010 and noted the quantity of studies linking marital distress to decreasing psychological functioning. In short, there is a clear relationship between individual distress and marital distress.

The association between marital distress and individual psychological distress led researchers to evaluate the effectiveness of couples counseling for decreasing both marital and individual distress (Denton et al., 2003; Isakson et al., 2006; Lundblad & Hansson, 2005). Men with clinical levels of individual distress showed significant gains after participating in couples

counseling (Isakson et al., 2006) and, as a whole, relationship satisfaction and levels of individual functioning improved with couples counseling interventions (Baucom, Shoham, Mueser, Daiuto, & Stickle, 1998; O'Leary & Beach, 1990). However, only one published study examined the effect of MRE interventions on levels of individual distress for low-income couples who participated in MRE (Hsueh et a., 2012). In other words, it is not known whether MRE treatment for the couple improves each member's level of psychological functioning. As a result, it's not clear if MRE dosage, or the amount of time spent attending relationship education, is linked to higher individual functioning.

Professional Significance

Marriage and Relationship Education (MRE)

Marriage and relationship education originally developed as a preventive intervention traditionally conducted by clergy. MRE differs from traditional couples counseling because group formats comprise the method of delivery, and lay-persons often facilitate workshops (Larson, 2004; Hawkins et al., 2004). MRE promotes the acquisition of skills that facilitate effective communication and healthy conflict resolution. As a result, MRE is more readily available, has less stigma, is more accessible, and cost-effective than couples counseling.

Until recently, many still considered MRE a preventive intervention targeting higher functioning couples, such as premarital couples (Bowling, Hill, & Jencius, 2004). However, research found that distressed couples participated (DeMaria, 2005) and benefited from MRE (Hawkins & Fackrell, 2010) leading scholars to publish recommended changes for use with economically disadvantaged participants targeted by healthy marriage grantees (Adler-Baeder,

Higginbotham, & Lamke, 2004; Halford, 2004; Hawkins, 2004). The recommendations included utilizing empirically supported MRE curricula (Jakubowski, Milne, Brunner, & Miller, 2004), tailoring marketing and recruitment strategies to the population being served, and considering level of dosage and curriculum intensity (Hawkins et al., 2004). Additionally, Halford, Markman, Kline, and Stanley (2003) outlined seven principles for best practices in MRE, including assessing the risk profile of couples who attend, encouraging high risk couples to attend, assessing and educating about relationship aggression, offering relationship education at change points, promoting early presentation of relationship problems, matching content with couples' special needs, and enhancing accessibility of evidence-based relationship education programs.

Scholars published the aforementioned MRE best-practices based upon its utility and effectiveness with middle-income couples. Middle-income couples who participated in MRE experienced improvements in communication and relationship satisfaction (Blanchard et al., 2009; Giblin, Sprenkle, & Sheehan, 1985; Hawkins, Blanchard, Baldwin, & Fawcett, 2008). Effectiveness studies are also indicating positive outcomes with moderate effects for low-income couples who participated in MRE (Hawkins & Fackrell, 2010). However, Hawkins and Fackrell evaluated the effectiveness of the overall program, not necessarily the specific curriculum utilized. Several MRE curricula exist with a few programs deemed efficacious (i.e., PREP, Relationship Enhancement, Couple Communication Program, and Strategic Hope-Focused Enrichment; Jakubowski et al., 2004). Although the curricula vary, commonalities exist in the material covered, such as positive communication, conflict management, and positive expressions of hope (Halford et al., 2003). Therefore, it is not clear what contributed to the gains experienced by couples who participate in MRE.

Despite recommendations to assess risk factors and tailor programs to couples' needs, a literature review revealed only one published study that examined the relationships among demographic factors, levels of distress, and outcomes for low-income couples participating in MRE. This was a study by Adler-Baeder et al. (2010) who examined demographic factors as predictors of MRE outcomes. Adler-Baeder et al. identified income as the strongest predictor of baseline levels of individual and marital distress, and they found that attending with a partner predicted positive change in target outcomes. However, Adler-Baeder et al. did not examine change at follow-up or examine outcomes among demographic factors by dosage (e.g., hours spent in MRE or number of workshop lessons attended) or workshop format (e.g., weeknights or weekends). The gap in outcomes at follow-up for economically disadvantaged couples participating in MRE, as well as scant published research examining the influence of demographic factors on dosage and workshop format, warrants further investigation to help researchers and practitioners understand how information collected at pre-assessment (i.e., baseline assessment scores) can contribute to establishing treatment plans to help couples maximize benefits from MRE.

Theoretical Foundation

A cyclical relationship exists among the constructs of socioeconomic status, marital distress, and individual distress. The following section presents a description of two theoretical models, a family stress model and the marital discord model of depression, that served as the foundation for examining the relationships between the aforementioned constructs and outcomes in MRE.

A Family Stress Model

Researchers in the 1970s, 1980s, and early 1990s identified relationships between economic hardship constructs and family functioning (e.g., Conger et al., 1990). Variables such as income, employment, and income loss were used to represent the construct of economic hardship. Additionally, variables such as marital distress, individual functioning, and parental quality defined the construct of family functioning. As a result of this research, Conger and colleagues (1992) proposed a family process model of economic hardship. The family process model of economic hardships posits, "…adverse financial circumstances would affect parents' emotional state and the quality of family interactions…" (p. 527). Conger et al. described economic hardship as, "…spousal agreement that the family (a) cannot meet its material needs, (b) often falls behind in paying its debts, and (c) has had to cut back on everyday expenses…" (p. 527). As a result of economic deterioration, parents become depressed, leading to a decline in marital and parenting quality (Conger et al., 1992). In their evaluation of 205 families, Conger et al. supported the model. However, the model was tested on White, middle-class families living in rural areas.

Later research further supported the relationships identified in the family process model of economic hardship by linking economic disadvantage to marital quality, marital quality to individual distress, and individual distress and marital quality to child outcomes , such as school performance and coping skills (e.g., Amato & Booth, 1997; Amato, Loomis, & Booth, 1995; Conger et al., 1999). However, discrepancies exist regarding the variables used to define the construct of economic disadvantage. For example, some research contended that "perceived

economic hardship" is a better predictor of marital quality than the more objective measure of monthly income (Clark-Nicolas & Gray-Little, 1991). Other research found that it was important to consider ethnicity (Bulanda & Brown, 2007), age, and employment (Dakin & Wampler, 2008) as measures of economic disadvantage in order to predict marital quality.

In 1999, Conger and colleagues proposed the family stress model as an adaptation to the family process model of economic hardship. The family stress model differs from the earlier model because it focuses on stress related to an inability to pay bills resulting from a loss of income. The model states that economic pressure contributes to marital conflict and distress by affecting emotional distress (Conger et al., 1999).

The family stress model, and its supporting research, justifies the examination of the relationship between socioeconomic and demographic factors of participants in MRE. The federal government funded the Healthy Marriage Initiative under the premise that economic disadvantage is related to marital and individual functioning, and eventually affects parental quality and later child-outcomes. Therefore, it would be important to determine if MRE ameliorates distress in MRE participants, and to understand if participants with different demographics and levels of distress respond differently to levels of MRE dosage and various workshop formats.

The Marital Discord Model of Depression

The research linking marital distress and depression within spouses led to the development of the marital discord model of depression (Beach & Cassidy, 1991). The model guided clinicians conducting couples counseling when one or both members of the couple

display symptoms of depression. Beach and Cassidy developed the model after concluding from previous research that:

> …marital discord appears to be a powerful factor in determining the course of depression. It appears to be powerful enough to make someone who is already depressed more depressed, and it also seems to be powerful enough to make someone who has recently recovered from depression more likely to relapse (p. 121).

Thus, the model incorporates the notion that relationship interventions should be tailored to the level of distress a couple presents upon initial assessment. Beach and Cassidy identified the following areas to address with couples where depression is an issue: (a) couple cohesion; (b) acceptance of emotional expression; (c) self-esteem support; (d) spousal dependability; (e) intimacy and confiding; (f) and topics related to the creation of stress in marriage.

Although the current dissertation does not test the utility of the marital discord model of depression, the model serves as a prototype for examining the construct of individual distress in marital relationships. On the other hand, the marital discord model of depression is based on research conducted with traditional couples counseling participants.

Purpose of Study

The influx of recent funding for the Healthy Marriage Initiative through the ACF has increased the availability of MRE for low-income couples. The healthy marriage funding targeted low-income couples because prior research linked child outcomes to parental relationship quality. Additionally, socioeconomic variables such as income, ethnicity, and employment affect marital quality and individual distress. Therefore, policy makers postulated

that low-income couples who participate in MRE will experience improved relationship quality, and decreased individual distress. A recent meta-analyses identified MRE programs as at least moderately effective at improving relationship satisfaction (Hawkins & Fackrell, 2010). However, grantees traditionally provide MRE in a one-size-fits-all approach. Grantees typically do not use initial evaluations to determine the type or frequency of MRE intervention. In addition, they do not consider demographic data about participants or baseline levels of relationship and individual distress.

Thus, the current dissertation purposes to use previous research and theory that suggests the socioeconomic status (e.g., combined monthly income) influences both marital and relationship distress and can be considered a foundation to establish best practices for MRE format based upon pre, post, and follow-up changes in relationship satisfaction and individual distress for low-income married couples with children who participate in MRE. One potential implication of understanding the relationship among socioeconomic status, MRE dosage, and changes in relationship satisfaction and individual distress immediately following the MRE intervention, and three-to-six months later might result in lowered attrition and improved outcomes for participant couples. Consequently, researchers and practitioners can make evidenced-based decisions regarding MRE modality for couples based upon their initial intake scores.

Research Questions & Hypotheses

The current study aims to explore the relationships among socioeconomic demographic factors, marital and individual distress changes, and outcomes in MRE for married couples with children. I present the related research questions and null hypotheses below.

Research Question 1

The first research question asks: What differences exist in pre, post, and follow-up relationship satisfaction, as measured by the Dyadic Adjustment Scale total score (DAS; Spanier, 2001); individual distress, as measured by the Outcomes Questionnaire 45.2 total score, (OQ; Lambert et al., 2004); and between husbands and wives who participate in MRE?

Null Hypothesis 1A

No differences exist between husbands and wives and between pre-to-post change in relationship satisfaction and individual distress.

Null Hypothesis 1B

No differences exist between husbands and wives and between pretest and three-to-six month follow-up relationship satisfaction and individual distress.

Null Hypothesis 1C

No differences exist between husbands and wives and between pre, post, and three-to-six month follow-up in relationship satisfaction and individual distress.

Research Question 2

The second research question asks: Can MRE dosage, as measured by number of lessons attended, and combined monthly income predict relationship satisfaction, as measured by the Dyadic Adjustment Scale total scores, (DAS; Spanier, 2001), and individual distress, as measured by the Outcomes Questionnaire 45.2 total scores, (OQ; Lambert et al., 2004) for married men and women with children who volunteer for MRE, immediately following treatment, and three-to-six months later?

Null Hypothesis 2A

MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for male MRE participants at post-assessment, while controlling for wives' relationship satisfaction scores.

Null Hypothesis 2B

MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for female MRE participants at post-assessment, while controlling for husbands' relationship satisfaction scores.

Null Hypothesis 2C

MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for male MRE participants at 3-6 month follow-up assessment, while controlling for wives' relationship satisfaction scores.

Null Hypothesis 2D

MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for female MRE participants at 3-6 month follow-up assessment, while controlling for husbands' relationship satisfaction scores.

Null Hypothesis 2E

MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for male MRE participants at post-assessment, while controlling for wives' individual distress scores.

Null Hypothesis 2F

MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for female MRE participants at post-assessment, while controlling for husbands' individual distress scores.

Null Hypothesis 2G

MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for male MRE participants at 3-6 month follow-up assessment, while controlling for wives' individual distress scores.

Null Hypothesis 2H

MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for female MRE participants at 3-6 month follow-up assessment, while controlling for husbands' individual distress scores.

Methodology

Prior to beginning the evaluation for the current study, I received approval from the University's Institutional Review Board (IRB). Data was collected in accordance with the IRB proposal. See IRB approval letter in Appendix A.

Research Design

The current study utilized data collected from a larger study, the *OFA Together Project*, funded through the Healthy Marriage Initiative. The *OFA Together Project* targeted economically disadvantaged married couples with children to participate in an MRE intervention utilizing the PREP (Prevention, Relationship, Enhancement, Program) curriculum. As a member of the research team, I assisted in the collection of the data for the larger study. I analyzed a

sample of the *OFA Together Project* participant data to address the aforementioned research questions.

The current study employed a quasi-experimental, time-series, research design that analyzed relationships between dosage, combined monthly income, and relationship satisfaction and individual distress changes; as well as outcomes immediately following the treatment intervention, and three-to-six months later, for couples who participated in the *OFA Together Project*.

Once couples in the *OFA Together Project* completed the initial assessment paperwork, they participated in either 9 or 12 hours of MRE utilizing the PREP curriculum (Markman, Stanley, & Blumberg, 2001). We offered MRE Workshops in the following three formats: (a) one night per week for three hours over the course of four weeks (12 hours); (b) two consecutive Saturdays for six hours each day (12 hours); (c) one Saturday for 9 total hours; and (d) a combination of Friday evening and the following Saturday (9 hours). We administered post-assessments to participants who completed intervention options 'a' or 'b', as well as a follow-up assessment. We administered follow-up assessments only to participants who completed intervention 'c' or 'd' and not post-assessments due to the fact there was not enough time from the start of the intervention to completion to assess for any change in behavior.

Early research had supported MRE as a moderately effective intervention for improving relationship satisfaction among low-income participants (Hawkins & Fackrell, 2010). However, few research findings examined outcomes at follow-up assessment for low-income MRE participants. Additionally, scholars suggested longitudinal change be assessed, especially for more culturally diverse couples (Bradbury, Fincham, & Beach, 2000; Christensen, Baucom, Vu, & Stanton, 2005). Examining changes over time for the constructs of marital and relationship

distress will help to better understand the relationships of any change in distress resulting from MRE with both household income and baseline levels of distress. Therefore, the research community may find useful conclusions about best practices for treating couples in MRE with varying levels of distress.

Participants

We recruited participants for the *OFA Together Project* using purposive sampling procedures. We utilized purposive sampling because the criterion for inclusion was specific to the target population (i.e., economically disadvantaged married couples with children). Therefore, we employed active (e.g., face-to-face) and passive (e.g., flyers, word-of-mouth, etc.) recruitment strategies (Yancey, Ortega, & Kumanyika, 2006). We therefore formed partnerships with community organizations that typically serve low-income couples, such as Orange and Seminole County Department of Health's Women, Infants, and Children (WIC) program. Partnering organizations provided study team members access to participants to discuss the study and eligibility criteria. Additionally, we posted study flyers at community agencies and on the project website. As a result of our recruitment efforts, 182 couples (364 individuals) participated in the *OFA Together Project*.

I utilized participant data from the *OFA Together Project* to conduct the analysis for the current research project. I then identified a sample of participants based upon a preliminary analysis of the data. I included participants who volunteered to complete pre-assessments, completed the intervention, and completed post- and follow-up assessments in the current study.

Additionally, I conducted an *a priori* power analysis for each of the research questions posed in this study using G*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007) to determine the sample size required for adequate power related to each question. I conducted the power analyses utilizing alpha levels of .05, effect size of .06, and a recommended power of .80 (Cohen, 1992). The largest recommended sample for the repeated measures MANOVA analysis was over 1,040 participants to ensure adequate power. The largest recommended sample for the multiple regression analyses was 160 participants to ensure adequate power. The sample size for the larger *OFA Together Project* was 364 participants. I included only treatment completers with total assessment scores (i.e., complete assessment data) in the current study. Preliminary analyses also helped determine whether missing data was random and could be deleted from the data-set. Overall study attrition and missing data decreased the study's sample size and influenced the power of the repeated measures analyses.

Instruments

The *OFA Together Project* utilized several instruments. However, the current dissertation included only those instruments that measured the constructs of combined household income, marital distress, and individual distress. Therefore, I only used data from the following instruments: (a) intake information questionnaire; (b) Dyadic Adjustment Scale (DAS); and (c) Outcomes Questionnaire 45.2 (OQ 45.2). Following is a brief overview of each instrument.

Intake Information Questionnaire

The research team created the intake information questionnaire specifically for use with *OFA Together Project* participants. The questionnaire sought participant contact information along with basic demographic information. We included variables within the questionnaire that were utilized in this study to measure the construct of socioeconomic status, such as combined monthly income. We administered the intake information questionnaire to participants immediately after reviewing the informed consent at the initial intake appointment. Thus, we collected all socioeconomic demographic information prior to participants' receiving any treatment.

Dyadic Adjustment Scale (DAS)

The 32-item DAS (Spanier, 2001) measured participant's overall level of satisfaction and quality in his or her relationship. The DAS is one of the most widely used measures of relationship satisfaction in couples therapy outcome research (Christensen et al., 2005). It has four subscales: (a) dyadic cohesion; (b) dyadic satisfaction; (c) dyadic consensus; and (d) affectional expression. A total relationship adjustment score is calculated by the summing the total in each of the four subscales (Spanier, 2001). Extensive studies on the psychometric properties of the DAS exist (e.g., de Turck & Miller, 1986; Filsinger & Wilson, 1983; Spanier, 1976; Stein, Girodo, & Dotzenroth, 1982) indicating its sound reliability and validity.

Outcomes Questionnaire 45.2 (OQ 45.2)

The 45-item OQ 45.2 assessed participants' symptoms of individual distress across a variety of problems (Lambert et al., 2004). Intended for repeated administration for outcomes during therapy, the OQ 45.2 yields a total score and the following three subscales scores,: (a) symptom distress; (b) interpersonal relationships; (c) and social role performance. Using a five-point Likert scale, total scores can range from 0 to 180 with higher scores indicating more levels of distress, while lower scores indicated less distress. Established cutoff scores (indicating clinical significance) are 63 for the total distress, 36 for symptom distress, 15 for interpersonal relations, and 12 for social role. Because of demonstrated sound psychometric properties, researchers regularly utilize the OQ 45.2 to evaluate the effectiveness of counseling interventions, such as couples counseling, at decreasing levels of individual distress in men and women (Isakson et al., 2006).

Data Analyses

I conducted a preliminary analysis of the data to identify any univariate and multivariate outliers that might exert excessive influence on findings, checked for missing data, and ensured that there were no violations of assumptions, such as normality, collinearity, and multi-collinearity. I utilized two statistical data analyses to investigate the two research questions postulated in this study. I used a repeated measures, split plot, MANOVA to evaluate research question one: What differences exist in pre, post, and follow-up relationship satisfaction, as measured by the Dyadic Adjustment Scale total score (DAS; Spanier, 2001); individual distress, as measured by the Outcomes Questionnaire 45.2 total score, (OQ; Lambert et al., 2004); and

between husbands and wives who participate in MRE? I conducted a hierarchical multiple regression to evaluate research question two: Can MRE dosage, as measured by number of lessons attended, and combined monthly income predict relationship satisfaction, as measured by the Dyadic Adjustment Scale total scores, (DAS; Spanier, 2001), and individual distress, as measured by the Outcomes Questionnaire 45.2 total scores, (OQ; Lambert et al., 2004) for married men and women with children who volunteer for MRE, immediately following treatment, and three-to-six months later?. I used the Statistical Package for Social Sciences (SPSS), version 17.0, to conduct the statistical procedures.

Definition of Terms

Following, I operationally define terms or phrases for the purposes of the current study:

Marriage and relationship education – MRE comprises skills-based workshops offered in a group format, and designed to teach couples effective communication and healthy conflict resolution skills (Hawkins et al., 2004; Larson, 2004). MRE curricula aim to help couples achieve long lasting, and healthy relationships (NHMRC, 2010). Although several MRE curricula exist, the current study utilized data from couples who participated in the PREP curriculum (Stanley, Markman, & Blumberg, 2001) as the MRE intervention.

MRE Dosage – Dosage means the intensity and amount of the intervention provided. Hawkins et al. (2004) identified three levels of MRE dosage: low, medium, and high. Although these authors acknowledge the difficulty in establishing a cutoff for each level, they suggested low levels of MRE might be more effective at reaching audiences who would otherwise not attend a workshop. Additionally, Hawkins and colleagues described medium intensity as half-

day workshops, or workshops that do not require repeated and continued attendance. Therefore, high dosage requires repeated attendance over longer periods of time. For the purposes of this study, I identified dosage as a combination of number of lessons attended in MRE as well as workshop format. Couples participated in workshops that contained either 11 or 12 lessons, and they experienced different workshop formats that included repeated attendance over four weeks, two Saturdays, one-day workshops on Saturday, or a combination of Friday and Saturday in one weekend.

Socioeconomic status – Research contested demographic factors that define low-income. For example, marital quality predicted combined monthly income in some research (Conger et al., 1990), while other studies identified education, age, ethnicity (White & Keith, 1990), or employment (Karney & Bradbury, 2005) as better predictors. However, the current study used combined monthly income as a marker of socioeconomic status. The US Department of Health and Human Services poverty guidelines were used as the measure for household income status. Participants who had total monthly household income equal to or less than 200% of the poverty guidelines were considered low-income.

Marital satisfaction – Research often uses the term "marital distress" interchangeably with ones like "marital quality" or "marital satisfaction." The current study utilized the DAS (Spanier, 2001) total score of *OFA Together Project* participants to measure levels of marital distress within participants.

