

THE DURABILITY OF SUPPORT-FOCUSED MARITAL THERAPY

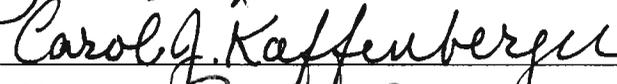
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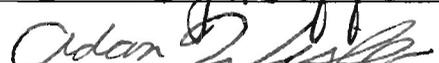
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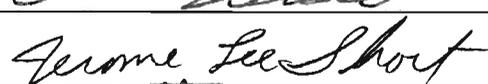
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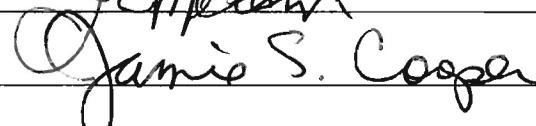
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The Durability of Support Focused Marital Therapy

A dissertation submitted in partial fulfillment of the requirements for the degree of
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Master of Arts
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ABSTRACT

THE DURABILITY OF SUPPORT FOCUSED MARITAL THERAPY

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This dissertation investigated the long-term efficacy of Support Focused Marital Therapy. This study analyzed the six month follow-up data collected from couples who completed the 12 session intervention. In addition to analyzing changes in couple's marital satisfaction and psychological distress, the study also investigated the characteristics of couples who would most benefit from this intervention. The results of the study suggest that couples who participated in this intervention did not experience significant declines in marital satisfaction from post-treatment to follow-up and were able to maintain some of the improvements they experienced during the course of the intervention. Effect sizes for marital satisfaction were similar to other marital therapy modalities and couples experienced reliable and clinically significant change at levels slightly less than other modalities. Participants also experienced decreased anger and psychological distress from pre-treatment to follow-up

This study determined that the number of years the couple dated and the presence of children in the home were correlated with increased marital satisfaction at

follow-up. Therapeutic alliance was not correlated with increased marital satisfaction. None of the demographic or personal variables investigated reliably separated those who responded well to SFMT and those who did not. This thesis continues the process of validating Support Focused Marital Therapy as an effective tool for improving marriages.

INTRODUCTION

Throughout the world, cultures formalize the union between men and women (Buss & Schmitt, 1993). The cultural importance of these unions is demonstrated by the fact that over 90% of men and women, the world over, get married at some point in their lives (Buss, 1985). The importance of the union between two people cannot be overlooked. The majority of adults identify their marital partner as their primary source of support and affection (Levinger & Huston, 1990) and research indicates that marriage serves as a protective factor (Keicolt-Glaser & Newton, 2001). Burman and Margolin (1992) determined that married persons have lower mortality rates than non-married people at all ages, while Ross, Mirowsky, and Golsteen (1990) determined that non-married people experience more health problems than married people. In addition to better physical health, married people enjoy greater mental health than non-married people (Gove, Style, & Hughes, 1990) and reported higher levels of satisfaction with their friends and family (Brody, Litvin, Hoffman, & Kleban, 1995).

Although marriage has the potential to provide many benefits, research indicates that marital distress and dissatisfaction can contribute to a number of serious problems. Researchers have noted the relationship between marital difficulties and depression (Beach & O'Leary, 1992). Marital dysfunction is also a predictor of physical ailments such as high blood pressure and a weakened immune system (Ewart, Burnett, & Taylor, 1983; Kiecolt-Glaser et al., 1987). Disorders such as alcohol abuse (Gotlib & McCabe, 1990) and psychological problems with the

couple's children (Grynych & Fincham, 1990) are also associated with marital distress. Although these results are correlational and cannot prove causality, there appear to be strong links between marital quality and individual well-being. Thus, it is likely that therapies designed to improve marriages will yield improvement, not only in marital satisfaction, but in the individual well-being of both partners and their children.

Efficacy of Marital Therapy

The research on marital therapy has changed as greater emphasis is placed on demonstrating the efficacy of the intervention rather than simple effectiveness.

Chambless and Hollon (1998) developed a standard by which all empirically supported therapeutic interventions may be measured. They broke treatment efficacy into four categories:

1. Efficacious: The intervention is superior to a waitlist control in at least two studies conducted by two independent research teams.
2. Efficacious and specific: The intervention is superior to a placebo, nonspecific treatment, or rival interventions in two studies conducted by independent research teams.
3. Possibly Efficacious: The intervention is superior to a waitlist control in only one study or in more than one study conducted by the same research team.
4. Possibly Efficacious and Specific: The intervention is superior to a placebo or rival intervention in one study or in more than one study conducted by the same research team.