Individual distress – Previous studies assessing the relationship between individual and relationship distress measured individual distress by variables assessing for symptoms of depression or anxiety (Dehle & Weiss, 2002; Isakson et al, 2006; Lundblad & Hansson, 2005). Therefore, the current study utilized the OQ 45.2 (Lambert et al., 2004) total score for *OFA*

Together Project participants to measure the construct of individual psychological distress in participants. The OQ 45.2 assessed for symptoms related to both anxiety and depression (Lambert et al., 2004).

Limitations

A lack of a comparison group is one limitation and poses a threat to internal validity in this study because the participants all received the intervention. Making conclusions about the cause of change will not be possible without a comparison group. However, researchers questioned the ethics of employing random assignment with couples in distress when previous studies exist showing the intervention is effective (e.g., Baucom, Hahlweg, & Kuschel, 2003). Additionally, Baucom and colleagues asserted that effectiveness studies improve the external validity of a study when compared to efficacy studies. Effectiveness studies include community populations made up of participants who more closely resemble clients receiving services in real-world settings, whereas efficacy studies comprise study participants who are easier to access, such as university students. Therefore, effectiveness studies indicate the extant a treatment works in practice.

A second limitation to the current study exists because not all couples received the same MRE dosage. We anticipated challenges in both recruiting and retaining study participants. Therefore, having various workshop options for participants helped ameliorate scheduling challenges faced by those interested in participating in the study. I conducted analyses to compare differences in outcomes for participants by MRE dosage.

Summary

The recent federal funding for the Healthy Marriage Initiative increased the accessibility of MRE interventions to low-income couples. Providing MRE to low-income couples was designed to help create long-lasting, healthy relationships that inherently improve outcomes for the children of the couples participating.

Low-income couples experience financial and economic hardship causing strain on their relationships. Additionally, economic hardship relates to decreases in marital satisfaction, and low marital satisfaction relates to decreases in levels of individual functioning. Previous research identified couples counseling as an effective intervention at decreasing levels of both marital and individual distress for participating couples. However, low-income couples typically do not participate in couples counseling. Additionally, prior to the Healthy Marriage Initiative, MRE participants were middle-to-upper-income Caucasian couples.

Therefore, this study aimed to evaluate relationships among combined household income and changes in marital and individual distress, as well as relationships between participants' overall improvements and workshop dosage. Findings from this study may aid in the accessibility and efficiency of offering MRE to low-income couples. For example, researchers and practitioners might use baseline levels of distress to help practitioners develop an MRE treatment plan using best practices, as opposed to the current one-size-fits-all approach to MRE.

CHAPTER II: LITERATURE REVIEW

Since 1970, the trend in American marriages has shifted. For example, fewer Americans are marrying, and there are more divorced Americans (National Center for Family & Marriage Research; NCFMR, 2010). NCFMR reported the percent of divorced Americans increased from 2.9% in 1970 to 10.7% in 2008. Nineteen divorces per 1,000 marriages occurred in 2008 (NCFMR, 2009). Of those who divorced, the majority comprised White and Black couples, and they were more than twice as likely as Asians to be divorced (NCFMR, 2010). Further, about 50% of Blacks never marry, followed by 38% of Hispanic couples. The increase in divorce, coupled with the decline in marriage, led to more children being born to unmarried couples. As a result, unmarried couples bore 36% of all children (Hamilton, Ventura, Martin, & Sutton, 2005).

Researchers reported negative outcomes for children of parents who divorce (e.g., Amato, 2000; Frisco, Muller, & Frank, 2007; Kim, 2011), as well as parents experiencing marital discord (e.g., Amato & Booth, 2001; Amato et al., 1995; Moore et al., 2011). Moore and colleagues (2011) found negative outcomes in children resulting from parental relationship discord included child behavior problems and child school engagement. Therefore, children attend school frequently and are less engaged when they do attend. Amato and Booth (2001) conducted a national longitudinal study with 297 parents and their married children. They found parental marital discord was negatively associated with children's marital quality and positively related to marital discord. Amato and Booth identified the following parental relationship behaviors as predictors of marital discord in couples' children: (a) jealousy, (b) being domineering, (c) getting angry easily, (d) being critical, (e) being moody, and (f) avoidant behaviors. Conversely, improved relationship quality relates to more parental engagement for mothers and fathers (Carlson, Pilkauskas, McLanahan, & Brooks-Gunn, 2011). As a result,

researchers and policy makers sought to understand the shifting trend in marriages, as well as mechanisms to strengthen parental relationships in order to improve outcomes for children (Knox, Cohen, Cohen, & Bildner, 2011).

The financial expectations and family formation theory (Edin & Kefalas, 2005; Gibson-Davis, Edin, McLanahan, 2005) helps to explain the decreasing marriage rate and increase in children born to unmarried, low-income couples. The financial expectations and family formation theory purports a shift in the perception of the role financial stability plays for couples considering marriage. As such, economic hardship becomes a barrier to marriage, but childbearing does not because low-income couples perceive marriage and childbearing to fulfill separate desires (Edin & Kefalas, 2005). Gibson-Davis (2009) tested aspects of the financial expectations and family formation theory in her study utilizing data from the Fragile Families and Child Wellbeing (FFCW) study. Gibson-Davis found that changes in participant income predicted marriage rates but had no effect on childbearing. A 1% change in combined couple earnings was associated with a .2% greater chance of getting married. Additionally, cohabiting couples who became financially distressed had a 37% decrease in likelihood of marriage (Gibson-Davis, 2009).

Therefore, research indicates that decreasing marriage rates may not necessarily be explained by couples who no longer value marriage or who lack a desire to one day get married. In fact, low-income unmarried couples report a desire to eventually marry (Edin, 2000), but they acknowledge financial hardship as one of the main reasons they do not get married (Bembry, 2011). Bembry summarized findings from the FFCW study and concluded that at the time of child birth, parents had high hopes of marrying. However, follow-up data revealed that many of the parents had not married, and many were no longer in a relationship. Data from the FFCW

study helped researchers understand factors that contributed to unmarried childbirth among low-income parents. The FFCW study collected data on 4700 families, which included 3,600 non-married couples and 1,100 married couples from 75 hospitals in 20 cities throughout the United States (Reichman, Teitler, Garfinkel, & McLanahan, 2001). The FFCW study overcame one of the challenges to examining un-married parents by capitalizing on the "Magic Moment" (Reichman et al., 2001; p. 303), which describes the period of time right after child birth where both mother and father are present. Collecting data at this time allowed the researcher to include information from both mother and father. As a result of the FFCW study, researchers concluded that despite desires to marry, low-income parents may not marry because of financial instability (e.g., Bembry, 2011; Carlson & McLanahan, 2006; Edin, 2000). Many economically challenged couples marry despite their economic concerns. However, Fein (2004) reported that low-income couples who marry struggle to maintain the marriage due to factors associated with economic discord. Therefore, the fears expressed by unmarried low-income couples about the effect of economic hardship could be valid.

Barriers to lasting relationships for low-income couples include stressors related to financial hardship and contextual factors associated with low socioeconomic status (Karney & Bradbury, 2005). Contextual factors include external stressors, such as job loss or financial instability, which ultimately influence how partners perceive relationship quality (Neff & Karney, 2004). For example, Neff and Karney followed newlyweds through their first four years of marriage and found that stress had a negative influence on marital perceptions. Thus, low-income couples experience poorer relationship quality as a result of the contextual stressors associated with economic hardship (Conger et al., 1990), leading to increased likelihood of

relationship dissolution or a decreased likelihood of getting married (Gibson-Davis, Edin, & McLanahan, 2005).

Socioeconomic Demographic Factors and Couple Relationships

Not only does economic hardship discourage marriage among low-income couples, but the environmental factors associated with economic hardship also make maintaining long-lasting marriages difficult for couples who choose to marry (Fein, 2004; Karney & Bradbury, 2005). Research utilized different variables to measure the construct of economic hardship, such as monthly income and other factors related to chronic financial instability including (a) employment, (b) social support, (c) substance abuse, and (d) education. For example, Karney, Story, & Bradbury (2005) found that couples who experienced high levels of chronic stress reported lower relationship satisfaction and struggled to maintain satisfaction over the long-haul. Karney and Bradbury suggested contextual influences should be considered when providing interventions to improve relationship satisfaction among low-income couples.

Contextual influences affect couples' decision to seek treatment, as well as outcomes experienced in counseling. Differences among contextual influences, such as education and employment, have been examined between low- and middle-income couples seeking relationships assistance (Dakin & Wampler, 2008). Dakin and Wampler employed a convenience sample of 51 low-income couples and 61 middle-income couples who participated in couples counseling at a University-based family counseling clinic. They found low-income couples had significantly less education, increased chances of being unemployed, were more likely to be from a minority group, and were younger in age. Additionally, Dakin and Wampler found

baseline levels of relationship distress and individual distress to be higher for low-income couples. Many low-income couples do not receive relationship assistance because of economic hardship and the related contextual factors. For example, Lester and Harris (2007) compared differences between those who attended their first session at a university-based clinic and those who did not. Among other factors, they found employment to be a significant difference between the attenders and non-attenders (Lester & Harris, 2007). Spoth, Goldberg, and Redmond (1999) found socioeconomic status was a significant predictor of assessment attrition for studies targeting low-income couples. Therefore, one challenge facing clinicians and researchers who provide interventions targeting low-income couples is identifying effective strategies to recruit and retain couples (Ooms & Wilson, 2004; Dion, 2005). Without access to interventions that help ameliorate the stressors associated with financial discord, relationship distress among low-income couples is exacerbated.

In addition to monthly income, researchers identified education, employment, and race as socioeconomic factors correlated with marital quality (Bulanda & Brown, 2007). Bulanda and Brown used data from the National Survey of Families and Households to compare marital quality among non-Hispanic Blacks, Blacks, and non-Hispanic Whites. In their sample of 6,231 individuals and couples, they found Blacks reported poorer marital quality than Whites, and Mexican Americans reported fewer marital problems than Whites (Bulanda & Brown, 2007). Similarly, Sweeney, and Phillips (2004) used data from the Current Population Survey to examine differences in marital disruption by ethnicity. Their sample included a total of over 40,000 Black and White women who were either currently or previously married. Sweeney and Phillips found that marital disruption rates leveled for White women but increased for Black women. Additionally, Sweeney and Phillips found differences in risk factors for marital

disruption by race (e.g., age at first marriage and premarital childbearing). Although race alone is not the cause of the difference in marital dissolution among couples, factors associated with race may contribute to the disruption noted by Sweeney and Phillips.

Economic Hardship & Relationship Distress

Previous research identified relationships between economic hardship, including factors associated with economic hardship, and relationship distress (e.g., Clark-Nicolas & Gray-Little, 1992; Conger et al., 1990; Conger et al., 1992; Conger et al., 1999). For example, in their sample of 150 Black spouses, Clark-Nicolas and Gray-Little (1992) sought to examine the relationship between socioeconomic variables and marital quality. The researchers identified income, perceived economic adequacy, occupation, education, and perceived social class as the variables that made up socioeconomic status. Marital quality was measured through the variables of marital satisfaction, reciprocity, and role performance. Results of their correlational research indicated that income predicted husbands' evaluation of spouses' role performance, but perceived social class predicted both husbands' and wives' appraisals of each other. Further, Clark-Nicolas and Gray-Little found that perceived economic adequacy was the most consistent predictor of marital quality. Participants with higher perceived economic adequacy and higher perceived social class were linked with higher marital satisfaction. However, more concrete measures of socioeconomic status, such as education and employment, were not related to marital quality (Clark-Nicolas & Gray-Little, 1992).

Additionally, Conger and colleagues (1990) conducted a study with 76 White, middle-class couples to examine the role of economic hardship on marital instability. Objective

measures of economic instability, such as income and husband's work instability, were associated with greater perceptions of marital instability for both husbands and wives (Conger et al., 1990). Thus, studies have been somewhat inconsistent with their findings regarding which socioeconomic variable is the best predictor of marital distress. However, the collective contextual associations of economic hardship appear negatively related to perceptions of relationship distress.

How Men and Women Handle Stress Differently

Men and women respond differently to relationship stressors (Neff & Karney, 2004; Conger et al., 1990; Conger et al., 1999). Conger and colleagues (1990) found that income and economic pressure influenced men's ability to be warm and supportive towards wives while trying to meet economic needs with limited resources. As a result, wives' perception of marital stability decreased, lowering their level of relationship satisfaction. Conger and colleagues (1993) studied the effects of undesirable life events on husbands and wives' marital quality and found that men responded more negatively to financial problems as opposed to wives who responded negatively to family problems.

Furthermore, Neff and Karney (2004) described differences between men and women when examining the influence of stress, or stress spillover, on relationship satisfaction in newlywed couples who were followed for four years. Neff and Karney described stress spillover as stressors experienced outside the home that affect how members of a couple interact with each other. Results indicated that when wives experienced above average levels of stress, they reported lower levels of marital satisfaction. Additionally, wives who reacted more strongly to

initial stress reported lower levels of relationship satisfaction four years later. Increases in stress also contributed to an increase in blaming behaviors (Neff & Karney, 2004). The men in their study reported fewer relationship effects from stress. Neff and Karney postulated that men's perception of relationship satisfaction may not have been affected in the same manner as wives' because the men reported significantly less overall work stress than wives. The results of these studies contribute to the notion that economic hardship, and subsequent relationship stressors, may lead to relationship distress within the couple. Consequently, individual functioning may be affected by relationship distress and/or external stressors associated with economic hardship.

Individual Distress and Couple Relationships

In addition to relationship functioning, individual functioning affects economic hardship (Conger et al., 1992). Research identified a relationship between low socioeconomic status and increases in symptoms of depression, and indicated improvements in socioeconomic conditions could ameliorate some symptoms of depression (Lorant et al., 2001). In addition to economic status, research associated decreases in relationship satisfaction with increases in individual distress (Choi & Marks, 2008; Davila, Karney, Hall, & Bradbury, 2003; Overbeek et al., 2006; Whisman, 2007). Further, marital instability and subsequent divorce relate to poorer individual well-being for adult children (Amato & Booth, 1991). Overbeek and colleagues (2006) studied 4,796 men and women from the Dutch general population. They examined associations between divorce and prevalence of mood, anxiety, and substance use DSM-III-R disorders. Results indicated that divorce was related to incidences of alcohol abuse and dysthymia (Overbeek et al., 2006). However, participants had an increased probability of developing a mental disorder when

they reported low levels of marital quality prior to the divorce. Therefore, Overbeek and colleagues concluded that the marital discord causing the divorce, not the divorce itself, determined the onset of mental health problems.

Couples not yet divorced but experiencing distress within the relationship experience a decline in individual functioning as well. Utilizing a sample of 2,213 married adults from the National Comorbidity Survey Replication, Whisman (2007) identified an association with marital distress and increases in anxiety, mood, and substance use disorders. Choi and Marks (2008) employed a sample of 1,832 married adults from the National Survey of Families and Households to examine the influence of marital conflict on depression and functional impairment for each member of the couple. Choi and Marks based their study on the stress process theoretical framework (Pearlin, Menaghan, Lieberman, & Mullan, 1981), which posits that chronic stress in social areas, such as marriage, causes strain that presents in the form of psychological or physical distress. Results indicated a relationship with conflict within marriage to increases in depression and functional impairment (Choi & Marks, 2008).

Research has identified differences between men and women, as well as the relationship among individual distress and relationship distress (Dehle & Weiss, 2002; Townsend, Miller, & Guo, 2001). Dehle and Weiss employed a sample of 45 couples to study the role of anxiety in marital functioning. The researchers explained that prior research frequently examined the role of depression in marital relationships but that anxiety's effect on couple relationships had not yet been examined. Dehle and Weiss administered the Dyadic Adjustment Scale and the Beck Depression Inventory at two time points, with the second administration occurring 12 weeks after the initial assessment. Results of the correlational analysis indicated that husbands' anxiety at time one was more strongly related to both spouses' marital quality, while wives' reports of

anxiety were not a predictor of marital quality. The authors concluded that husbands' reports of anxiety could reflect stressors external to the marriage, as opposed to stressors from within the relationship (Dehle & Weiss).

Many of the studies examining the influence of depression on relationship distress used homogeneous samples of White adults (e.g., Choi & Marks, 2008; Dehle & Weiss, 2002; Whisman, 2007). However, Townsend and colleagues (2001) incorporated a somewhat more diverse sample of 3,149 married adults. They sought to examine differences by race/ethnicity (i.e., White, Black, or Mexican American) in depression and relationship distress, as well as the influence of one spouse's level of depression on the other spouse. Findings indicated variances in levels of depression among partners, and depressive symptoms were moderately correlated among spouses (Townsend et al., 2001). Further, they found no differences between genders for Black couples, but there was a difference between White couples and Mexican American couples. Therefore, Townsend and colleagues recommended using caution when interpreting results from studies that examined largely White couples.

The plethora of research linking marital discord and individual distress led scholars to evaluate couples counseling as an efficacious treatment for individual distress. As a result, researchers and practitioners consider marital therapy as a collaborative treatment to individual counseling for adults with depression and anxiety (Fincham & Beach, 2010). The following section will discuss empirical studies that examined couples counseling as a treatment approach for individual distress.

Treating Individual Distress With Couples Counseling

Research identified couples counseling as a possible treatment of depression (Denton et al., 2003) and an intervention that could increase overall relationship satisfaction, as well as decrease symptoms of individual distress, even at one-year follow-up (O'Leary & Beach, 1990). Additionally, couples counseling proves effective at treating other individual disorders, such as alcoholism and anxiety disorders (Baucom et al., 1998).

O'Leary and Beach (1990) employed an experimental design study and randomly assigned 36 couples to one of three different treatment groups: (a) individual cognitive therapy for the depressed wife; (b) marital therapy for the depressed wife and her spouse; or (c) a 15-week waiting list. Both the individual and couples counseling treatment approaches lasted 15-16 weeks with weekly sessions. O'Leary and Beach identified women with clinical depression and used the Beck Depression Inventory and Dyadic Adjustment Scale to measure the constructs of individual distress and relationship satisfaction. Results indicated that both individual and marital therapy were effective at reducing symptoms of depression when compared to the control group (O'Leary & Beach). Additionally, depression scores did not differ significantly for women who received individual treatment when compared to those who received marital treatment. However, women who received marital treatment had significant increases in their marital satisfaction scores, while no difference existed between the women in individual treatment and the control group (O'Leary & Beach). Finally, women in marital treatment and individual treatment did not differ in symptoms of depression at follow-up. Therefore, despite only studying couples with depressed women, results indicated that both individual and marital behavioral therapy were effective at reducing symptoms of depression, but only the marital therapy group increased in marital satisfaction. O'Leary and Beach's study facilitated the development of their model for

treating depressed couples: the marital discord model of depression. I will discuss this model later and also will use it as a supportive theory within this dissertation study.

Similarly, Lundblad and Hansson (2005) employed a sample of 312 couples who attended at least three conjoint counseling sessions using various therapeutic modalities, with systems theory being the most popular modality chosen among therapists. After attending an average of 8 sessions, both men and women experienced significant reductions in depressive symptoms as measured by the Symptom Check-list 90 (Lunblad & Hansson). Although their study was completed in Sweden, it was the first study in Sweden to examine the efficacy of couples counseling on individual symptoms of depression.

Men and women may differ in their response to couples counseling as a treatment approach to individual distress (Isakson et al., 2006). Isakson and colleagues utilized a sample of 95 married couples who received conjoint couples counseling and 45 individuals who received individual treatment. The couples were divided into groups based upon their scores on the Outcomes Questionnaire 45.2, which measured individual distress. The groups included: (a) both partners in the clinical range; (b) both partners in the non-clinical range; (c) female in the clinical range; and (d) male in the clinical range. The last two groups were compared with respective genders who received individual treatment. Individual distress included diagnoses such as mood disorders, anxiety disorders, and adjustment disorders. Results indicated that both individual and couples counseling were effective at reducing individual distress symptoms (Isakson et al.). In addition, outcomes for men who experienced clinical levels of individual distress at pre-assessment, and were seen for couples counseling, were not influenced by the level of clinical distress experienced by their female partner. Further, men appeared to benefit in both couple and individual treatment. Conversely, women entering treatment in the clinical range with a male

partner who was not clinically disturbed had poor outcomes when compared to married women seen in individual therapy and women who received couples counseling when both partners experienced equal levels of distress (Isakson et al.).

Although research exists supporting couples counseling as a modality for treating individual distress, as well as improving relationship satisfaction, a literature review revealed no published studies that incorporated samples made up of economically disadvantaged couples. Therefore, the samples have been relatively homogenous with respect to race and income. Low socioeconomic couples experience contextual stressors that contribute to both relationship and individual distress. Therefore, studies examining changes in individual distress for interventions targeting low-income couples are warranted.

Marriage and Relationship Education

Marriage and relationship education (MRE) originally developed as a preventive intervention and was traditionally conducted by clergy. Facilitators conduct MRE in group settings, and they do not need advanced degrees to do so (Larson, 2004; Hawkins et al., 2004). These qualities contribute to MRE being more readily available, accessible, and cost-effective than couples counseling. Additionally, MRE encompasses specific skills that teach couples tools centered around healthy communication and conflict resolution. MRE began as a preventive measure with non-distressed couples, such as engaged couples (Bowling, Hill, & Jencius, 2004). However, distressed couples not only participate (DeMaria, 2005) but also benefit from MRE (Hawkins & Fackrell, 2010). Until recently, researchers and practitioners considered MRE a purely preventive intervention, leading scholars to publish recommended changes for use with

the economically disadvantaged participants targeted by healthy marriage grantees (Adler-Baeder, Higginbotham, & Lamke, 2004; Halford, 2004; Hawkins, 2004). Utilizing empirically supported MRE curricula (Jakubowski, Milne, Brunner, & Miller, 2004), tailoring marketing and recruitment strategies to the population being served, and considering level of dosage and curriculum intensity (Hawkins et al., 2004) were among the recommendations. Furthermore, Halford, Markman, Kline, and Stanley (2003) outlined seven principles for best practices in MRE, including (a) assessing the risk profile of couples who attend, (b) encouraging high risk couples to attend, (c) assessing and educating about relationship aggression, (d) offering relationship education at change points, (e) promoting early presentation of relationship problems, (f) matching content with couples special needs, and (g) enhancing accessibility of evidence-based relationship education programs. However, providing MRE to couples experiencing economic hardship has only recently occurred. Thus, there is still much to be learned about how researchers and practitioners can effectively and efficiently provide MRE to low-income couples.

Government Initiatives Supporting MRE

The Personal Responsibility and Work Opportunity and Reconciliation Act (PRWORA) was passed in 1996 initiating federal support for work with poor couples and families. PRWORA helped fund Temporary Assistance for Needy Families (TANF) and aimed to "encourage the formation and maintenance of two-parent families" (PRWORA 1996, p. 8). As a result of the systemic influence that economic hardship causes couples and their children, the federal government supported initiatives that sought to improve child outcomes through the

strengthening of couple relationships (Dion, 2005; Ooms & Wilson, 2004). The Deficit Reduction Act reauthorized the TANF program in 2005. As a result, the United States Congress authorized $150 million per year for five years to support healthy marriage and responsible fatherhood grantees. The Administration of Children and Families (ACF) used this funding to sustain the Healthy Marriage Initiative that began in 2006, and they intended to continue for five years (Knox, Cowan, Cowan, & Bildner, 2011). The Healthy Marriage Initiative aimed to teach low-income couples skills-based tools through the implementation of MRE with the goal of improving and sustaining the quality of couples' relationships. This goal was carried out through the funding of three large demonstration projects: (a) Building Strong Families (BSF); (b) Supporting Healthy Marriages (SHM); and (c) Community Healthy Marriage Initiative (CHMI).

BSF was a large scale, multi-site, experimental design research study administered and evaluated by Methematica Policy Research. Nine sites implemented the program model nationally. The goal of BSF was to target low-income unmarried couples who recently had a baby and provide them with relationship skills to help sustain long-term relationships. Researchers conducted impact studies on the effectiveness of the BSF model. Fifteen-month outcomes revealed minimal differences between the treatment and control group couples at all national sites, with the exception of one – Oklahoma City (Wood, McConnell, Moore, Clarkwest, & Hsueh, 2010). Couples participating in Oklahoma's program received a higher level of dosage with 45% of participants receiving 80% of the curriculum, as opposed to 9% percent of participants from all other sites (Wood et al., 2010). The gap in dosage experienced by participants likely contributed to the differences in findings between Oklahoma and the other eight BSF sites. Therefore, attrition appeared to influence couples' success in relationship education programs.

SHM was an experimental design study that targeted low-income married couples with children. Eight national SHM implementation sites randomly assigned over 6,000 couples to either the treatment or control group. MDRC, a social policy research firm based in New York, served as the lead administrator and evaluator of the SHM study. Married couples participated in 30 hours of MRE, received extensive family support services, and participated in extended marital activities. The funders required SHM implementation sites to maintain retention benchmarks to ensure dosage was sufficient. Twelve-month impact results recently released by MDRC revealed that SHM treatment group couples experienced small positive effects on several relationship dimensions, such as higher levels of relationship happiness, lower relationship distress, and more positive communication (Hsueh et al., 2012). Furthermore, compared to control group couples, treatment group couples reported less psychological and physical abuse from their partners (Hsueh et al., 2012). Finally, men and women who participated in the treatment group reported lower levels of individual distress than control group participants (Hsueh et al., 2012).

Finally, the CHMI consisted of 125 healthy marriage grants awarded to 123 grantees (National Healthy Marriage Resource Center, 2010). CHMI was comprised of grass-roots programs such as faith-based organizations and other community agencies who provided MRE to both married and unmarried couples, as well as responsible fatherhood programs targeting absent or high risk fathers. CHMI grantees were responsible for conducting their own program evaluation. Following is an overview of MRE outcome research that was conducted with middle- and upper-income couples, as well as published evaluations of CHMI programs that targeted low-income couples.

MRE Effectiveness Studies

Prior research found MRE effective at improving communication and relationship satisfaction among middle-income couples (Blanchard et al., 2009; Giblin, Sprenkle, & Sheehan, 1985; Hawkins, Blanchard, Baldwin, & Fawcett, 2008). Additionally, early research indicated that MRE has moderate effects with low-income couples (Hawkins & Fackrell, 2010). That is, MRE helped improve relationship satisfaction among couples who participated in CHMI programs. However, one published study examined the effect of MRE on individual distress (e.g., Ditzen, Hahlweg, Fehm-Wolfsdorf, & Baucom, 2011) and no published studies examined the effect of MRE on individual distress for low-income couples.

Additionally, a review of the literature revealed four published meta-analyses that examined effects of relationship education programs (Blanchard et al., 2009; Giblin, Sprenkle, & Sheehan, 1985; Hawkins, Blanchard, Baldwin, & Fawcett, 2008; Hawkins & Fackrell, 2010). Giblin and colleagues (1985) published one of the earliest met-analytic studies using quantitative data evaluating the effectiveness of enrichment programs. The researchers included studies in the analysis if they employed an experimental or quasi-experimental design and focused on premarital, marital, or family enrichment. As a result, Giblin et al. incorporated 85 studies in the evaluation, including 3,886 couples or families from varying socioeconomic and demographic backgrounds (Giblin et al., 1985). Results of the analysis for the enrichment studies indicated an average effect size of .44. Therefore, those who participated in enrichment programs were better off than 67% of control group participants (Giblin et al., 1985). In addition to overall effectiveness, Giblin and colleagues examined the relationship between program length and effect size. The average length of enrichment programs was 14 hours, ranging from 2 to 36 hours. Results identified a small positive relationship between length of MRE program and effect

size, indicating the longer the program, the higher the effect size (Giblin et al, 1985). Finally, Giblin and colleagues examined differences in effect size between participant level of relationship distress and found couples with higher levels of distress displayed significantly higher effect sizes than lower distress couples. Thus, couples with more distress appeared to experience greater gains from the intervention.

Hawkins, Blanchard, Baldwin, and Fawcett (2008) conducted a meta-analysis to evaluate the effects of MRE on relationship quality and communications skills. Hawkins et al. included experimental and quasi-experimental design studies that implemented psychoeducational interventions, including improving couple relationships and communication skills as a treatment goal. Similar to Giblin and colleagues, the sample in their analysis was mostly White, middle-class, married couples not experiencing significant relationship distress. Hawkins et al. included 117 studies in their analysis. Hawkins and colleagues conducted separate analyses for experimental and quasi-experimental studies and for relationship skills and communications skills. Relationship quality effect sizes were .36 at post and .30 at follow-up for experimental studies and .15 at post and .19 at follow-up for quasi-experimental studies (Hakwins et al., 2008). Communication skills effect sizes were .43 at post and .44 at follow-up for experimental studies and .22 at post and .29 at follow-up for quasi-experimental studies (Hawkins et al., 2008). Effect sizes for experimental design studies were higher than quasi-experimental studies for both relationship quality and communication skills. However, Hawkins and colleagues did not examine the effects of MRE on individual distress.

In 2009, Blanchard, Hawkins, Baldwin, and Fawcett evaluated 143 distinct studies to examine the effects of MRE on couples communication as well as relationship distress. Unlike Hawkins and colleagues, Blanchard et al. evaluated the effect of MRE on the relationship

distress. However, only seven of the studies examined contained a significant level of distressed couples. Analysis included experimental and quasi-experimental studies, as well as follow-up data. Blanchard and colleagues found medium to large effects for all analyses conducted. They concluded that results provided modest evidence to support MRE as a universal prevention for higher functioning couples, and as an indicated prevention for more distressed couples. Limitations to the current meta-analysis include the following: (a) a small number of distressed couples were included; (b) only 14 studies had follow-up data beyond 6 months; and (c) individual distress was not examined.

The most recent meta-analyses conducted by Hawkins and Fackrell (2010) addressed the limitation from previous meta-analytic studies that included participants who were mostly White, well-educated, middle-income couples. Hawkins and Fackrell evaluated 15 studies that provided MRE specifically to low-income participants. The researchers included studies in the analysis if two-thirds of the participants were at less than twice the federal poverty rate. Only three of the studies evaluated employed a control group, with the remaining implementing a pre/post design. Overall effects were moderate and mirrored effects found for meta-analytic studies conducted with middle- and upper-income couples (Hawkins & Fackrell, 2010). Additionally, effects were similar between the three control group studies and the 12 pre/post design studies. Hawkins and Fackrell also examined differences in effect sizes between lower dosage-programs (12 hours or less) and higher-dosage programs (more than 12 hours). No significant differences existed in effect sizes between dosage levels (Hawkins & Fackrell, 2010). Hawkins and Fackrell's meta-analysis contained limitations because it did not examine follow-up data and because individual distress was not evaluated.

Although initial evaluations of MRE's effectiveness with economically disadvantaged couples validate findings from studies conducted with middle-income couples, long-term effects have been difficult to discern. This is partially because scholars consider retaining couples in a long-term study one of the biggest challenges for programs providing MRE to low-income couples (Ooms & Wilson, 2004). Research has only recently begun identifying empirically supported recruitment and retention strategies for targeting low-income couples (e.g., Carlson et al., 2012). Carlson and colleagues used programmatic variables from 786 low-income men and women who participated in a government-funded MRE study. The programmatic factors included the (a) number of phone calls research team members made to new referrals prior to scheduling an intake appointment; (b) attendance, as measured by hours spent in MRE workshops; and (c) which member of the couple research team members attempted to call. Carlson et al. found more phone calls to wives were associated with less attendance. Additionally, calling husbands was associated with fewer phone calls to schedule the initial intake appointment (Carlson et al., 2012). The findings indicate potential relationships between recruitment practices and retention. Moreover, the findings support how little scholars know about effectively recruiting low-income participants.

The challenges associated with attrition raise questions regarding the characteristics of couples who volunteered to attend MRE programs (Duncan, Homan, & Yang, 2007). As a result, Morris, McMillan, Duncan, and Larson examined intrapersonal and interpersonal differences between those who attended and those who chose not to attend MRE. Morris and colleagues surveyed 121 married couples and found that communication was the only significant predictor of MRE participation, with lower levels of communication indicating a higher likelihood of participation (Morris et al., 2011). Therefore, couples who volunteer to participate in MRE

experience higher levels of relationship distress than couples who do not participate. However, most of the participants in the Morris et al. study were White, limiting the extent to which their findings can be generalized.

Additionally, Adler-Baeder and colleagues published findings from their 2010 study that examined demographic factors as predictors in outcomes from pre- to post-intervention, as well as characteristics of participants at pre-assessment. Adler-Baeder et al. employed a large sample of 1,293 ethnically diverse adult individuals. Sixty-one percent of participants had monthly incomes below the federal poverty guidelines. Adler-Baeder et al. incorporated a pre/post design and measured couple quality, trust, confidence/dedication, happiness, positive interaction, negative interaction, conflict management, adjustment, individual empowerment, and depression. They used structural equation modeling and found income to be the strongest predictor of baseline levels of individual and marital distress, and attending with a partner was the only predictor of change in target outcomes (Adler-Baeder et al., 2010). Their study was one of the first published studies that included the construct of individual distress for MRE participants. However, change was not examined at follow-up assessment, and demographic factors were not examined by dosage (i.e., hours spent in MRE) or workshop format (e.g., weeknights or weekends).

Adler-Baeder and colleagues' study (2010) was one of the first published accounts of MRE with low-income couples to measure participants' individual distress. Ditzen, Hahlweg, Fehm-Walfsdord, and Baucom (2011) examined the influence of couples education (CE) on psychophysiological stress within participants. Ditzen et al. posited that conflict in unhappy marriages decreased individual function. They used salivary cortisol to measure physiological levels of stress and arousal. Couples' salivary cortisol levels were measured in a lab while

engaging in conflict discussions. Significant decreases in cortisol responses existed during conflict discussions after the completion of CE (Ditzen et al., 2011). No other published studies exist measuring biomarkers for CE participants. However, Ditzen and colleagues' study sample comprised all Caucasian couples. Their study findings support MRE's use with distressed couples despite the homogenous sample.

Current published studies indicate that distressed couples are participating in MRE and benefiting from the intervention (Blanchard et al., 2009). Intake information, such as demographics and distress levels can be utilized to help determine how much MRE dosage and what type of workshop format might work most effectively. Such information would heed the recommendations made by scholars to make intentional decisions regarding level of dosage and curriculum intensity based on the characteristics of the population being targeted (Hawkins et al., 2004). Additionally, a better understanding of how presenting distress influences outcomes would help heed the recommendation to match the content of the material to the needs of the couples participating (Halford et al., 2003).

Theoretical Foundation

In their review of theoretical perspectives on marriage, Karney and Bradbury (1995) identified the following criteria when considering a marriage theory for quantitative research: (a) include a range of potential predictors of outcomes and provide links between various levels of the analysis; (b) identify mechanisms of change within the theory; and (c) account for variances in marital stability and outcomes both between and within couples longitudinally. Karney and Bradbury acknowledged that a single theory could not meet all criteria. Therefore, one should

choose a theory that best encapsulates all constructs being examined. The current study includes constructs of socioeconomic status, marital distress, and individual distress because previous research identified relationships among them. Thus, two theoretical models serve as the basis for the current analysis: a family stress model and the marital discord model of depression.

A Family Stress Model

Originally published in 1992 by Conger and colleagues, a family process model of economic hardship was developed as a result of research that identified relationships between constructs of economic hardship and family functioning (e.g., Conger et al., 1990). Variables such as income, employment, and income loss were used to represent the construct of economic hardship. Additionally, variables such as marital distress, individual functioning, and parental quality were used to represent family functioning. Objective measures of economic hardship influenced husbands' marital interactions, which influenced wives' perception of marital satisfaction (Conger et al., 1990). As a result of this research, Conger and colleagues (1992) proposed and tested the family process model of economic hardship which posits, "…adverse financial circumstances would effect parents' emotional state and the quality of family interactions…" (p. 527). The model possesses similarities to crisis theory (Hill, 1949), which attempted to explain how families react to stressful life events. Crisis theory's ABCX model suggests that families need to (A) adapt to crises and (B) families arrive at different definitions of events due to variances in resources. The resources (C) amend the effect of the events and ultimately help determine (X) if a family will successfully recover from the crises (Hill, 1949). Therefore, crisis theory helps explain decrease in marital satisfaction by attributing the decrease

to an inability of the couple/family to recover from a crisis (Karney & Bradbury, 1995). A family process model of economic hardship goes beyond crisis theory because it identifies a specific crisis (i.e., economic hardship) and includes effects of economic hardship on the couple, individual members of the couple, and eventually child outcomes. Conger et al. described economic hardship as, "…spousal agreement that the family (a) cannot meet its material needs, (b) often falls behind in paying its debts, and (c) has had to cut back on everyday expenses…" (p. 527). As a result of economic deterioration, parents become depressed, which leads to a decline in marital and parenting quality (Conger et al., 1992). In their evaluation of 205 families, the model was substantiated and proved consistent with prior research. However, the model was tested on White, middle-class families living in rural areas.

Later research supported the relationships identified in the family process model of economic hardship in linking economic disadvantage to marital quality, marital quality to individual distress, and individual distress and marital quality to child outcomes (e.g., Amato & Booth, 1997; Amato, Loomis, & Booth, 1995; Conger et al., 1999). However, discrepancies exist regarding the variables used to define the construct of economic disadvantage. For example, some research found that perceived economic hardship is a better predictor of marital quality than the more objective measure of monthly income (Clark-Nicolas & Gray-Little, 1991). Other research identified the importance of including ethnicity (Bulanda & Brown, 2007), age, and employment (Dakin & Wampler, 2008) as variables measuring economic disadvantage that predict marital quality.

In 1999, Conger et al. proposed the family stress model, rooted in frustration-aggression theory (Berkowitz, 1989), as a slight adaptation to the family process model of economic hardship. The family stress model differs from the family process model of economic hardship

because it focuses on economic pressure, which Conger and colleagues (1999) identify as "…a specific form of economic stress" (p. 55). The authors describe economic pressure as stress stemming from an inability to pay bills, or having to cut back on spending to pay bills resulting from a loss of income (Conger et al., 1999). The family stress model purports that economic pressure affects emotional distress (e.g., depression and anxiety), which contributes to marital conflict and distress (Conger et al., 1999).

The family stress model supports the examination of the relationship between socioeconomic and demographic factors of participants in MRE. The federal government funded the Healthy Marriage Initiative under the auspice that economic disadvantage relates to marital and individual functioning and that it eventually affects parental quality and later child-outcomes. Therefore, it would be important to understand if MRE ameliorates distress in MRE participants and to understand if participants with variances in demographics and distress respond differently to MRE dosage and workshop format.

The Marital Discord Model of Depression

Early research identified a relationship between depression and marital discord (Coleman & Miller, 1975). In fact, research identified marital discord as a risk factor for individual distress, such as major depression (Weissman, 1987; Whisman & Bruce, 1999). Furthermore, research indicated marital therapy as an effective treatment for depression among spouses (O'Leary and Beach, 1990). Research supporting marital therapy and couples counseling as an effective intervention for treating both relationship discord and individual distress led to the development of the marital discord model of depression (Beach & Cassidy, 1991). The marital discord model

of depression purports that relationship stress and individual distress (e.g., symptoms of depression) are positively correlated and that marital discord often precedes symptoms of depression. Therefore, the model encompasses aspects of stress process theories, which posit that stress is the result of chronic strain in various social roles, such as marriage, and presents in the form of psychological or physical distress (Pearlin, Menaghan, Lieberman, & Mullan, 1981). When change occurs (e.g., loss of a job), disequilibrium results and necessitates a period of readjustment (Pearlin et al., 1981). For example, job loss and decreases in income contribute to increases in depression (Pearlin et al., 1981). Pearlin and colleagues described the distress experienced as "…the result of a struggle to reestablish a homeostasis following change" (p.339). Therefore, external stress experienced by one member of a couple may not only create relationship discord, but it may also affect the individual functioning of the other member of the couple. Conversely, Pearlin and colleagues suggested that social support, specifically engaging in trusting relationships with others, functions as a mediator to stressful events.

The marital discord model of depression serves as a guide for clinicians conducting couples counseling when symptoms of depression are evident in one or both members of the relationship. The model incorporates the notion that relationship interventions should be tailored based on the level of distress a couple presents upon initial assessment. The marital discord model of depression aims to assist clinicians in identifying interventions to guide the counseling process. Beach and Cassidy identified the following points of particular interest to address with couples: (a) couple cohesion; (b) acceptance of emotional expression; (c) self-esteem support; (d) spousal dependability; (e) intimacy and confiding; (f) and topics related to the creation of stress in marriage. Couple cohesion comprises the goal of helping the couple increase shared positive experiences through activities. Improving communication skills and conflict resolution skills and

helping couples improve marital satisfaction and individual functioning aids in partners' acceptance of emotional expression. Additionally, assisting couples with addressing marital problems directly and jointly assists in the reduction of depression. The model addresses self-esteem and support through facilitating appreciations and compliments from each member of the couple. Beach and Cassidy noted that positive expressions towards each member of the couple were important for distressed and depressed couples. Accomplishing spousal dependability occurs when partners express commitment to each other, which may help depressed partners feel more supported. Finally, couples enhance intimacy and confiding when partners are vulnerable and reveal personal information with each other. Thus, encouraging depressed partners to share feelings could mediate symptoms of depression (Beach & Cassidy, 1991).

Although the current dissertation does not test the utility of the marital discord model of depression, the model serves as a foundation for measuring the construct of individual distress in marital relationships. Additionally, the model underscores the necessity of establishing best practices in relationship interventions that incorporate the assessment of distress and structure treatment in a concordant manner. Finally, research conducted with traditional couples counseling participants (e.g., educated, middle- to upper-income, White) provided support for the marital discord model of depression. The emergence of MRE with low-income couples warrants examining the relationship between individual distress and outcomes in MRE because economically challenged couples inherently experience chronic stressors that may influence both the quality of their relationship and individual functioning.

Summary

Recent reports indicate that more couples are divorcing and fewer couples are marrying, resulting in higher rates of children born to single-parent homes. However, the decrease in couples choosing to marry is not because couples no longer value marriage. Financial instability and factors associated with economic hardship, such as inability to pay bills and unreliable transportation, are among the reasons identified by couples as deterrents to maintaining a long-lasting relationship. Additionally, couples experiencing chronic economic hardship tend to have less education, less stable employment, and are of minority status when compared to middle- and upper-income couples. Relationships exist between economic hardship and increases in relationship distress and decreases in individual functioning. Furthermore, economically disadvantaged couples who choose to marry or maintain a long-lasting relationship experience reductions in parenting quality as well. Thus, children whose parents have poor quality relationships, or whose parents divorce, experience negative outcomes, such as behavioral problems in school, and are more likely to describe having low quality relationships as adults.

As a result, the federal government launched the Healthy Marriage Initiative aimed at improving the quality of relationships and helping couples sustain their relationships. Grantees across the country utilized MRE as the treatment intervention to target economically disadvantaged couples. MRE differs from counseling because it encompasses skills-based techniques that are provided to couples in group workshop formats. Couples learn tools and tips to communicate more effectively and resolve conflicts in a healthier manner. Several MRE curricula exist, and research identified MRE interventions effective at improving relationship satisfaction among middle- and upper-income couples. In addition, early meta-analysis results indicated MRE is equally effective with low-income couples. However, no published studies evaluated MRE's

influence on the individual distress of couples participating. Additionally, a literature review revealed only one published study examining the influence of socioeconomic demographic factors on treatment outcomes for couples who participate in MRE. Therefore, a lack of clarity exists indicating how initial levels of relationship and individual distress, as well as socioeconomic demographic factors (e.g., income, education, and employment status), influence outcomes. Grantees providing MRE to low-income couples frequently encounter challenges to engagement, such as scheduling. Scant research exists regarding which workshop format works best when considering initial levels of distress in addition to socioeconomic demographic factors. Finally, MRE programs vary in the length of curricula provided to couples. Research and practice may be beneficially informed by examining the influence of individual and relationship distress, and socioeconomic demographic factors on workshop length.

CHAPTER III: METHODOLOGY

ACF's Healthy Marriage Initiative funding influx increased MRE accessibility for low-income couples. The funding targeted low-income couples because previous theory (e.g., Conger et al., 1992) and research linked child outcomes to parental relationship quality (e.g., Amato & Booth, 2001; Amato et al., 1995; Moore et al., 2011). Additionally, research identified relationships between socioeconomic variables such as income, ethnicity, and employment with marital quality (Bulanda & Brown, 2007; Clark-Nicolas & Gray-Little, 1992; Sweeney & Phillips, 2004) and individual distress (e.g., Choi & Marks, 2008; Lorant et al., 2007; O'Leary & Beach, 1990; Whisman, 2007). Therefore, MRE aims to improve the quality of the relationships for participating couples. A recent meta-analysis identified MRE programs targeting economically challenged couples as at least moderately effective at improving relationship satisfaction (Hawkins & Fackrell, 2010). However, grantees traditionally provide MRE in a one-size-fits-all approach. Although researchers and practitioners administer initial assessments collecting baseline information such as relationship satisfaction, a literature review revealed no published studies discussing how baseline scores influence MRE modality. Consequently, practitioners do not factor participant demographics, relationship satisfaction, and individual distress scores into consideration when deciding on MRE dosage or workshop format.

Thus, the current dissertation aimed to (a) understand the relationship between demographics and outcomes in MRE; (b) examine changes in relationship satisfaction and individual distress as a result of MRE immediately following treatment and three-to-six months later; and (c) examine the influence of workshop format and duration on outcomes in MRE. Therefore, the overall goal of the study was to identify best practices for MRE format based changes in relationship satisfaction and individual distress.

Research Questions & Hypotheses

This study explored the relationships among demographic factors, marital satisfaction and individual distress, and outcomes at post- and follow-up assessment for married couples with children who volunteer for MRE. The research questions and null hypotheses are presented next.

Research Question 1

What differences exist in pre, post, and follow-up relationship satisfaction, as measured by the Dyadic Adjustment Scale total score (DAS; Spanier, 2001); individual distress, as measured by the Outcomes Questionnaire 45.2 total score, (OQ; Lambert et al., 2004); and between husbands and wives who participate in MRE?

Null Hypothesis 1A

No differences exist between husbands and wives and between pre-to-post change in relationship satisfaction and individual distress.

Null Hypothesis 1B

No differences exist between husbands and wives and between pretest and three-to-six month follow-up relationship satisfaction and individual distress.

Null Hypothesis 1C

No differences exist between husbands and wives and between pre, post, and three-to-six month follow-up in relationship satisfaction and individual distress.

Research Question 2

Can MRE dosage, as measured by number of lessons attended, and combined monthly income predict relationship satisfaction improvement, as measured by the Dyadic Adjustment Scale total scores, (DAS; Spanier, 2001), and individual distress, as measured by the Outcomes Questionnaire 45.2 total scores, (OQ; Lambert et al., 2004) for married men and women with children who volunteer for MRE, immediately following treatment, and three-to-six months later?

Null Hypothesis 2A

MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for male MRE participants at post-assessment, while controlling for wives' relationship satisfaction scores.

Null Hypothesis 2B

MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for female MRE participants at post-assessment, while controlling for husbands' relationship satisfaction scores.

Null Hypothesis 2C

MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for male MRE participants at 3-6 month follow-up assessment, while controlling for wives' relationship satisfaction scores.

Null Hypothesis 2D

MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for female MRE participants at 3-6 month follow-up assessment, while controlling for husbands' relationship satisfaction scores.

Null Hypothesis 2E

MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for male MRE participants at post-assessment, while controlling for wives' individual distress scores.

Null Hypothesis 2F

MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for female MRE participants at post-assessment, while controlling for husbands' individual distress scores.

Null Hypothesis 2G

MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for male MRE participants at 3-6 month follow-up assessment, while controlling for wives' individual distress scores.

Null Hypothesis 2H

MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for female MRE participants at 3-6 month follow-up assessment, while controlling for husbands' individual distress scores.

Research Design

Prior to beginning the evaluation for the current study, I sought approval from the University's Institutional Review Board (IRB), and data collection began after IRB approval. Couples who participated in a federally-funded Community Healthy Marriage Initiative (CHMI), the *OFA Together Project*, located at a large University-based research institute in the southeast region of the United States, contributed data to the current dissertation.

After completing initial assessment paperwork, participants chose to partake in either 9 or 12 hours of MRE utilizing the PREP curriculum, version 7.0 (Markman, Stanley, & Blumberg, 2001). We offered MRE workshops in the following three formats: (a) one night per week for three hours over the course of four weeks (12 hours; 12 lessons); (b) two consecutive Saturdays for six hours each day (12 hours); (c) one Saturday for 9 total hours; and (d) a combination of Friday evening and the following Saturday (9 hours; 11 lessons). We administered a post-

assessment and a follow-up assessment to participants who completed intervention options ‘a’ or ‘b’. We administered the follow-up assessment only to participants who completed intervention ‘c’ or ‘d’ and not a post-assessment due to the fact not enough time elapsed between intervention start and completion to assess for behavior change.

Early research supported MRE as a moderately effective intervention for improving relationship satisfaction among low-income participants (Hawkins & Fackrell, 2010). However, scant findings exist examining outcomes at follow-up assessment for low-income MRE participants. Additionally, scholars suggested longitudinal change be assessed, specifically for culturally diverse couples, when evaluating the effectiveness of couples’ interventions (Bradbury, Fincham, & Beach, 2000; Christensen, Baucom, Vu, & Stanton, 2005). Examining change over time for the constructs of marital satisfaction and relationship distress resulting from MRE, as well as relationships between outcomes, demographics, and dosage, will help researchers and practitioners garner conclusions about best practices for treating couples with varying baseline distress.

Therefore, the data being analyzed for the current study utilized a sample from the larger *OFA Together Project*. Participants who completed treatment, and had complete data at post and follow-up assessment qualified for inclusion. Thus, the current study represents a quasi-experimental, time-series, research design to measure changes in relationship satisfaction and individual distress that occurred immediately following MRE, and three-to-six months later. Additionally, the current study examined relationships between MRE dosage, combined monthly income, and changes in relationship satisfaction and individual distress. Although the larger *OFA Together Project* study initially included an experimental design with a wait-list control group, the current study did not utilize data from the wait-list control group. Like many CHMI grantees

targeting low-income couples, we experienced data attrition impeding data collection from enough of the wait-list control group couples. However, the measurement of change at post and follow-up assessment qualify the design for the current analyses as time series, quasi-experimental (Campbell & Stanley, 1963).

Participants

Participants for the current study were part of a larger study, the *OFA Together Project.* We recruited couples using purposive sampling procedures. We utilized purposive sampling because the criterion for inclusion was specific to the target population, and the target population was chosen with a purpose in mind (Trochim, 2000). The current study's sample included low-to-moderate income married participants with children who volunteered to participate in MRE. We employed active (e.g., face-to-face) and passive (e.g., flyers, word-of-mouth, etc.) recruitment strategies (Pappas-Deluca et al., 2006; Yancey, Ortega, & Kumanyika, 2006). Yancey et al. reported limitations to public health research due to inadequate participation from culturally diverse populations. In their review of 95 studies describing methods of increased minority recruitment and retention, Yancey et al. identified active recruitment strategies as effective approaches when targeting low-income participants. Similarly, Pappas-Deluca et al. (2006) suggested a strategy to overcome recruitment barriers for low-income populations that involved actively targeting both members of the couple. As such, we formed partnerships with community organizations that typically serve low-income couples, such as surrounding county Department of Health's Women, Infants, and Children (WIC) program. Partnering organizations provided study team members participant access to discuss the study and eligibility criteria. Additionally, we posted study flyers at community agencies and on the project website.

One-hundred eighty-two couples (364 individuals) participated in the *OFA Together Project*. The current study's analyses utilized a sub-sample from the 182 couples who participated in the *OFA Together Project*. The sub-sample included participants who completed treatment and had complete pre-assessment data. Therefore, 110 couples (220 individuals) comprised the current dissertation's sample. Of the participating men, 52.3% (*n* = 58) were Hispanic; 36.9% (*n* = 41) White/Non-Hispanic; 9% (*n* = 10) Black/Non-Hispanic; and 1.8% (*n* = 2) identified as 'other'. Participating women included 48.6% (*n* = 54) Hispanic; 38.7% (*n* = 43) White/Non-Hispanic; 7.2% (*n* = 8) Black/Non-Hispanic; 4.5% (*n* = 5) identified as 'other'; and 9% (*n* = 1) Asian American. See table one for additional participant demographics.

Table 1: Participant Demographics

	M	*SD*	Min	Max
Husbands				
Age	37.48	8.20	22	56
Yrs. Education	14.05	2.35	8	22
Mos. Married	115.64	78.50	0	325
Children Under 18	1.86	.89	0*	4
Combined Monthly Inc.	$3,780.16	$2,419.32	$0	$15,800
Wives				
Age	36.15	7.75	21	57
Yrs. Education	14.58	1.12	10	20
Mos. Married	115.75	78.99	0	325
Children Under 18	1.86	.87	0*	4
Combined Monthly Inc.	$3,684.50	$2, 479.56	$0	$15,800

Note: * denotes couples who were expecting their first child

I conducted an *a priori* power analysis for each research question using G*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007) to determine if the *OFA Together Project* sample size would ensure adequate power with each of the anticipated analyses. *A priori* power analyses are conducted to determine the sample size necessary for adequate power (Balkin & Sheperis, 2011; Cohen, 1992). Larger sample sizes may lead to less error and higher statistical power, resulting in larger effects (Balkin & Sheperis, 2011). Therefore, the results of a given study increase in trustworthiness and generalizability. The current dissertation benefited from an *A priori* analysis

even though the sample was collected previously. The *a priori* analysis helped determine the sub-sample necessary for each of the anticipated analyses to have adequate power. Conversely, researchers utilize *post hoc* power analyses after the completion of statistical analyses resulting in non-significant findings (Balkin & Sheperis, 2011; Onwuegbuzie, 2011). *Post hoc* analyses help determine error type and conclusion validity with non-significant results. Onweugbuzie (2004) described a Type A error as an error that occurs when results indicate a large effect size but no statistically significant *p* value, and a Type B error was described as an error when results indicate a small effect size with statistically significant *p* value results. Identifying the difference in error type after completion of statistical analyses may help the researcher identify and explain reasons for the results.

The *a priori* power analyses conducted for the current dissertation utilized an alpha level of .05, moderate effect size of .06 (Cohen, 1988), and a recommended power of .80 (Cohen, 1992). The power analysis conducted for research question one indicated a sample of over 2,000 participants for adequate power. The sample for the current study is 220 individuals. Thus, sample size is a likely limitation for research question one. G*Power identified a sample of 164 in order to achieve adequate power for research question two. Although 364 individuals (182 couples) participated in the *OFA Together Project*, preliminary analyses and data-cleaning procedures resulted in a reduced sample. Moreover, inherent challenges exist when targeting economically disadvantaged study participants. These challenges also limited the size of the overall sample.

Instruments

The *OFA Together Project* utilized several instruments. However, the current dissertation will include only those instruments that measure the constructs of socioeconomic demographic factors, marital satisfaction, and individual distress. Therefore, I will analyze the results from the following three instruments administered to *OFA Together Project* participants: (a) intake information questionnaire; (b) dyadic adjustment scale (DAS); and (c) outcomes questionnaire 45.2 (OQ 45.2). During the *OFA Together Project*, we administered assessments prior to couples beginning MRE, upon completion of MRE (with the exception of couples who participated in the one-day workshop format), and at 3-6 months for follow-up. Following is a brief overview of each instrument.

Intake Information Questionnaire

The *OFA Together Project* research team developed the intake information questionnaire in order to collect contact information and basic demographic information from study participants. We requested both participant contact information and information related to variables used in the current study to measure the construct of socioeconomic status. We divided the intake information questionnaire into the following four sections: (a) identifying and contact information; (b) demographic information – about you; (c) demographic information – about your relationship; and (d) about the *OFA Together Project.* To this end, the intake information questionnaire collected socioeconomic status variables such as ethnicity, combined monthly income, years of education, current employment, and age. We administered the intake information questionnaire to participants immediately after reviewing the informed consent at

the initial intake appointment. Additionally, each member of the couple completed a separate intake information questionnaire. Thus, we collected all socioeconomic demographic information prior to participants' receiving any MRE.

Dyadic Adjustment Scales (DAS)

The DAS (Spanier, 2001) encompasses 32 items designed to measure a participant's overall level of satisfaction and quality in his or her relationship. The DAS includes four subscales: (a) dyadic cohesion – identifies the couples' shared interests; (b) dyadic satisfaction – the level of tension within the relationship, as well as whether or not the individual has considered ending the relationship; (c) dyadic consensus – the extent of agreement between partners; and (d) affectional expression – partners' satisfaction with the expression of sex and affection. To score the DAS, one must calculate a total relationship adjustment score by summing the total in each of the four subscales (Spanier, 2001). Therefore, researchers and practitioners use the total score and subscale scores to make inferences about the individual's self-reported relationship satisfaction and adjustment. Higher total scores indicate greater satisfaction (>100) and lower scores indicate higher levels of distress (<100; Spanier, 2001). Research identified the DAS as one of the most widely used measures of relationship satisfaction in couple therapy outcome research (Christensen et al., 2005), and the researchers utilized the DAS in several studies examining the relationship between marital distress and individual distress (e.g., Burr, 2010; O'Leary & Beach, 1990). Additionally, researchers incorporated the DAS in studies examining the relationship between economic hardship and relationship quality

(e.g., Conger et al., 1990), as well as research that assessed relationship satisfaction among low-income couples who participated in MRE (e.g., Adler-Baeder et al., 2010; Einhorn, 2010).

Researchers examined the psychometric properties of the DAS extensively with white participants (e.g., de Turck & Miller, 1986; Filsinger & Wilson, 1983; Spanier, 1976; Stein, Girodo, & Dotzenroth, 1982), indicating sound reliability and validity. However, Sanderson et al. (2009) suggested researchers report reliability information specific to the sample being examined in a given study because reliability estimates may differ from estimates developed with other samples. Therefore, following is a report of reliability coefficients from Adler-Baeder et al.'s (2010) study since she and her colleagues targeted low-income couples and individuals. Alpha coefficients were .85 and .86 at pre-test and .84 and .89 at post-test for men and women respectively. Additionally, Conger et al. (1990) utilized the DAS in their research. Specifically, they used questions related to relationship happiness and satisfaction. Thus, they left out question pertaining to couple cohesion and affectional expression. Conger et al. found correlations between the two items were .58 for husbands and .73 for wives. Morris et al. (2011) utilized the dyadic consensus subscale from the DAS in their study on the characteristics of couples who volunteered to attend MRE. They reported a Cronbach's alpha of .88 for their study.

The DAS displayed strong internal consistency for the current study. Alpha reliability for men's DAS scores follow: (a) .93 at pre-assessment; (b) .92 at post-assessment; and (c) .94 at three-to-six month follow-up. Alpha reliability for women's DAS scores follow: (a) .93 at pre-assessment; (b) .96 at post-assessment; and (c) .84 at three-to-six month follow-up. Internal consistency scores above .7 are considered acceptable (DeVellis, 2003). The internal consistency of DAS total scores for men and women in the current studies are well above the acceptable levels.

Outcomes Questionnaire 45.2

The OQ 45.2 includes 45 items designed to assess for common symptoms across a variety of problems (Lambert et al., 2004). The developers intended the OQ to be administered repeatedly and measure outcomes for the duration of therapy. The OQ comprises a total score broken down into the following three subscales scores: (a) symptom distress; (b) interpersonal relationships; (c) and social role performance. Researchers and practitioners score the OQ by totaling answers indicated on a 5-point Likert scale with scores ranging from 0-180. Higher scores indicate more distress, while lower scores indicate less distress. Research established cutoff scores for the total score at 63, symptom distress at 36, interpersonal relations at 15, and social role at 12. Research utilized the OQ in prior studies examining the effect of couples counseling on individual distress (e.g., Isakson et al., 2006). Isakson et al. administered the OQ 4 to couples and individuals who received counseling at a university-based counseling clinic. Participants completed the assessment upon initial intake and after treatment to measure change in individual distress. Isakson et al. utilized only total OQ scores to determine levels of distress. Additionally, research that examined distress among individuals in couple relationships utilized the OQ to compare partners' individual distress levels (e.g., Tambling & Johnson, 2008). Tambling and Johnson administered the OQ to 290 couples who received counseling at a university-based family counseling clinic. The study utilized mostly low- and moderate-income Caucasian participants. Researchers administered the assessment at the first appointment and repeatedly throughout treatment to measure change in individual distress. Although research utilized the OQ in previous studies examining individual distress among partners within a couple, a potential limitation exists with the scant published research that tested the OQ on ethnically diverse, economically challenged couples.

Despite the potential limitation, the OQ demonstrated sound psychometric properties. Lambert et al. (2004) reported alpha reliability coefficients of .93 and test-retest reliability of .84. Additionally, research identified concurrent validity with the Zung self-rating anxiety scale (.81) and the Social Adjustment Scale (.65; Lamber et al., 2004). After evaluating the convergent, divergent, and concurrent validity, Doerfler, Addis, and Moran (2002) identified the OQ-45.2 as a useful measure for tracking individual functioning throughout the course of treatment. Doerfler et al. correlated the OQ and subscales with the Behavior and Symptom Identification Scale (BASIS-32). They found highest correlations were between the OQ symptom distress subscale and BASIS total score (.67) and between the BASIS depression and anxiety subscale and the OQ total score (.66). Internal consistency could not be calculated for the current study because the Together Project's research protocol included the imputation of total scores and subscale scores only into SPSS.

Procedure

After we recruited couples to participate in the *OFA Together Project*, the research team called each member of the couple to schedule an initial intake appointment. During the initial appointment, we confirmed the eligibility criteria (e.g., married, biological or adoptive children under the age of 18, and low- to moderate-income), and couples completed the (a) informed consent; (b) intake information questionnaire; (c) OQ 45.2; (d) DAS; and (e) additional assessments not utilized in the current dissertation. We separated couples after completing the intake information questionnaire so they could complete the other assessments without the influence of their partner, we scheduled couples for the upcoming workshop after the

assessments we administered. We created workshop schedules prior to the couple agreeing to participate in the project. Therefore, we scheduled couples for their initial intake appointment only after we confirmed their availability. Additionally, we assessed couples' childcare needs and dietary restrictions. Couples participating in the *OFA Together Project* received childcare and meals during the workshops at no charge.

Participants engaged in the following workshop formats: (a) one night per week for three hours over the course of four weeks (12 hours); (b) two consecutive Saturdays for six hours each day (12 hours); (c) one Saturday for 9 total hours; and (d) a combination of Friday evening and the following Saturday (9 hours). Workshop schedule, format, and duration varied to accommodate scheduling challenges presented by couples. Couples selected upcoming workshops that fit best with their current schedule. Therefore, we did not utilize baseline assessment scores to determine workshop format for participating couples.

We invited *OFA Together Project* couples to participate in booster session workshops three-to-six months after completion of the PREP workshop. Booster workshops typically lasted one to two hours and incorporated topics that complimented the PREP curriculum. Participants completed follow-up assessments at the beginning of the booster workshop. Thus, we did not assess the content of the booster workshop and its influence on participants' relationships. Participants who declined to attend the booster workshop received follow-up assessment packets via mail. The packet contained the follow-up assessments, a letter outlining the instructions for completing the assessments, and a return envelope with pre-paid postage for easy return.

Statistical Package for the Social Sciences (SPSS) housed all the data for the *OFA Together Project*. Data entry and quality control protocol helped maintain the large data set. Prior to conducing analyses for the current study, data filtering procedures removed participants

who did not complete the relationship education workshops. Additionally, I removed variables from the large data set not being evaluated in the current study.

PREP

All couples participating in the *OFA Together Project*, and the current dissertation, received the PREP Version 7.0 curriculum. Although several different MRE curricula exist, research identified PREP as one of the most well-known and well-researched (e.g., Halford, Sanders, & Behrens, 2001; Jakubowski et al., 2004; Markman, Floyd, Stanely, & Storaasli, 1988; Markman, Renick, Floyd, Stanley, & Clements, 1993). Longitudinal studies indicated that pre-marital couples who participated in PREP had higher relationship satisfaction at 1 ½ and 3 year follow-up than control couples (Markman et al., 1988). Additionally, married couples who participated in a 5-session version of PREP displayed more positive communication skills and lower levels of marital violence than control couples at 5-year follow-up (Markman et al., 1993). Furthermore, research identified PREP as effective for couples deemed high-risk (Halford et al., 2001). Halford et al. incorporated a sample of 83 couples, split them into high and low-risk groups, and randomly assigned them to either a treatment group utilizing Self-PREP or a control group. The researchers deemed a couple high-risk if the woman reported her parents had divorced or if the man identified violence in his parents' relationship (Halford et al., 2001). Results at four-year follow-up indicated high-risk couples who participated in Self-PREP had higher relationship satisfaction than control couples. However, studies have only recently begun to examine the influence of PREP tools on low-income couples (e.g., Einhorn, 2010). Einhorn tested a newly revised version of PREP's Within Our Reach program, entitled FRAME, on

ethnically diverse, low-income couples and individuals. Men and women experienced improvements in relationship satisfaction, depression, and anxiety at post-assessment (Einhorn, 2010). However, both treatment and control group participants experienced gains in outcomes, and follow-up data was not collected because Einhorn conducted her research in support of a dissertation. Nonetheless, researchers will likely publish more data evaluating the effectiveness of PREP with low-income couples given the recent healthy marriage and responsible fatherhood funding.

Like many relationship education curricula, PREP was originally identified as a preventive measure designed to teach couples effective communication and conflict resolution skills. As such, PREP incorporates the use of structured tools to help couples practice effective speaking and listening skills. For example, the Speaker-Listener technique serves as one of PREP's hallmark communication tools and provides couples a step-by-step process for practicing effective speaking and active listening skills (Stanley, 1997). The following four principles to couple relationships drive PREP's approach: …"(a) be safe at home; (b) open the doors to intimacy; (c) do your part and be responsible; and (d) nurture security in your future together" (Markman, Stanley, & Blumberg, 2001, p. 27). As such, PREP aims to help couples reduce relationship risk factors and increase relationship protective factors through facilitating an emotional connection, and increasing couple commitment (Stanley, Markman, Jenkins, & Blumberg, 2008). PREP tools, such as the speaker-listener technique, encompass the goal to provide couples with a safe way to talk about tough issues (Markman, Stanley, Jenkins, Petrella, & Wadsworth, 2006).

Couples participating in PREP Version 7.0 partake in up to 14 lessons including the following topics: (a) introduction; (b) communication danger signs; (c) "honey, let's talk" – good

communication; (c) events, issues, and hidden issues; (d) fun and friendship; (e) you, me and us; (f) stress and relaxation; (g) problem solving; (h) forgiveness; (i) supporting each other; (j) the sensual/sexual relationship; (k) sharing hearts; (l) ground rules; and (m) commitment. The exact number of lessons and specific topics may vary depending upon the workshop format chosen by the PREP facilitators or program administrators implementing the MRE program. Participating couples in the *OFA Together Project* attended either 13 or 11 PREP sessions. Couples who selected the four-session weeknight version (12 hours; 12 lessons) received the following lesson topics: (a) introduction; (b) danger signs and time out; (c) events, issues, and hidden issues; (d) "honey, let's talk" – good communication; (e) being friends and having fun; (f) problem solving; (g) you, me, and us; (h) forgiveness; (i) sensuality/sexuality; (j) ground rules; (k) stress & relaxation; and (l) commitment. Couples who selected the one-day version, or the one-night/on-day version (both 9 hours; 11 lessons) received the same aforementioned topics as the four-session weeknight version, with the exception of *forgiveness* and *sensuality/sexuality*. See appendices for workshop content schedule.

Variables

The current dissertation evaluated the constructs of socioeconomic demographics (i.e., gender and income), relationship satisfaction, individual distress, and MRE dosage. In order to investigate this study's research questions, I analyzed the following independent and dependent variables.

Independent Variables

Independent variables are those that can be controlled or manipulated by the researcher (Howell, 2010). Although demographic variables cannot be controlled or manipulated, a researcher decides upon the participants who will be studied. Therefore, socioeconomic demographic factors are independent variables. The current study initially sought to examine the following socioeconomic demographic variables: (a) combined monthly income; (b) employment status; (c) ethnicity; and (d) years of education. I identified the socioeconomic demographic variables based upon previous research that linked these variables to relationship and individual distress (e.g., Adler-Baeder et al., 2010; Bulanda & Brown, 1990; Conger et al., 1990; Conger et al., 1992). However, due to low sampling for the necessitated analyses, I included only combined monthly income. I retained combined monthly income because income represents a concrete measure of socioeconomic status.

Additionally, MRE dosage served as an independent variable because dosage is controlled by the researcher. I measured MRE dosage by the number of lessons participants attended. Furthermore, preliminary analyses utilized workshop format as an independent variable. I categorized workshop format by one of the following formats selected by participants: (a) four-session weeknight format; (b) one-night/one-day workshop format; or (c) one-day workshop. I identified MRE dosage and workshop format as independent variables because MRE best-practice publications suggest tailoring dosage and format to the specific population being targeted (e.g., Hawkins et al., 2004; Halford, 2004). Additionally, early meta-analyses indicated slight differences in the overall effect of MRE based upon dosage received (Hawkins & Fackrell, 2010).

Dependent Variables

Dependent variables are typically the outcomes of a study, such as the scores being tested for change (Howell, 2010). Therefore, the constructs comprising the current study's dependent variables include relationship satisfaction and individual distress. I utilized the DAS total score to measure relationship satisfaction. Research identified the DAS as a widely used self-report measure for couples' relationship satisfaction, or relationship distress (Christensen et al., 2005). As such, studies targeting low-income couples and examining outcomes for MRE utilized the DAS to measure relationship gains (e.g., Adler-Baeder et al., 2010; Einhorn, 2010).

The OQ 45.2 total score served to measure the construct of individual distress. Previous studies examining the effect of couples counseling on individual distress incorporated the OQ (e.g., Isakson et al., 2006). However, scarce MRE publications exist examining individual distress, resulting in little MRE research that incorporated the OQ.

Data Analyses

SPSS served as the software utilized for the current dissertation's statistical procedures. I conducted preliminary analyses, or data screening, prior to running any of the study's statistical analyses (Tabachnik & Fidell, 2007). As such, I identified univariate and multivariate outliers, along with missing data, and tested for assumptions associated with statistical procedures, such as normality, collinearity and multi-collinearity. Two statistical data analyses comprised the evaluation method for the aforementioned research questions postulated. First, I utilized a repeated-measures, split-plot, multivariate analysis of variance (MANOVA) to examine relationship satisfaction and individual distress changes that occurred from pre-assessment to

post and follow-up assessment. I evaluated research question one's null hypotheses utilizing a repeated-measures, split-plot, MANOVA. The null hypotheses included examining (a) the differences between changes in relationship satisfaction, individual distress, and between gender for those who completed the pre- and post-assessments; (b) differences in relationship satisfaction changes, individual distress changes, and between gender for those who completed the pre- and follow-up assessments; and (c) differences in relationship satisfaction changes, individual distress changes, and between gender for those who completed the pre-, post-, and follow-up assessments. I considered one additional assumption for the repeated-measures analyses: homogeneity of inter-correlations (Pallant, 2007). Furthermore, inclusion of couples' data required the data set be split prior to analysis. As such, I split the SPSS data-set side-by-side with all variables pertaining to men on one side and all variables pertaining to women on the other side. Splitting the data allowed participants' scores to be analyzed utilizing gender as a between-subjects factor. Additionally, running the analysis in this manner accounted for the interdependence between husbands and wives' scores.

I used a hierarchical multiple regression to evaluate the second research question and associated null hypotheses. Therefore, hierarchical multiple regression examined: (a) combined monthly income and dosage as predictors of relationship satisfaction change for men at post-assessment, while controlling for wives' relationship satisfactions scores; (b) combined monthly income and dosage as predictors of relationship satisfaction change for women at post-assessment, while controlling for husbands' relationship satisfactions scores; (c) combined monthly income and dosage as predictors of relationship satisfaction change for men at three-to-six month follow-up, while controlling for wives' relationship satisfactions scores; (d) combined monthly income and dosage as predictors of relationship satisfaction change for women at three-

to-six month follow-up, while controlling for husbands' relationship satisfactions scores; (e) combined monthly income and dosage as predictors of individual distress change for men at post-assessment, while controlling for wives' individual distress scores; (f) combined monthly income and dosage as predictors of individual distress change for men at three-to-six month follow-up, while controlling for wives' individual distress scores; and (g) combined monthly income and dosage as predictors of individual distress change for women at three-to-six month follow-up, while controlling for husbands' individual distress scores. In addition to the abovementioned data screening procedures, I conducted checks for homoscedasticity and independence of residuals prior to running the regression analyses (Pallant, 2007; Tabachnik & Fidell, 2007).

Summary

The current dissertation purports (a) evaluate changes in relationship satisfaction and individual distress after participating in MRE; (b) examine the relationship between participants' combined monthly income, MRE dosage (i.e., number of lessons attended), and changes in relationship satisfaction and individual distress; and (c) utilize assessment scores to determine programmatic practices, such as the duration of MRE workshops. Therefore, the study's overall goal included identifying evidenced-based MRE practices based upon initial assessments.

The *OFA Together Project* provided low-income married couples with children the opportunity to participate in either 12 or 9 hours of PREP Version 7.0. One-hundred eighty-two couples participated in the *OFA Together Project.* We administered assessments at intake prior to beginning the workshop, at post-assessment, and again three-to-six months later. Couples selected the workshop format (i.e., four-session weeknight, one-day, or one-night/one-day) that

worked best for their current schedule. For this study, I used hierarchical multiple regression and mixed-between subjects (split-plot) repeated-measure MANOVA with 220 married individuals to examine the relationships among socioeconomic demographics, marital and individual distress, and outcomes at post- and follow-up assessment. The independent variables included demographic factors such as combined monthly income and workshop dosage. Relationship satisfaction, as measured by DAS total scores, and individual distress, as measured by the OQ 45.2 total scores, served as the dependent variables for the current study. Evaluation of dependent variables occurred at post- and follow-up assessment.

CHAPTER IV: RESULTS

Introduction

Relationship education improves communication skills and overall relationship satisfaction for middle- and upper-income couples (e.g., Blanchard et al., 2009). Preliminary studies indicated similar results for economically disadvantaged couples (Hawkins & Fackrell, 2010). However, economically challenged couples attend relationship education programs with more stressors than middle-income couples, leading to lower relationship satisfaction and more individual psychological distress (Adler-Baeder et al., 20010, Dakin & Wampler, 2008). However, published studies examining the influence of MRE on individual distress are scant. Thus, this study incorporated individual distress as a construct and measured changes that occurred immediately after relationship education, and three-to-six months later.

The current study evolved from previous research identifying recruitment and retention challenges of economically disadvantaged couples for relationship interventions. Additionally, the study's motivation stemmed from my recruitment and retention experiences of low-income couples as a research team member for a grant-funded relationship education program, *The OFA Together Project*. Less than 25% of couples recruited attended the intervention. Furthermore, couples who attended often experienced consistent participation challenges, such as work schedules changes and unreliable transportation.

The current study examined relationship satisfaction and individual distress changes that occurred immediately following relationship education and three-to-six months later. Furthermore, I compared relationship and individual distress changes by demographics, such as gender and income, and treatment dosage. The study aimed to use baseline assessment scores as

a determination of treatment duration and workshop format. Therefore, I examined the relationships among assessment scores, treatment dosage, and income level.

Preliminary Analysis

I conducted preliminary analyses to test for assumptions, outliers, and missing data. All assumptions were met for the two types of analyses used in this study: repeated measures, split-plot, MANOVA and hierarchical multiple regression. Examination of univariate and multivariate outliers is discussed prior to each analysis. Missing data existed for participants who completed assessments. See table two for missing data by assessment and time of assessment administration.

Table 2: Missing Data by Assessment and Time of Administration

	DAS			**OQ 45.2**		
	Complete	*Missing*	*Tot*	*Complete*	*Missing*	*Tot*
Pre-Assessment	258	6	264	260	4	264
Post-Assessment	108	3	111	104	6	110
Follow-up	128	4	131	127	6	133

Initial examination of the missing data revealed several participants who did not complete all assessment items. Total assessment scores could not be calculated when missing items occurred. Additionally, significant attrition ensued from pre-assessment to post- and follow-up assessment. Determining if missing data was random, or if differences existed among

participants who completed all questions compared to those who skipped items, warranted conducting four t-tests. The first t-test examined pre-test individual distress differences using the OQ 45.2 total score between those who had missing data at post-assessment (n = 6) and those who did not (n = 104). No significant individual distress score differences existed between those who had missing data (M = 44.83, SD = 20.09) and those who did not (M = 51.74, SD = 20.78), t (108) = .93, p = .439 (two-tailed). The second t-test examined pre-test individual distress score differences using the OQ 45.2 total score between those who had missing data at follow-up assessment (n = 6) and those who did not (n = 127). No significant individual distress score differences existed between those who had missing data (M = 45.33, SD = 24.03) and those who did not (M = 47.24, SD = 20.59), t (131) = .22, p = .826 (two-tailed). Thus, missing individual distress scores at post- and three-to-six month follow-up appear random.

The next two t-tests examined missing DAS data. The first t-test examined pre-assessment relationship satisfaction score differences between those who had missing data at post-assessment (n = 3) and those who did not (n =108). Results indicated no significant pre-assessment relationship distress differences using the DAS total scores between those who had missing data (M = 102.67; SD = 14.15) and those who did not (M = 99.36, SD = 21.94), t (109) = -.25, p = .796 (two-tailed). The second t-test examined pre-assessment relationship satisfaction differences between those who had missing data at follow-up (n = 4) and those who did not (n = 128). No significant differences existed between those who had missing data (M = 106.25, SD = 15.17) and those who did not (M = 103.48, SD = 19.46), t (130) = -.23, p = .779 (two-tailed). Thus, missing relationship satisfaction scores at pre- and three-to-six month follow-up appear missing at random.

Finally, I conducted a MANCOVA for participants who completed the treatment. Couples participated in one of three workshop options: (a) four weeknights; (b) two consecutive Saturdays; or (c) one weekend. Post-assessment administration was not necessary for couples who participated in the 'one weekend' workshop format because not enough time elapsed to assess for change. Furthermore, all couples who completed the post-assessments did not complete the follow-up assessments. Additionally, some couples who completed treatment did not complete the post or the follow-up assessments. This occurred when a participant was absent for the last class or left the workshop prior to the post-assessment being administered. Consequently, participants completed treatment (75% of the curriculum), but we could not assess change over time. Therefore, assessment completion occurred at one of the following time points: (a) pre and post; (b) pre and follow-up; (c) pre, post, and follow-up; or (d) pre-assessments only. I conducted the MANCOVA to determine what differences existed between pre-assessment relationship satisfaction and individual distress scores in the four groups of assessment completion (i.e., pre/post; pre/follow-up; pre/post/follow-up; pre only). The results of the preliminary MANCOVA helped determine the necessity of conducting separate repeated measures analyses by assessment completion group (i.e., pre/post; pre/follow-up; pre/post/follow-up; pre only), or if one analysis could be conducted. If results indicated no significant differences between participants in assessment group, then one analysis would suffice. Two dependent variables encompassed the analysis: relationship satisfaction total scores (DAS) and individual distress total scores (OQ 45.2). The assessment group, or time of assessment administration, comprised the independent variable.

I intended to control for participants' age, years of education, and monthly combined income because previous research identified links between these factors, relationship

satisfaction, and individual distress (e.g., Adler-Baeder et al., 2010; Dakin & Wampler, 2008; White & Keith, 1990). However, a Pearson correlation revealed no relationships between the intended covariates and DAS and OQ 45.2 total scores. Yet, a relationship existed between husbands and wives' pre-assessment relationship satisfaction and individual distress scores. Therefore, I controlled for pre-assessment scores by gender and conducted two separate MANCOVAs, one for husbands and one for wives. See table three for Pearson correlations of husbands and wives' pre-assessment scores.

Table 3: Pearson Correlation for Pre-Assessment Scores of Treatment Completers

	Wife *(N)*	
Husband *(N)*	DAS(110)	OQ 45.2(110)
DAS (110)	.541**	-.422**
OQ 45.2 (110)	-.347**	.233*

Note: ** indicates significance at alpha .01 and * indicates significance at alpha .05

The first MANCOVA tested for differences in husbands' pre-assessment relationship satisfaction and individual distress scores while controlling for wives' pre-assessment relationship satisfaction and individual distress scores. Levene's test indicated no violation for the assumption of homogeneity existed. MANCOVA results indicated no significant differences existed between assessment groups, Wilks' Lambda = .958; F (6, 202) = .727, p = .632, partial eta squared = .021, observed power = .283. Husbands' pre-assessment relationship satisfaction and individual distress did not differ significantly by assessment group. See table four for means and standard deviations.

Table 4: Descriptive Statistics

	Husbands		Wives	
	DAS	*OQ 45.2*	*DAS*	*OQ 45.2*
Pre- Only				
N	36	36	37	37
M	96.89	51.83	97.95	55.92
SD	20.92	20.81	22.33	19.22
Pre/Post				
N	12	12	11	11
M	95.58	56	79.64	55.45
SD	16.65	24.09	25.31	12.55
Pre/FU				
N	18	18	25	25
M	99.61	46.94	102.68	47.76
SD	18.57	20	15.01	22.13
Pre/Post/FU				
N	42	42	35	35
M	106.33	44.50	102.68	50.14
SD	20.71	19.74	18.77	23.73

The second MANCOVA tested for differences in wives' pre-assessment relationship satisfaction and individual distress scores while controlling for husbands' pre-assessment

relationship satisfaction and individual distress scores. Levene's test of equal variances revealed a violation of the assumption of equal variances for wives' pre-assessment relationship satisfaction scores, F (3, 104) = 6.838, $p < .001$. Therefore, I utilized Piallai's Trace instead of Wilks' Lambda because it is more robust and accounts for violations of equal variances (Pallant, 2007). Additionally, I adjusted alpha levels to .025 to account for the violation of equal variances (Tabachnick & Fidell, 2007). There was a statistically significant difference between assessment groups, Pillais Trace = .123; F (6, 204) = 2.219, p = .043, partial eta squared = .061, observed power = .774. When the results for the dependent variables were considered separately, the only difference to reach statistical significance, using an adjusted alpha level of .025, was pre-assessment relationship satisfaction scores, F (3, 102) = 3.898, p = .011, partial eta squared = .103, observed power = .814. Wives who completed the pre/post DAS (M = 79.64, SD = 25.311) differed significantly in pre-assessment relationship satisfaction from those who completed the pre/follow-up (M =102.68, SD = 15.01), pre/post/follow-up (M = 102.40; SD = 18.77); and pre-assessment only (M = 97.95; SD = 22.33). No other group differences were significant. Additionally, no differences existed between groups and wives' pre-assessment individual distress scores.

The preliminary t-test analyses indicated no differences existed in pre-assessment relationship satisfaction and individual distress scores between participants who had complete data at post and follow-up assessment and those who did not. Therefore, the data appeared missing at random and could be removed from the sample. I included participants who had complete data that resulted in total scores for the DAS and the OQ 45.2 in the analysis. Preliminary MANCOVA results indicated differences in pre-assessment relationship satisfaction between participants who completed the pre-, post-, and follow-up and those who completed the

pre/post, or pre/follow-up only. Therefore, separate analyses accounted for differences and ensured inclusion from all participants who completed assessments at various time points.

Results of Data Analysis

Research Question 1

The first research question asks: What differences exist in pre, post, and follow-up relationship satisfaction, as measured by the Dyadic Adjustment Scale total score (DAS; Spanier, 2001); individual distress, as measured by the Outcomes Questionnaire 45.2 total score, (OQ; Lambert et al., 2004); and between husbands and wives who participate in MRE?

No univariate or multivariate outliers existed with excessive influence on the scores. A matrix of scatterplots for pre- and post-assessment scores by gender did not reveal any evidence of non-linearity, satisfying the assumption of linearity. Relationship distress scores and individual distress scores are the primary dependent variables in each of the analyses. I conducted a test of correlations to evaluate the assumption of multicollinearity and singularity. Dependent variables were modestly correlated (between .39 and .76). Therefore, the data did not violate the assumptions of multicollinearity or singularity.

I conducted three separate repeated measures, split-plot, MANOVAs to answer research question one and associated hypotheses. Each assessment group necessitated a separate analysis because they comprised different participants. For example, those who participated in the weeknight or two-weekend workshops were administered the pre-, post-, and follow-up assessments (n = 28 men and n = 28 women). However, participants in the one-day weekend workshop format were administered the pre- and follow-up assessments only (n = 54 men and n

= 54 women). Additionally, assessment attrition resulted in some participants only completing the pre- and post-assessments (n = 38 men and n = 38 women).

Null Hypothesis 1A

The first null hypothesis postulates that no differences exist between husbands and wives and between pre-to-post change in relationship satisfaction and individual distress. Results indicated no interaction effect between scores (DAS and OQ) at pre/post and gender (male/female), Wilks' Lambda = .998, F (2, 36) = .038, p = .963, partial eta squared = .002, and observed power was .055. There was a statistically significant difference in test scores between pre- and post-test administration, Wilks' Lambda = .543, F (2, 36) = 15.156, p < .001, partial eta squared = .457, and observed power = .998. Both relationship satisfaction [F (1, 37) = 23.629, p < .001, partial eta squared = .390, observed power = .997] and individual distress [F (1, 37) = 24.372, p < .001, partial eta squared = .397, observed power = .998] scores improved significantly with no differences detected between men and women. Thirty-nine percent of the variance in pre-to-post relationship satisfaction and individual distress improvement can be attributed to the treatment, resulting in a high effect (Cohen, 1992). See table five for means and standard deviations. Thus, both men and women reported significant relationship satisfaction improvements and significant individual distress decreases immediately following the treatment. However, no significant differences existed between men and women.

Table 5: Descriptive Statistics for Pre/Post DAS and OQ Total Scores

	Pre		Post	
Husbands	*M (N)*	*SD*	*M (N)*	*SD*
DAS	101.58(38)	19.31	108.89(38)	16.89
OQ45.2	49.16(38)	22.23	41.82(38)	18.95
Wives				
DAS	96.45(38)	23.62	104.26(38)	25.52
OQ45.2	49.16(38)	20.48	41.97(38)	21.85

Null Hypothesis 1B

The second null hypothesis states no differences exist between husbands and wives and between pretest and three-to-six month follow-up relationship satisfaction and individual distress. Results indicated no interaction effect between changes in relationship distress and individual distress scores and gender, Wilks' Lambda = .976, F (2, 52) = .627, p = .538, partial eta squared = .024, observed power = .149. There was a statistically significant main effect for time of assessment administration from pre- to follow-up, Wilks' Lambda = .589; F (2, 52) = 18.107, $p < .001$; partial eta squared = .411; observed power = 1.000. Forty-one percent of the effect, which is considered a high effect (Cohen, 1992), found from pre-assessment to follow-up assessment can be attributed to the treatment. Relationship satisfaction increased significantly from pre-assessment to post-assessment, F (1, 53) = 20.642, $p < .001$; partial eta squared = .280; observed power = .994. Twenty-eight percent of the variance in relationship satisfaction from pre-assessment to follow-up assessment can be attributed to the treatment. Individual distress

decreased significantly from pre-assessment to post-assessment, F (1, 53) = 32.631, $p < .001$; partial eta squared = .381; observed power = 1.000. Thirty-eight percent of the variance in individual distress can be attributed to the treatment. Although no difference was found between men and women, results indicate the treatment significantly improved overall relationship satisfaction and individual distress for participants who completed treatment and who were administered the pre-assessment and three-to-six month follow-up assessments only. See table six for means and standard deviations.

Table 6: Descriptive Statistics for Pre/FU DAS and OQ Total Scores

	Pre		**FU**	
Husbands	*M (N)*	*SD*	*M (N)*	*SD*
DAS	104.28(54)	20.20	111.24(54)	18.15
OQ45.2	44.96(54)	19.57	38.26(54)	16.58
Wives				
DAS	102.65(54)	16.94	109.65(54)	17.58
OQ45.2	48.91(54)	23.71	39.20(54)	21.12

Null Hypothesis 1C

The third null hypothesis states no differences exist between husbands and wives and between pre, post, and three-to-six month follow-up in relationship satisfaction and individual distress. Results indicated no statistically significant interaction between changes in relationship satisfaction and individual distress scores and gender, Wilks' Lambda = .931; F (4, 324) = .442,

p = .777; partial eta squared = .069; observed power = .135. There was a statistically significant main effect for time of test administration, Wilks' Lambda = .564; F (4, 24) = 4.629, p < .01, partial eta squared = .436, observed power = .896. Over 43% of the variance in change over time can be attributed to the treatment. Men and women did not have statistically significant differences in relationship satisfaction or individual distress scores over time. Relationship satisfaction increased significantly over time, F (2, 54) = 6.276, p < .01, partial eta squared = .189, observed power = .879. Eighteen percent of the change in relationship satisfaction over time can be attributed to the treatment. More specifically, relationship satisfaction increased significantly from pre-assessment to post- and follow-up assessment. However, the increases in relationship satisfaction for men and women were not statistically significant from post-assessment to follow-up assessment. Individual distress decreased significantly over time, F (2, 54) = 10.69, p < .001, partial eta squared = .283, observed power = .986. Over 28% of the variance in individual distress over time can be attributed to the treatment. Specifically, individual distress decreased significantly from pre-assessment to post- and follow-up assessment. However, individual distress did not decrease significantly from post-assessment to follow-up assessment. See table seven for means and standard deviations. Thus, relationship satisfaction increased and individual distress decreased for both men and women immediately following relationship education, and three-to-six months later. However, men and women did not experience significant differences in their relationship and individual distress improvements. Additionally, gains appeared to stabilize because no differences existed between post-assessment and follow-up scores.

Table 7: Descriptive Statistics for Pre/Post/FU DAS and OQ Total Scores

	DAS		OQ 45.2	
Husbands	*M (N)*	*SD*	*M (N)*	*SD*
Pre	103.11(28)	21.19	46.50(28)	20.56
Post	109.75(28)	18.49	41(28)	18.47
FU	107.32(28)	20.57	41.25(28)	13.45
Wives				
Pre	103.32(28)	18.74	48.04(28)	22.33
Post	109.21(28)	19.97	41.32(28)	22.80
FU	108.50(28)	19.05	38.43(28)	20.92

Research Question 2

The second research question asks: Can MRE dosage, as measured by number of lessons attended, and combined monthly income predict relationship satisfaction improvement, as measured by the Dyadic Adjustment Scale total scores (DAS; Spanier, 2001), and individual distress decreases, as measured by the Outcomes Questionnaire 45.2 total scores, (OQ; Lambert et al., 2004) for married men and women with children who volunteer for MRE, immediately following treatment, and three-to-six months later?

I conducted hierarchical multiple regressions to answer research question two and the associated null hypotheses. I conducted preliminary analyses prior to conducting the regressions. A scatterplot of the residuals, as well as a box plot, revealed no univariate outliers with

standardized residuals more than 3.3. or less than -3.3. Inspection of Mahalanobois distances to check for multivariate outliers indicated no case had a Mahalanabois distance that exceeded the chi-square critical value of 13.82 associated with two independent variables. Thus, no multivariate outliers existed. Furthermore, Pallant (2007) suggests utilizing Collinearity diagnostics to test for the presence of multicollinearity. Collinearity diagnostics provide indicators of tolerance and variance inflation factors (VIF). Tolerance is an indicator of how much variance of the specified independent is not explained by the other independent variables in the model. General indications of multicollinearity are tolerance levels below .10. Collinearity diagnostics for the current analysis identified tolerance levels for each multiple regression greater than .10. VIF is the antithesis of tolerance and acceptable levels are below 10. The regressions conducted for the current analysis contained VIF levels less than 10. Therefore, sufficient evidence exists indicating no violations of multicollinearity (Palant, 2007).

I conducted the following regression analyses utilizing combined monthly income and treatment dosage (number of lessons attended) as predictors, or independent variables. Previous research indicated links between income and relationship satisfaction, as well as individual distress (Adler-Baeder et al., 20010, Dakin & Wampler, 2008). Furthermore, scholars recommended practitioners providing relationship education to low-income participants incorporate intentional practices regarding treatment dosage (Hawkins et al., 2004). However, empirical data identifying acceptable levels of relationship education dosage is limited. Finally, I utilized gender scores as a covariate to account for the influence husbands and wives had on their relationship satisfaction and individual distress scores. The analyses conducted with husbands' scores as the dependent variable contained wives' scores in the first block. Conversely, the analyses conducted with the wives' scores as the dependent variable contained husbands' scores

in the first block. Placing the opposing genders' scores in the first block had the effect of controlling for the influence of those variables (Pallant, 2007). Following are the null hypotheses and results for research question two.

Null Hypothesis 2A

The first null hypothesis postulates that MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for male MRE participants at post-assessment, while controlling for wives' relationship satisfaction scores.

I entered wives' relationship satisfaction scores at Step one, explaining over 29% of the variance in husbands' relationship satisfaction scores from pre- to post-assessment. I entered combined monthly income and number of lessons attended at Step two, explaining 3% of the variance. The total variance explained in the model as a whole was 32%. The first covariate, wives' relationship satisfaction scores at post-assessment, explained most of the change in husbands' relationship satisfaction scores at post-assessment and was statistically significant, F (1, 41) = 17.014, $p < .001$. Combined monthly income and number of lessons learned were not significant contributors of change in husband's relationship satisfaction from pre- to post-assessment, F (2, 39) = .954, p = .394.

Null Hypothesis 2B

The second null hypothesis states MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for female MRE participants at post-assessment, while controlling for husbands' relationship satisfaction scores.

I entered husbands' relationship satisfaction scores at Step one, accounting for over 29% of the variance in change for wives' relationship satisfaction from pre- to post-assessment. I entered combined monthly income and number of lessons attended at Step two, accounting for 4.9% of the variance in change. Combined, the variables accounted for over 34% of the variance in change. However, husbands' relationship satisfaction scores were the only significant predictor of change in wives' relationship satisfaction from pre- to post-assessment, F (1, 41) = 17.014; $p < .001$. Thus, combined monthly income and number of lessons attended cannot predict relationship satisfaction for wives from pre- to post-assessment, F (2, 39) = 1.462; p = .244. However, husbands' relationship satisfaction, or improvement in relationship satisfaction, is a significant predictor of wives' relationship satisfaction improvement. See table eight for Pearson correlations of husbands and wives' post-assessment relationship satisfaction scores and related predictors. Table nine indicates R squared change and beta values for predictor and control variables.

Table 8: Pearson Correlations for Post-Assessment Relationship Satisfaction

	Post DAS		Income		Dosage	
	H	W	H	W	H	W
Post DAS						
H	1	.54*	-.01	-.02	-.12	-.18
W		1	.12	.15	.02	.01
Income						
H			1	--	-.16	--
W				1	--	-.14

Note: * indicates significance at the .001 level

Table 9: Predicting Relationship Satisfaction Improvement (i.e., DAS Total Scores) at Post-Assessment

	Husband		Wife	
Predictor	ΔR^2	β	ΔR^2	β
Step 1				
Control Variables	.29*	.54	.29*	.54
Step 2				
Combined Monthly Income	.03	-.11	.04	.18
Dosage	.03	-.16	.04	.15

Note: * indicates significance at the .001 level

Null Hypothesis 2C

The third null hypothesis suggest MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for male MRE participants at 3-6 month follow-up assessment, while controlling for wives' relationship satisfaction scores.

I entered wives' follow-up relationship satisfaction scores at Step one, accounting for over 50% of the variance in husbands' relationship satisfaction from pre- to follow-up assessment. I entered combined monthly income and number of lessons attended at Step two, accounting for .2% of the variance in change. The total variance explained in the model as a whole was just over 50%. Wives' 3-6 month follow-up relationship satisfaction scores were the only significant predictor of change in husbands' 3-6 month follow-up relationship satisfaction scores, F (1, 56) = 57.332; $p < .001$. Combined monthly income and number of lessons attended does not predict change in relationship satisfaction scores for husbands three-to-six months following treatment, F (2, 54) = .129; $p = .879$.

Null Hypothesis 2D

The fourth null hypothesis states MRE dosage and combined monthly income do not predict relationship satisfaction (i.e., total DAS scores) for female MRE participants at 3-6 month follow-up assessment, while controlling for husbands' relationship satisfaction scores.

I entered husbands' three-to-six month follow-up relationship satisfaction scores at Step one, accounting for over 50% of the variance in change for wives' three-to-six month relationship satisfaction scores. I entered combined monthly income and number of lessons attended at Step two, accounting for .7% of the variance in change. The model as a whole accounted for 51% of the variance in change. Husbands' follow-up relationship satisfaction scores were the only predictor of change in wives' relationship satisfaction three-to-six months following treatment, F (1, 56) = 57.332; $p < .001$. Combined monthly income and number of lessons attended cannot predict relationship satisfaction for wives three-to-six months after treatment, F (2, 54) = .367; $p = .695$. See table 10 for Pearson correlations of husbands' and

wives' three-to-six month follow-up assessment relationship satisfaction scores and related predictors. Table 11 indicates R squared change and beta values for predictor and control variables.

Table 10: Pearson Correlations for Three-to-Six Month Follow-Up Relationship Satisfaction

	FU DAS		**Income**		**Dosage**	
	H	W	H	W	H	W
FU DAS						
H	1	.71*	.05	.04	-..09	-.16
W		1	.07	.10	.-.07	-.10
Income						
H			1	--	-.22	--
W				1	-.26	--

Note: * indicates significance at the .001 level

Table 11: Predicting Relationship Satisfaction Improvements (i.e., DAS Total Scores) at Follow-Up

	Husband		**Wife**	
Predictor	ΔR^2	β	ΔR^2	β
Step 1				
Control Variables	.50	.71	.50*	.71
Step 2				
Combined Monthly Income	.00	-.01	.00	.08
Dosage	.00	-.05	.00	.03

Note: * indicates significance at the .001 level

Null Hypothesis 2E

The fifth null hypothesis postulates MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for male MRE participants at post-assessment, while controlling for wives' individual distress scores.

I entered wives' post-assessment individual distress scores at Step one, accounting for .4% of the change in husbands' post-assessment individual distress scores. Wives' post-individual distress scores were not a significant predictor, F (1, 39) = .163; p = .689. I entered combined monthly income and number of lessons attended at Step two, accounting for 2.6% of the variance in change. Combined monthly income and number of lessons attended were not significant predictors, F (2, 37) = .499; p = .611. Combined, the predictors accounted for 3% of the variance in change. However, none of the independent variables are statistically significant predictors of change for husbands' individual distress scores immediately following treatment.

Null Hypothesis 2F

The sixth null hypothesis states MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for female MRE participants at post-assessment, while controlling for husbands' individual distress scores.

I entered husbands' post-assessment individual distress scores at Step one, accounting for .4% of the variance in change for wives' post-assessment individual distress scores. Husbands' post-assessment individual distress scores were too small to be considered significant predictors of change, F (1, 39) = .163; p = .689. I entered combined monthly income and number of lessons attended at Step two, accounting for 5.4% of the variance in change. Combined monthly income and number of lessons attended were not significant predictors, F (2, 37) = 1.068; p = .354. The model as a whole accounted for 5.9% of the variance in change. However, none of the

independent variables were statistically significant predictors of change in wives' post-assessment individual distress scores. See table 12 for Pearson correlations of husbands' and wives' post-assessment individual distress scores and related predictors. Table 13 indicates R squared change and beta values for predictor and control variables.

Table 12: Pearson Correlations for Post-Assessment Individual Distress

	Post OQ 45.2		**Income**		**Dosage**	
	H	W	H	W	H	W
Post OQ 45.2						
H	1	.06	-.15	.13	-.10	-.05
W		1	-.09	-.19	.16	.16
Income						
H			1	--	-.16	--
W				1	--	-.14

Table 13: Predicting Individual Distress Change (i.e., OQ Total Scores) at Post-Assessment

	Husband		**Wife**	
Predictor	ΔR^2	β	ΔR^2	β
Step 1	.01	-.06	.01	-.06
Control Variables				
Step 2				
Combined Monthly Income	.03	.13	.05	-.17
Dosage	.03	-.07	.05	.13

Null Hypothesis 2G

The seventh null hypothesis states MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for male MRE participants at 3-6 month follow-up assessment, while controlling for wives' individual distress scores.

I entered wives' three-to-six month follow-up individual distress scores at Step one, accounting for .5% of the variance in change from pre- to follow-up for husbands' individual distress. Wives' follow-up individual distress scores were not a significant predictor of husbands' scores at follow-up, F (1, 56) = .295; p =.589. I entered combined monthly income and number of lessons attended in Step two, and accounted for 6.8% of the variance. However, combined monthly income and number of lessons attended were not significant predictors of change, F (2, 54) = 1.990; p = .147. The model as a whole accounted for 7.4% of the variance in change. However, none of the independent variables significantly predicted change in husbands' individual distress scores from pre- to follow-up assessment.

Null Hypothesis 2H

The eighth null hypothesis suggests MRE dosage and combined monthly income do not predict individual distress (i.e., total OQ 45.2 scores) for female MRE participants at 3-6 month follow-up assessment, while controlling for husbands' individual distress scores.

I entered Husbands' three-to-six month follow-up individual distress scores into Step one, and accounted for .5% of the variance in change in wives' three-to-six month follow-up individual distress scores. Husbands' follow-up individual distress scores did not significantly predict change in wives' individual distress scores, F (1, 56) = .295; p = .589. I entered combined monthly income and number of lessons attended in Step two, and accounted for .7% of

the variance in change. Combined monthly income and number of lessons attended did not statistically predict change in wives' follow-up individual distress scores, F (2, 54) = .185; p = .831. Although the combined model accounted for 1.2% of the variance in change, none of the independent variables were statistically significant predictors of change. See table 13 for Pearson correlations of husbands' and wives' three-to-six month follow-up individual distress scores and related predictors. Table 14 indicates R squared change and beta values for predictor and control variables.

Table 14: Pearson Correlations for Three-to-Six Month Follow-Up Individual Distress

	FU OQ 45.2		**Income**		**Dosage**	
	H	W	H	W	H	W
FU OQ 45.2						
H	1	.07	.03	.06	.24	.25
W		1	-.06	-.07	.03	.03
Income						
H			1	--	-.22	--
W				1	--	-.26

Table 15: Predicting Individual Distress Change (i.e., OQ Total Scores) at Three-to-Six Month Follow-Up

	Husband		Wife	
Predictor	ΔR^2	β	ΔR^2	β
Step 1				
Control Variables	.01	.07	.01	.07
Step 2				
Combined Monthly Income	.07	.09	.01	-.08
Dosage	.07	.27	.01	-.00

Summary

This study examined what change occurred in relationship satisfaction and individual distress for low-income married couples with children who participated in marriage and relationship education. Furthermore, the current study purported to determine what effect income, gender, dosage, and baseline scores had on change over time. The overall study goal was to identify factors at pre-assessment that could be utilized to help clinicians and researchers make intentional treatment planning decisions.

The analyses found that participants who completed at least 75% of the curriculum experienced statistically significant relationship satisfaction increases, as well as statistically significant individual distress decreases. The significant improvements continued three-to-six months following the intervention. However, improvements did not differ significantly from post-assessment to follow-up assessment. Moreover, no differences existed between men and women.

Results of the hierarchical multiple regression analyses indicated MRE dosage (number of lessons attended) and combined household monthly income were not predictors of change in relationship satisfaction or individual distress. Husbands' and wives' relationship satisfaction scores accounted for the most variance in change. Therefore, husbands' relationship satisfaction influenced wives' relationship satisfaction and vice versa. However, husbands' and wives' scores did not influence each others' change in individual distress.

CHAPTER V: DISCUSSION

The current study examined the relationship among participant socioeconomic demographic factors, changes in individual distress, changes in relationship satisfaction, and outcomes for low-income married couples with children who completed relationship education. Two-hundred twenty participants (110 couples) completed the PREP 7.0 relationship education intervention, and had complete assessment data at initial intake, post-intervention, and three-to-six months follow-up. Assessing participants' individual distress and relationship satisfaction occurred upon initial intake, immediately after intervention completion, and again three-to-six months later. The study aimed to (a) evaluate changes in relationship satisfaction and individual distress after participating in MRE; (b) examine the relationship between participants' combined monthly income, MRE dosage (i.e., number of lessons attended), and changes in relationship satisfaction and individual distress; and (c) utilize assessment scores to determine programmatic practices, such as the duration of MRE workshops. Study benefits include practical implications such as understanding if participants' income status upon initial intake is related to overall outcomes. Additionally, although differences in participant outcomes by workshop format (i.e., weeknight vs. weekend) were not directly examined, study results contribute to format implications. The aforementioned study goals resulted in the current study postulating two research questions. The first research question examined changes in relationship satisfaction and individual distress at post-assessment and three-to-six month follow-up for participants who completed relationship education. The second research question examined the relationship between participants' combined monthly income, MRE dosage, and changes in relationship satisfaction and individual distress at post-assessment and three-to-six month follow-up.

Following is a brief overview of the study results followed by a discussion of results organized by constructs examined within the current study.

Relationship Education Outcomes

The first research question was: What differences exist in pre, post, and follow-up relationship satisfaction, as measured by the Dyadic Adjustment Scale total score (DAS; Spanier, 2001); individual distress, as measured by the Outcomes Questionnaire 45.2 total score, (OQ; Lambert et al., 2004); and between husbands and wives who participate in MRE? Three null hypotheses accompanied research question one. Each null hypothesis included relationship satisfaction and individual distress total scores as the dependent variable. However, the period of assessment (i.e., pre, post, and follow-up assessment) distinguished the three hypotheses. A repeated-measures MANOVA was conducted to examine outcomes between men and women who completed the pre/post, pre/follow-up, and pre/post/follow-up assessments. Conducting three separate analyses allowed for inclusion of all participants who completed the intervention.

The first null hypothesis associated with research question one examined differences in outcomes between men and women from pre-assessment to post-assessment. Participants included in this analysis completed the four-week, four-hour weeknight intervention, or the two-week, six-hour Saturday intervention. Post-assessment administration occurred immediately following the final workshop lesson. Additionally, participant invitations to complete the follow-up assessments occurred three-to-six months later. However, the participants in this group did not complete the follow-up assessment.

The second group of treatment completers also participated in the four-week, four-hour weeknight intervention, or the two-week, six-hour Saturday intervention. However, many

returned to complete the three-to-six month follow-up survey. Therefore, the second null hypothesis for research question one analyzed change from pre-, post- and three-to-six month follow-up assessment.

The third null hypothesis included participants who completed the one-day workshop format. These participants received pre-assessments and three-to-six month follow-up assessments. Post-assessment administration did not occur immediately following completion of the one-day workshop because not enough time existed between pre- and post-assessment to evaluate for change.

Results of research question one indicated statistically significant differences in relationship satisfaction and individual distress for participants who completed the pre/post, pre/follow-up, and pre/post/follow-up. Thus, significant improvements existed in relationship satisfaction and individual distress for each of the null hypotheses analyzed. These differences included higher levels of self-reported relationship satisfaction and lower levels of individual distress immediately following relationship education workshops and three-to-six months later. However, no individual distress or relationship satisfaction differences existed between men and women for any of the null hypotheses. Furthermore, participants who completed the pre/post/follow-up assessments experienced significant differences in scores between the pre- and post-assessments, and pre and follow-up assessments. No significant changes occurred from post to three-to-six month follow-up assessment. Thus, changes in relationship satisfaction and individual distress stabilized at follow-up assessment.

Moreover, the three workshop formats utilized resulted in positive changes for participants who completed the program. Participants in each of the three analyses conducted indicated significant relationship satisfaction gains and significant individual distress decreases.

Next, the current study sought to understand if the number of MRE lessons attended or participants' income could predict participant outcomes.

Income and Dosages as Predictors of Change

The second research question asked: Can MRE dosage (number of lessons attended) and combined monthly income predict relationship satisfaction (total DAS scores; Spanier, 2001) and individual distress (total Outcome Questionnaire 45.2 scores; Lamber et al., 2004) for married men and women with children who volunteer for MRE immediately following treatment and three-to-six months later? Eight null hypotheses accompanied research question two. The first two null hypotheses included husbands' relationship satisfaction total scores (one at post-assessment and the second at follow-up assessment) as the dependent variable with dosage and income as predictors, while controlling for wives' relationship satisfaction total scores. The next two null hypotheses contained wives' relationship satisfaction total scores as the dependent variable with dosage and income as predictors, while controlling for husbands' relationship satisfaction total scores. I utilized the same format for the remaining four null hypotheses that included individual distress scores as the dependent variable.

Results for all analyses indicated that income and dosage were not predictors of relationship satisfaction or individual distress for either men or women at any time point (i.e., post-assessment and three-to-six month follow-up assessment). However, partner scores represented the biggest predictor of change in relationship satisfaction scores at post and three-to-six month follow-up assessment. This finding is consistent with Adler-Baeder et al.'s (2010) study that concluded the biggest predictor of change in MRE was partners attending workshops together. Conversely, this was not the case for individual distress scores. Partner scores were not

significant predictors of changes in individual distress scores at any point in assessment administration (i.e., post-assessment and three-to-six month follow-up). Nevertheless, Pearson correlations indicated significant negative relationships between pre-assessment individual distress scores and relationship satisfaction scores. Thus, as individual distress increased, relationship satisfaction scores decreased. This finding is consistent with previous research identifying the links between relationship quality and individual distress (e.g., Beach & Cassidy, 1991; Choi & Marks, 2008; Whisman & Bruce 1999).

Relationship Satisfaction

Previous research linked economic disadvantage with poor relationship quality (Adler-Baeder et al., 2010; Conger et al., 1992; Dakin & Wampler, 2008). The primary mechanism used to measure economic disadvantage is total household income. However, scholars identified other factors, such as years of education, current employment, and income perceptions as inherent characteristics of economic disadvantage. Karney, Story, and Bradbury (2005) termed the stressors associated with the aforementioned characteristics as contextual stressors. Contextual stressors limited access to relationship resources for economically disadvantaged couples. Moreover, many couples perceived their financial status as a barrier to maintaining long-lasting relationships (Charles, Orthner, Jones, & Mancini, 2006; Gibson-Davis, Edin, & McLanahan, 2005). The resulting effect is that fewer low-income couples marry (NCFMR, 2008) or maintain long-lasting relationships, which eventually contributes to poor outcomes for children (Amato, 2000; Moore et al., 2011). Therefore, developing intentional strategies to support and improve relationship quality for economically disadvantaged couples is important.

The current study found low-income participants' relationship satisfaction improved immediately after attending a short, or moderate, length relationship education intervention. Furthermore, improvements were maintained three-to-six months following completion of the intervention. These findings are consistent with previous research that linked relationship satisfaction to improvements in communication skills (Blanchard et al., 2009). However, previous research utilized largely middle-income samples and did not include follow-up data. The current study's findings are also supported by a recent meta-analysis indicating relationship education improved relationship quality for low-income couples (Hawkins & Fackrell, 2010). Therefore, it was not surprising to find relationship improvements from the current study's intervention.

Finally, the current study's results indicated no relationship satisfaction differences existed between men and women. Previous research indicated significant differences between men and women with respect to coping with economic stressors. For example, men report lower relationship quality with high perceptions of monthly income, while women report lower relationship quality with high perceptions of family stress (Clark-Nicolas & Gray-Little, 1991). Therefore, stress spillover affects women's perception of relationship quality more so than men's (Neff & Karney, 2004). Men experiencing financial stressors lose the ability to use positive relationship skills towards spouses, contributing to wives' lowered relationship quality (Conger et al., 1990). Furthermore, I met with several couples who participated in the current project during their intake appointment. It was common to experience men as somewhat distant and women as more interested in participating. Thus, it was surprising to find no relationship satisfaction differences between men and women. Perhaps relationship quality improvements occur regardless of initial distress levels or attendance motivation. It is also important to note the

power and effect size for the interaction effect between gender and time was very low. Therefore, the non-significant finding could stem from low sample size (Balkin & Sheperis, 2011).

Individual Distress

The current study found participants who completed relationship education experienced statistically significant individual distress improvements. Improvements occurred at both post-assessment and three-to-six months after completing relationship education classes. Furthermore, no differences in distress improvements existed among the various assessment groups (e.g., pre/post; pre/follow-up/; and pre/post/follow-up).

Previous theory and research identified couples counseling as effective at improving relationship quality and reducing individual distress (Lundblad & Hansson, 2004; O'Leary & Beach, 1990). The marital discord model of depression (Beach & Cassidy, 1991) provides guidelines for couples counselors when one member of the couple exhibits symptoms of depression. Research identified the model as an effective intervention, but sampling included homogeneous, middle-income groups. The current study is one of the first to examine the influence of relationship education on individual distress levels for low-to-moderate income couples. Economically distressed couples may be more prone to decreased levels of individual distress due to contextual stressors associated with low-income status. Additionally, contextual stressors limit access to resources for low-income couples (Karney & Bradbury, 2005). Relationship education is more accessible than traditional couples counseling and should be considered an effective treatment modality for couples experiencing relationship and financial stressors.

The current study found no differences in individual distress gains between men and women. The lack of significant findings was surprising given that prior research identified differences in individual distress outcomes between men and women who participated in couples counseling (Isakson et al., 2006). However, there are a few factors that may have influenced the current study's findings. The first factor includes a small sample that contributed to low power and low effect size for the interaction effect of gender and time. Low power and low effect increase the likelihood of making a Type II error, or finding non-significant results when significance exists (Balkin & Sheperis, 2011).

Secondly, the mean OQ total score for men and women at pre-assessment was 46.50 and 48.04 respectively. The clinical cut-off for the OQ total score is 63 and above. Therefore, men and women who completed treatment did not display clinical levels of individual distress prior to participating. Examination of subscale scores may yield clinical distress in one of the three subscale areas (social role, interpersonal relationships, and symptom distress). However, small sample size and low power prevented subscale examination. Men and women experienced significant individual distress improvements despite non-clinical baseline total scores. Hence, clinical levels of individual distress are not necessary for participants to experience benefits from relationship education workshops. Furthermore, individual distress benefits can be achieved through shorter, one-day workshops.

The second research question postulated examined predictors of individual distress at post-assessment and three-to-six month follow-up. Results indicated that no individual distress predictors existed, including partners' individual distress scores. Unlike relationship distress, partners' individual distress scores minimally, and non-significantly, contributed to distress decreases.

Socioeconomic Demographics

One of the theories supporting the current study's rationale was the family process model, developed by Conger and colleagues (1999). The family process model identified economic stressors, specifically economic pressure, as a catalyst for reduced relationship quality. The model asserts that poor relationship quality led to increased individual distress and reduced parenting quality. However, the model was developed from a sample of rural, Caucasian participants. The current study was not a test of the model, and results indicated no relationship between income and outcomes. Contrary to the homogenous sample in Conger and colleagues' study (1999), the current study's sample comprised more than 60% ethnic minorities. Nevertheless, relationship education was effective for the participants experiencing economic distress and should therefore be considered an efficacious method of helping couples maintain healthy relationships despite the presence of economic stressors.

I originally intended to examine relationships between participant demographic factors and both relationship satisfaction and individual distress scores. However, results of the Pearson correlation indicated no relationship between the variables. This was surprising given the extent of previous research linking participant demographics to relationship quality and individual distress (Adler-Baeder et al., 2010; Conger et al., 1992; Charles, Orthner, Jones, & Mancini, 2006; Dakin & Wampler, 2008). However, previous researchers identified correlations between demographics and initial distress scores. The current study examined relationships between demographics and both relationship and individual distress scores at post and three-to-six month follow-up. Therefore, the current study's participants may have links between demographics and their initial scores that are no longer present after receiving the intervention.

Furthermore, limitations existed to examining differences among participant demographics due a small sample. Power became a concern, and adding more demographic variables would have reduced the power of the repeated measure, split-plot, MANOVA more than it already was. Therefore, I excluded demographic variables from the first research question. Sampling is discussed more thoroughly in the limitations section.

Predictors of Change

The current study sought to examine relationship satisfaction changes and predictors of change for participants. The study's goal included utilizing results to establish an empirically supported practice of assigning participants to workshop format, or duration, based upon relationship satisfaction, or individual distress scores. However, no relationship satisfaction differences existed between participants who completed four-week interventions and those who completed one-day interventions. Furthermore, combined household income did not predict relationship satisfaction outcomes. Previous research identified income as a predictor of baseline relationship satisfaction scores (Adler-Baeder et al., 2010; Dakin & Wampler, 2008). The current study purported to predict relationship satisfaction outcomes from combined monthly income as well as dosage. Therefore, no relationship education dosage or format recommendations can be postulated considering dosage and income could not predict outcomes. Nonetheless, practitioners providing relationship education should note that shorter one-day workshop formats are just as effective at improving relationship quality as longer formats. Shorter formats may result in less attrition after the start of the workshop than four-week formats and therefore could be preferred when providing services for low-income couples.

Summary

Government funded initiatives targeting economically disadvantaged couples have increased since 2002. Funding allocations aimed to provide couples with resources to sustain healthy relationships and, ultimately, to improve child outcomes. However, researchers and practitioners have struggled to identify efficacious recruitment and retention methods. The results of the current study, as well as others (e.g., Hawkins & Fackrell, 2010; Wood et al., 2011) suggest relationship education effectively improves relationship satisfaction and decreases individual distress for low-income couples who complete treatment. Addressing the contextual stressors associated with low-income status encompasses challenges associated with recruitment and retention.

Scholars have published strategies and guidelines pertaining to offering relationship education to economically disadvantaged participants (e.g., Adler-Baeder et al., 2004; Halford, 2004; Hawkins, 2004). Recommendations included utilizing empirically supported MRE curricula, tailoring marketing and recruitment strategies to the population served, and considering level of dosage and curriculum intensity. Halford and colleagues (2003) identified seven best practice MRE principles including: (a) assessing the risk profile of couples who attend; (b) encouraging high risk couples to attend; (c) assessing and educating about relationship aggression; (d) offering relationship education at change points; (e) promoting early presentation of relationship problems; (f) matching content with couples special needs; and (g) enhancing accessibility of evidence-based relationship education program. However, little empirical data exists to substantiate the best practice recommendation postulated, and many relationship education programs provide a one-size-fits-all approach to participants. Therefore,

the current study sought to utilize baseline scores and demographics to help establish empirical support for tailoring relationship education to participants.

Results did not support differences among participants who completed various workshop formats. Participants experienced benefits despite the time span required to attend workshops. Furthermore, participating couples did not self-select workshop format. The project initially began offering only the four-weeknight or two-Saturday formats. As attrition challenges became more prevalent, replacing the aforementioned formats with one-day workshops was warranted. Workshop attrition generated concerns regarding meeting funder-related benchmarks. These concerns necessitated additions to recruitment strategies, including passive strategies such as marketing tactics. Marketing tactics included newspaper and radio advertisements. Passive strategies resulted in a less targeted recruitment approach and more middle-income participants. As such, one-day workshop participants may not have experienced as much distress as the initial multi-workshop participants, resulting in initial distress scores below the clinical cutoff.

Government initiatives continue to fund relationship education programs aimed at serving economically disadvantaged participants. Researchers and practitioners' experiences are leading to more informed practice. However, successful program implementation includes effective engagement practices. Shorter programming, along with tailored support, such as booster sessions or family support staff, may increase participant engagement while still maximizing outcomes. The current study did not evaluate the influence of booster sessions on outcomes, and assessment collection took place prior to booster participation. However, booster presentations can be an effective method of connecting participants to community resources.

Furthermore, childcare and food appeared vital to participant engagement. Low-income couples often do not have the support network of friends and family to provide childcare. They

also do not have the funds to support paying for childcare. Therefore, establishing the means for childcare can be a determining factor when participants are considering workshop attendance. Wood and colleagues (2011) discussed the dosage challenges BSF sites experienced and postulated that attrition ultimately influenced outcomes. Therefore, providing engagement support is pivotal to reducing attrition and maximizing programmatic gains.

Limitations of the Study

Limitations to internal and external validity existed within the current study. Internal validity is the extent to which any change occurred as a result of the intervention, as opposed to some other factor. External validity is the ability of the study's findings to be generalized to the overall population (Campbell & Stanley, 1963). Some limitations likely influenced both internal and external validity. Following are some of the current study's limitations.

The study's sample presented limitations to the first research question postulated and its associated null hypotheses. An *a priori* power analysis indicated a sample of over 1,000 participants would be needed to achieve a medium effect and power of .80. The current study's sample was 220 participants. Therefore, the interaction effect for each of research question one's null hypothesis resulted in low power and effect. Consequently, results indicating no differences between men and women are subject to Type II error. However, the small sample represents the inherent challenge to targeting low-income couples. Researchers and practitioners have struggled to identify efficacious engagement practices. Therefore, study attrition presents barriers to collecting follow-up data. The current study collected follow-up data for the analyses, something few other published studies included when incorporating samples of economically disadvantaged couples.

The small sample limited the ability to include more demographics as independent variables. Additionally, sample size prevented the inclusion of subscale scores. It is possible differences may have existed between men and women upon examination of specific aspects of relationship satisfaction and individual distress. Moreover, participants whose initial individual distress total scores were not above the clinical cutoff may have scored above clinical levels on the subscales. However, including additional variables would have created less power.

The larger *OFA Together Project* began as an experimental design, wait-list control study. However, the study's design changed after randomly assigning 113 couples (78 to treatment and 35 to control). The study team identified ethical concerns with continuing random assignment for couples experiencing high levels of relationship distress. The concerns led to all couples receiving program services. Therefore, I did not utilize control couples as a comparison group, resulting in limitations to external and internal validity. Yet, the population utilized resulted from community recruitment efforts. The population included a majority of Hispanic couples, followed by Caucasian and lastly Black couples. All participants identified as married with children, and most were within 200% of the federal poverty guidelines. The population was an accurate representation of the local community demographic and strengthens the study's generalizability to the local population. However, results included only participants who completed treatment. Forty-one percent of project participants did not complete at least 75% of the curriculum. The current study did not examine differences between those who completed treatment and those who did not. Understanding differences between treatment completers and non-completers may help identify more efficacious engagement strategies.

Programmatic changes created data analysis challenges. For example, the addition of a one-day workshop format occurred because of attrition concerns. Participants completing the

one-day workshop were not administered the post-assessment. Therefore, all study participants did not complete assessments at the same time points. Assessment administration differences yielded three different groups of participants and necessitated three separate analyses to examine outcome changes. Multiple analyses may have also reduced the study's overall power.

Finally, the current study did not examine the influence the workshop dynamics had on participants' reported changes. Such dynamics include trust and rapport established during the group, as well as facilitator qualities. Counseling research identified relationship quality between client and counselor as the biggest predictor of success in counseling (Nuttall, 2002). Therefore, it is not clear how much group and facilitator dynamics contributed to relationship satisfaction improvements and individual distress reductions. Furthermore, recruitment staff 'sold' the program to participants by suggesting it was an opportunity to spend quality time together. It may also be possible that spending time together affected outcomes as much as utilization of relationship education tools. More discussion on these points will follow in the recommendations for future research.

Implications for Practice

The current study's aim was to utilize relationship satisfaction scores, individual distress scores, and demographics to assist with treatment planning for relationship education participants. Results do not support such implications because income and dosage did not correlate to changes in relationship satisfaction or individual distress outcomes. However, the quality of participants' relationship improved and level of individual distressed decreased in all workshop formats provided. This finding is relevant to the low-income population because shorter workshops, such as one-day workshops, are more conducive to supporting target

populations prone to attrition (e.g., economically disadvantaged couples). Programs, or individual clinicians, seeking to conduct relationship education for low-income participants should consider shorter programs to maximize dosage received. These results are consistent with Hawkins et al.'s (2004) best-practice suggestion for grantees targeting economically disadvantaged couples suggesting low levels of MRE may be more effective at reaching audiences who would otherwise not attend a workshop. Shorter workshops help reduce attrition and appear effective for participants who complete the workshops.

Furthermore, resources are necessary to support the participation of low-income couples. Conducting shorter workshops could mean programs can allocate funding for more support services, such as case management or childcare, instead of conducting longer workshops. Young and Carlson (2011) noted the importance of providing resources to low-income participants. In addition, counselors providing traditional couples counseling should consider implementing similar strategies to help support access to counseling for low-income couples. Thus, reducing the service gap that exists for those seeking relationship interventions.

The current study's results suggest relationship education effectively improves relationship satisfaction and decreases individual distress. Counselors, and other mental health providers should consider relationship education groups as a treatment method for participants in a relationship exhibiting individual distress symptoms. Additionally, counselors should consider incorporating relationship education interventions into their counseling practice. Relationship education was initially intended for less distressed couples seeking to find proactive measures to support a healthy relationship. However, the continued emergence of relationship education as an effective intervention with low-income, more distressed couples, suggests its utility transcends traditional thinking. Therefore, couples counselors who encounter highly distressed couples

should consider either referring to a relationship education group or utilizing structured relationship education tools in their counseling. The structured nature of the tools and associated ground rules help couples maintain a focused discussion. Furthermore, couples can practice relationship education tools outside, and specifically in between, counseling sessions. Discussion can ensue regarding the couples' ability to incorporate structured tools into their daily lives. Counselors and relationship educators could utilize an experiential learning cycle to facilitate teaching relationship tools. Experiential learning cycles include discussing the theory supporting the tool, such as PREP's speaker-listener technique, teaching how to use the tool, and brainstorming methods of incorporating the tool into daily life.

Implications for Research

The current study represents one of the first to analyze follow-up data for low-income couples who participated in relationship education. Collecting follow-up data with economically disadvantaged participants presents challenges to researchers. The current study experienced challenges to follow-up data as well, which limited the follow-up time frame to three-to-six months. Results indicated sustained improvements in relationship satisfaction, as well as decreases in individual distress. However, researchers should continue to evaluate longitudinal MRE effects for participating couples. Incentivizing study participation could aid in the collection of longer-term follow-up data. The current study did not utilize incentives but instead designed follow-up data collection around booster workshops. Booster workshops provided couples another opportunity to learn about relationship topics not covered in the curriculum. Childcare and meals helped ease barriers to participation during booster sessions. Data was collected prior to the start of the booster. Had the current study incentivized participation, longer-

term follow-up may have been possible. In fact, study participants who do not experience financial stressors may perceive incentives as an added bonus. Conversely, incentivizing participation for low-income couples is not a bonus but rather a necessity to help participants overcome challenges to participation. For example, couples could use incentives to pay for gas needed to drive to the research center or site. Money or gift cards received could be utilized to buy groceries for the week or even diapers for babies. Therefore, with respect to low-income couples, researchers should understand that it may be more accurate to transition from the term *incentives* to the term *investments*. The term investments creates a perception shift for the research team because it reflects an investment in the time and expense that participation may yield to the participant. The perception shift represents a cultural understanding of the contextual stressors facing economically disadvantaged families. Moreover, investments typically help produce outcomes. The outcomes in this case include accurate data for researchers and efficacious services for participants.

Longitudinal data may also be aided by developing creative data collection strategies. For example, research teams may identify mutually beneficial locations to meet with participants and collect data. Identifying a mutually beneficial location could help reduce participant expense and anxiety associated with traveling to a research center or site. Additionally, collecting data electronically could mitigate travel challenges altogether. However, low-income participants may not always have access to computer technology. Assessments are not always available electronically either.

Research continues to identify relationship education as effective for middle-income and low-income couples. However, mediators of change have yet to be identified. For example, are there specific tools that are particularly useful in creating change? Recent research examined

couple characteristics of those who utilize relationship education tools (Veldorale-Brogan, Bradford, & Vail, 2010). Veldorale-Brogan et al. utilized the actor-partner interdependence model to examine virtuous characteristics within couples who attended MRE. Results indicated marital virtues (e.g., compassion and generosity) and communication mediated the relationship between individual well-being and relationship satisfaction. Therefore, the promotion of such virtues appears important to create relationship and individual change. However, their sample did not include low-income couples. Examining virtuous characteristics within low-income couples who attend relationship education would help determine if the same compassion and generosity are important as well.

Moreover, specific relationship education mediators of change have not been identified. For example, the study of which curriculum tools couples frequently use and why they use one tool more frequently than another may help researchers identify how particular tools create change within couple relationships. Furthermore, specific tools, such as PREP's speaker-listener technique, may be more useful for couples with higher levels of relationship distress than couples who are less distressed. Such information could be useful for couples counselors to consider when working with couples in more traditional counseling settings.

Methods of evaluating change resulting from MRE participation should also be considered. The vast majority of published relationship education research discusses change as measured by participant self-report. Sanderson et al. (2009) recommended utilizing multiple methods of evaluating change, such as a combination of self-report and researcher observation. Behavior coding could be an effective method of identifying virtuous behaviors, as well as relationship education tools couples find helpful versus tools they appear to struggle utilizing. In addition, examining physiological, or biosocial, change resulting from MRE will help

researchers further understand the effects of positive relationship functioning. Ditzen and colleagues (2011) examined salivary cortisol levels in couples attending relationship education. They found cortisol levels decreased after completing relationship education, indicating lower participant distress. However, their sample did not incorporate economically disadvantaged participants.

Additionally, the current study excluded the use of subscale scores and only utilized both relationship satisfaction and individual distress total scores. The instrument utilized to measure relationship satisfaction (DAS) includes four sub-scales and the instrument that measured individual distress (OQ 45.2) contains three sub-scale scores. Future research with larger samples should include subscale scores to narrow the constructs measured. This would result in a more in-depth understand of any relationships or differences between constructs.

The current study defined dosage as number of lessons attended by participants and included only those who completed the workshops. Completion was defined as attending at least 75 % of the curriculum. Thus, not much variance existed in the number of lessons attended between participants who completed the intervention resulting in a non-significant finding for the current analysis. Future research could incorporate other measures of dosage, such as time spent in MRE workshop (e.g., hours of attendance), or compare differences in outcomes between high dosage (20 hour and above) and low dosage (below 20 hours) MRE curricula.

Finally, roughly half the current study's sample encompassed participants who identified as Hispanic. Daire et al. (in press) conducted a qualitative study examining Hispanic participants in relationship education. Results included the notion that older Hispanic participants were eager to learn new relationship tools not necessarily for the benefit of their own relationships, but so they could pass the information to their children or younger friends (Daire et al., in press). The

current study's large Hispanic sample is partly due to the geographic location of recruitment. Recruitment took place close to the university housing the study. Several Hispanic families live in the area where recruitment occurred. However, Hispanic families appeared more willing to participate and less skeptical of participation than other ethnicities. Understanding cultural differences as they relate to participating in relationship education will help researchers tailor recruitment and engagement strategies to the population targeted, which complies with Halford et al.'s (2003) relationship education best practice recommendations.

MRE Works, But…

The findings from the current study, as well as previously published meta-analyses (e.g., Blanchard et al., 2009; Hawkins & Fackrell, 2010) support the effectiveness of relationship education as an intervention to improve relationship quality and decrease individual distress. Additionally, the findings suggest MRE is effective with economically and ethnically diverse. After participating in relationship education workshops, couples report higher levels of relationship satisfaction, lower levels of individual distress, and less physical and emotional abuse (e.g., Hsueh et al., 2012). Furthermore, Hsueh et al. identified consistent positive relationship outcomes across various relationship education curricula. However, published research has not examined causal factors for the positive outcomes experienced by couples who participate relationship education.

As a member of the research team for the *OFA Together Project*, as well as two other relationship education studies, I spoke to several couples before and after their participation in the intervention. Prior to participating in the workshops, couples often stated their interest in

workshop participation was peaked because it was a chance for them to spend quality time together. Additionally, couples who completed the workshops frequently discussed the bonds they formed with the other participants, and many times couples continued to meet on their own time. The anecdotal reports of couples' experiences in relationship education are relevant to the current study because they contribute to the looming unanswered question about the effectiveness of relationship education: Why are relationship education workshops effective? The structured communication tools and tips couples learn while participating in relationship education are likely one reason for the intervention's effectiveness, but studies have not examined how frequently couples utilize the tools during participation, or after the workshops conclude. No published data examined the fidelity with which couples use the tools after workshop completion. Therefore, if couples are using tools learned, how do we know the tools are being used in the manner they were taught? These questions raise considerations as to the contributing factors of relationship education's effectiveness. Future research should examine the influence of quality time on relationship education outcomes. It may be possible that couples' relationship quality is enhanced because they spent quality time together focusing on their relationship and not necessarily because of the specific relationship tools they learned or relationship issues they discussed during the workshop. When couples spend quality time together they may feel more connected and bonded as a result, thus enhancing their relationship satisfaction. A more complete understanding of the contributing factors to relationship education's success as intervention may help researchers, clinicians, and educators deliver the intervention more effectively to participants.

Conclusion

The current study's results indicated relationship education (i.e., PREP) reduced individual distress levels and improved relationship satisfaction at post-assessment and three-to-six months follow-up for low-income participants. Results substantiate similar findings for middle-income couples and emerging findings for low-income couples. Additionally, results denoted no outcomes differences between those who completed shorter workshop formats and those who completed longer formats. Less attrition existed during the one-day workshop format. Therefore, practitioners should consider utilizing shorter and more streamlined relationship education workshop formats to ameliorate some attrition challenges.

In addition, results suggest practitioners should consider relationship education as an intervention for couples with one member exhibiting depressive symptoms. Couples counselors should also consider implementing relationship education tools into traditional counseling practice. Furthermore, counseling and relationship educators should identify recruitment and engagement practices designed to mitigate the unique stressors affecting economically disadvantaged participants.

Researchers should continue seeking to understand relationship education change mediators. Utilizing multiple evaluation methods, such as self-report, researcher observation, and examining physiological change, may help understand specific change agents. Furthermore, examination of which tools participants use frequently, as well as the influence group dynamics has on change, will help understand what accounts for the most variance in participant change.

APPENDIX A: IRB APPROVAL

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Andrew P Daire, Mark E Young, Matthew Munyon**

Date: **September 15, 2011**

Dear Researcher:

On 9/15/2011, the IRB approved the following activity as human participant research that is exempt from regulation:

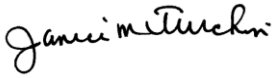
Type of Review:	Exempt Determination
Modification Type:	Protocol modification to confirm that data collected from this study will be used for purposes of dissertation research
Project Title:	OFA Together Project
Investigator:	Andrew P Daire
IRB Number:	SBE-10-06669
Funding Agency:	US Department of Health & Human Services

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Janice Turchin on 09/15/2011 11:46:37 AM EDT



IRB Coordinator

APPENDIX B: INFORMED CONSENT

Informed Consent/Waiver of Documentation of Consent for an

Adult in a Non-medical Research Study

OFA TOGETHER PROJECT

Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being invited to take part in a research study that will include 150 couples. You can ask questions about the research. You can read this form and agree to take part right now, or take the form home with you to study before you decide. You will be told if any new information is learned which may affect your willingness to continue taking part in this study. You have been asked to take part in this research study because you are married with at least one child (birth, adopted, or legal guardian) age 0 to 17 residing in your household at least 51% percent of the time single individuals, You must be 18 years of age or older to be included in the research study and sign this form.

Researchers: The person doing this research is Dr. Andrew P. Daire, Associate Professor, and Dr. Mark Young, Professor, in the UCF Counselor Education program.

Study title: OFA Together Project

Purpose of the research study: The purpose of this study is to evaluate the impact of a 12-hour marriage and relationship education on individual and couple functioning factors.

What you will be asked to do in the study:

I. Intake Interview – You will be asked to complete an interview and complete assessments. The husband and wife will complete the assessments separately. You will be asked to complete a brief demographic intake form; the Dyadic Adjustment Scale (DAS), a 32-item measure of relationship adjustment; the Relationship Assessment Scale (RAS), a seven-item measure of relationship satisfaction; the Outcomes Questionnaire 45.2 (OQ45), a 45-item measure of individual distress; and the Marital Expectation Questionnaire (MEQ), a 15-item measure of marital expectations.

II. Random Assignment – After completion of the intake assessments, couples will be randomly assigned to a Treatment Group or a Wait-list Control Group. 100 couples will be randomly assigned to the treatment group and 50 to the wait-list control group.

III. Treatment Group – Treatment group participants will (a) participate in a 12-hour Prevention and Relationship Enhancement Program (PREP) marriage education program offered (two six-hour sessions or four three-hour sessions); (b) complete the DAS, RAS, OQ45, MEQ, and the Together Project Post Survey at the end of the class; and (c) attend a booster session six months after completion of the PREP course where they will complete the DAS, RAS, OQ45, MEQ, and the Together Project six-Month Survey.

IV. Wait-List Control Group – Wait-list control group participants will (a) complete the DAS, RAS, OQ45, MEQ, and the Together Project Post Survey approximately four to six weeks after

intake; (b) complete the DAS, RAS, OQ45, MEQ, and the Together Project six-Month Survey approximately six months after intake; and (c) receive one eight-hour PREP workshop on a date after the six-month data is collected.

Voluntary participation: You should take part in this study only because you want to. There is no penalty for not taking part, and you will not lose any benefits. You have the right to stop at any time. Just tell the researcher or a member of the research team that you want to stop. You will be told if any new information is learned which may affect your willingness to continue taking part in this study.

Location: The intake appointment, marriage education classes, and follow-up data will take place at the University of Central Florida Marriage & Family Research Institute on UCF's main campus located at 28 Gemini Boulevard, Building 28, Orlando, FL 32826.

Time required: It will take approximately 45 minutes to complete the intake surveys, post surveys, and six-month follow-up surveys. The treatment group marriage education classes will be 12 hours and the wait-list control group marriage education classes will be eight hours.

Audio or videotaping:

This study does not include any audio or videotaping. However, research staff may observe marriage education classes using a secure, password-protected IP (Internet Protocol) camera that is mounted in the marriage education class.

Risks:

The risk in participating in this research is minimal. The risk will be no greater than the risks normally encountered in everyday life

Benefits:

There are no expected benefits to you for taking part in this study.

Compensation or payment:

There is no compensation or other payment to you for taking part in this study. If you are receiving this survey in a course, there is no extra credit for taking part in this study.

Confidentiality:

We will limit your personal data collected in this study to people who have a need to review this information. We cannot promise complete secrecy, particularly because the marriage education classes are provided in a group format. However, the research team will keep all data strictly confidential and in password protected electronic files. Limits confidentiality are based on possible legal issues such as uncovering child or elder abuse or neglect, threats to harm one's self or another, in which case information may be disclosed to appropriate authorities For compliance purposes, representatives from the University's IRB might need to inspect your information.

Study contact for questions about the study or to report a problem: Dr. Andrew P. Daire, Associate Professor for Counselor Education and Executive Director for the UCF Marriage & Family Research

Institute UCF College of Education, at P.O. Box 161250, Orlando, FL 32816-1250, (407) 823-4652 or by email at adaire@mail.ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

How to return this consent form to the researcher: There are two copies of this Informed Consent Form stapled with the assessment instruments. Please tear off and keep one copy of this Informed Consent Form for your records. Then, complete the five assessments and return them to the research team.

APPENDIX C: INTAKE FORM

UCF Marriage & Family Research Institute (MFRI)
OFA Together Project

Intake Form

The information on this form will be kept strictly confidential

Identifying and Contact Information

Name: _____ _____ _____
First$_1$ MI$_2$ Last$_3$

Address$_4$: _____

_____ _____ _____
City$_5$ State$_6$ Zip Code$_7$

Telephone: (__) _____ (__) _____
Home Phone$_8$ Cell Phone$_9$

(__) _____ Which number is best$_{11}$? □ Home □ Cell □ Work
Work Phone$_{10}$

Email$_{12}$: _____

Being able to contact you for participation in the follow-up assessments is important to us. Please provide us with names and contact information for two relatives or friends whom we can contact to reach you in the event you move.

Name: _____ _____
First$_{13}$ Last$_{14}$

Telephone: (__) _____ (__) _____
Home Phone$_{15}$ Cell Phone$_{16}$

Email$_{17}$: _____

Relation to you$_{18}$: □ Parent □ Sibling □ Aunt/Uncle □ Cousin □ Friend □ Other:_____

Name: _____ _____
First$_{19}$ Last$_{20}$

Telephone: (__) _____ (__) _____

Home Phone$_{21}$ Cell Phone$_{22}$

Email$_{23}$: _____

Relation to you$_{24}$: □ Parent □ Sibling □ Aunt/Uncle □ Cousin □ Friend □ Other:_____

Demographic Information – **About You**

Gender$_{25}$: □$_1$ Male □$_2$ Female Your Date of Birth (mm/dd/yyyy) $_{26}$: ____/____/_____

Ethnicity$_{27}$: □$_1$ White/Non-Hispanic □$_2$ Hispanic/Latino □$_3$ Black/Non-Hispanic

□$_4$ Native American □$_5$ Asian American □$_6$ Other

Years of education completed (e.g. 12th grade would be '12', A.A. Degree would be '14') $_{28}$? _____

Are you currently employed$_{29}$? □$_1$ Yes □$_2$ No

Demographic Information – **About Your Relationship**

How long have you been married to your current spouse$_{30}$? _____ Years, _____ Months

How many times have you been married before, not including your current spouse$_{31}$? ____

Did you both live together with your spouse before you got married$_{32}$? □$_1$ Yes □$_2$ No

If yes, how long did you live together before you got married$_{33}$? _____ Years, _____ Months

What is the approximate monthly combined income for you and your spouse$_{34}$? $_____

What is your current living arrangement$_{35}$: □$_1$ Living Together □$_2$ Living Apart

Is your spouse currently employed$_{36}$? □$_1$ Yes □$_2$ No

Are you and your spouse expecting a child$_{37}$? □$_1$ Yes □$_2$ No

What is the approximate due date (mm/yyyy)$_{38}$? ____/_____

How many children under the age of 18 are currently living in your household$_{39}$? ____

About the OFA Together Project

How did you find out about the OFA Together Project$_{40}$?

□$_1$ Email from my department/employer;

□2 Attended an information session by OFA Together Project staff;

□3 Brochures or flier displayed at a community locations;

□4 Professional in the community;

□5 Friend or relative;

□6 Other:_____

APPENDIX D: PREP FOUR-WEEK SCHEDULE

Revised Weekday Schedule

PREP Version 7.0
OFA TP: Evenings
12 Hours of Content

Day 1

Start	Stop	Activity		Minutes
6:00	6:30	**Lesson 1**	**Introduction**	**30**
6:30	7:30	**Lesson 2**	**Danger Signs and Time Out**	**60**
7:30	7:40	Break		10
7:40	9:05	**Lesson 3**	**Honey, Let's Talk (Good Communication)**	**85**
9:05	9:10	Closing		5
Total Non-content Time 15			**Total Content Time**	**175**

Day 2

Start	Stop	Activity		Minutes
6:00	6:05	Check-In		5
6:05	6:50	**Lesson 4**	**Events, Issues and Hidden Issues**	**45**
6:50	6:55	Break		5
6:55	7:45	**Lesson 5**	**Being Friends and Having Fun**	**50**
7:45	8:35	**Lesson 6**	**You, Me and Us**	**50**
8:35	8:55	**Lesson 7**	**Stress & Relaxation Part One**	**20**
8:55	9:00	Closing		5
Total Non-content Time 15			**Total Content Time**	**165**

Day 3

Start	Stop	Activity		Minutes
6:00	6:05	Check-In		5
6:05	7:00	**Lesson 7**	**Stress & Relaxation Part Two**	**55**
7:00	7:30	**Lesson 8**	**Problem Solving**	**30**
7:30	7:35	Break		5
7:35	8:35	**Lesson 9**	**Forgiveness**	**60**
8:35	8:55	**Lesson 13**	**Ground Rules**	**20**
8:55	9:00	Closing		5
Total Non-content Time 15			**Total Content Time**	**165**

Day 4

Start	Stop	Activity		Minutes
6:00	6:05	Check-In		5
6:05	6:50	**Lesson 10**	**Supporting Each Other**	**45**
6:50	7:45	**Lesson 11**	**Sensuality/Sexuality**	**55**
7:45	7:50	Break		5
7:50	8:40	**Lesson 14**	**Commitment**	**50**
8:40	8:50	Closing		10
8:50	9:20	Assessments		30
Total Non-content Time 50			**Total Content Time**	**150**

APPENDIX E: TWO SATURDAY WEEKEND SCHEDULE

Revised Weekend Schedule

PREP Version 7.0
OFA TP: Weekend
12 Hours of Content

Day 1

Start	Stop	Activity		Minutes
9:30	10:00	**Lesson 1**	**Introduction**	**30**
10:00	11:00	**Lesson 2**	**Danger Signs and Time Out**	**60**
11:00	11:15	Break		15
11:15	12:45	**Lesson 3**	**Honey, Let's Talk (Good Communication)**	**90**
12:45	1:15	Lunch		30
1:15	2:00	**Lesson 4**	**Events, Issues and Hidden Issues**	**45**
2:00	2:15	Break		15
2:15	3:05	**Lesson 5**	**Being Friends and Having Fun**	**50**
3:05	3:50	**Lesson 6**	**You, Me and Us**	**45**
3:50	4:00	Closing		10
			Total Content Time	**320**
			Total Non-content Time	70

Day 2

Start	Stop	Activity		Minutes
9:30	9:35	Check-In		5
9:35	10:45	**Lesson 7**	**Stress and Relaxation**	**70**
10:45	11:15	**Lesson 8**	**Problem Solving**	**30**
11:15	11:45	Lunch		30
11:45	12:45	**Lesson 9**	**Forgiveness**	**60**
12:45	1:30	**Lesson 10**	**Supporting Each Other**	**45**
1:30	1:45	Break		15
1:45	2:45	**Lesson 11**	**Sensuality/Sexuality**	**60**
2:45	3:05	**Lesson 13**	**Ground Rules**	**20**
3:05	3:20	Break		15
3:20	4:10	**Lesson 14**	**Commitment**	**50**
4:10	4:20	Closing		10
4:20	4:50	Assessments		30
			Total Content Time	**335**
			Total Non-content Time	100

APPENDIX F: ONE EVENING, ONE DAY SCHEDULE

PREP Version 7.0

Short Version: One Evening and One Day

8.0 Hours of Content

*Notice in this format the Fun and Friendship lesson is taught out of sequence so that the first night includes some of the more positive content.

Evening Start	Stop	Activity		Hours	Minutes
5:30	6:00	Registration/Dinner		0.50	30
6:00	6:40	**Lesson 1**	**Introduction**	**0.67**	**40**
6:40	7:40	**Lesson 2**	**Danger Signs and Time Out**	**1.00**	**60**
7:40	8:40	**Lesson 5**	**Being Friends and Having Fun**	**1.00**	**60**
8:40	9:00	**Review and Process**		**0.33**	**20**
			Total Content Time	**3.00**	**180**
			Total Non-content Time	0.50	30

Full Day Start	Stop	Activity		Hours	Minutes
9:30	10:00	Registration		0.50	30
10:00	10:55	**Lesson 3**	**Honey, Let's Talk (Good Communication)**	**0.92**	**55**
10:55	11:35	**Lesson 4**	**Events, Issues and Hidden Issues**	**0.67**	**40**
11:35	12:20	**Lesson 6**	**You, Me and Us**	**0.75**	**45**
12:20	1:10	**Lesson 7**	**Stress and Relaxation**	**0.83**	**50**
1:10	1:40	**Lesson 8**	**Problem Solving**	**0.50**	**30**
1:40	2:30	**Lesson 10**	**Supporting Each Other**	**0.83**	**50**
2:30	2:50	**Lesson 13**	**Ground Rules**	**0.33**	**20**
2:50	3:40	**Lesson 14**	**Commitment**	**0.83**	**50**
3:40	4:00	**Review and Process**		**0.33**	**20**
			Total Content Time	**6.00**	**360**
			Total Non-content Time	0.50	60

	Hours	Minutes
Grand Total Content Time	**9.00**	**540**

APPENDIX G: PREP ONE DAY SCHEDULE

PREP Version 7.0
Short Version: One day (8 hours)
8.0 Hours of Content

Start	Stop	Activity		Hours	Minutes
9:00	9:30	Lesson 1	Introduction	0.50	30
9:30	10:15	Lesson 2	Danger Signs and Time Out	0.75	45
10:15	10:20	BREAK			
10:20	11:00	Lesson 3	Honey, Let's Talk (Good Communication)	0.67	40
11:00	12:00	Lesson 4	Events, Issues and Hidden Issues	1.00	60
12:00	1:00	LUNCH			
1:00	1:45	Lesson 5	Being Friends and Having Fun	0.75	45
1:45	2:30	Lesson 6	You, Me and Us	0.75	45
2:30	2:35	BREAK			
2:35	3:15	Lesson 7	Stress and Relaxation	0.67	40
3:15	3:45	Lesson 8	Problem Solving	0.50	30
3:45	4:30	Lesson 9	Forgiveness	0.75	45
4:30	5:00	Lesson 10	Supporting Each Other	0.50	30
5:00	5:30	Lesson 13	Ground Rules	0.50	30
5:30	6:00	Lesson 14	Commitment	0.50	30
			Total Content Time	7.84	470.00

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