Baucom, Shoham, Mueser, Daiuto, and Stickle (1998) applied these standards to several marital therapy interventions. They noted that numerous dependent

measures have been used to determine efficacy in the outcome literature and sought to find one primary measure of success in marital therapy. Baucom and his colleagues determined that marital adjustment or satisfaction at the end of therapy is the most important index of efficacy. In outcome research, marital satisfaction is most often determined by administering the Dyadic Adjustment Scale (Spanier, 1976) or another similar measure.

Efficacy of Marital Therapy Over Time

Baucom et al. (1998) did not include follow-up data in their examination of marital therapy efficacy due to methodological difficulties such as different follow-up time periods across studies, high drop-out rates during the follow-up period, and the possibility that couples sought additional treatment throughout the follow-up period. This does not, however, diminish the importance of examining the efficacy of marital therapy over time. Numerous researchers have noted the paucity of long-term studies examining the efficacy of marital interventions (e.g. Christensen & Heavey, 1999; Snyder, Wills, & Grady-Fletcher, 1991). In the age of managed care, where the efficacy of interventions is vital, there is added pressure to demonstrate that improvements made in the course of treatment last beyond the end of the therapeutic intervention. The number studies including follow-up information is growing, and quality follow-up research will be addressed in the review below.

Review of Marital Therapy

Numerous approaches to marital therapy have been developed and evaluated in the literature including cognitive, behavioral, psychodynamic, insight-oriented, systems, eclectic, and emotion-focused. Repeated meta-analytic studies indicate that no approach is reliably superior to any other (Christensen & Heavey, 1999; Dunn &

Schwebel, 1995; Shadish, Ragsdale, Glaser, & Montgomery, 1995). Among these many approaches, four have established a substantial amount of research to empirically validate their approaches through the rigorous methods established by Chambless and Hollon (1998). The research findings for these four therapies, Behavioral Marital Therapy, Cognitive-Behavioral Therapy, Emotion-Focused Marital Therapy, and Insight-Oriented Marital therapy will be discussed below.

Behavioral Marital Therapy

The most widely examined and evaluated type of marital therapy is behavioral marital therapy (BMT; Jacobson, 1984). BMT is based on social learning theory and proposes that the satisfaction that a couple experiences is directly related to the ratio of reinforcement to punishment experienced in the relationship. BMT is a skills-oriented approach that focuses on teaching couples how to communicate with each other and solve problems more effectively in order to increase the number of reinforcing experiences. Couples are taught skills to increase effective communication and better resolve conflict, such as the use of “I” statements and active listening techniques. Therapists using BMT emphasize the importance of positive behavioral exchange, working to increase positive and decrease negative interactions. Interventions may include increasing caring acts toward the partner or scheduling activities that allow the couple to spend quality time together (Baucom et al.; 1998). Another important component of BMT is the use of homework assignments to facilitate the generalization of techniques learned in the therapy to the couples’ daily lives. BMT is focused on the present and the focus of intervention is the couples’ behavior and interactions.

A large number of studies clearly demonstrate BMT's effectiveness when compared to no-treatment controls (Baucom, 1982; Dunn & Schwebel, 1995; Hahlweg & Markman, 1988; Halford, 1998). A meta-analysis performed by Hahlweg and Markman (1988) contained 17 studies and yielded an effect size of 0.95. Other meta-analyses (e.g. Shadish et al., 1995) have yielded smaller effect sizes, yet solidly support the effectiveness of BMT. Research investigating the utility of the components of BMT has also been conducted in order to better understand how BMT works (Jacobson et al., 1985; Jacobson, 1984). Jacobson and his colleagues separated BMT into behavioral exchange (BE) and communication/problem-solving training (CPT). These researchers demonstrated that both components are necessary to the success of BMT, but CPT was necessary to maintain marital improvement at follow-up.

Recently, meta-analytic research has indicated that the effect size for BMT may be less than previously reported. Shadish and Baldwin (2005) used unpublished and dissertation data in their analysis and concluded that BMT, while still effective, has an effect size of .58, which is significantly lower than the .95 effect size documented in Hahlweg and Markman's (1988) meta-analysis. Despite the controversy, BMT remains an effective treatment for marital distress.

Research also indicates that couples receiving BMT maintain their improvement for at least one year. Dunn and Schwebel (1995) reported an effect size of 0.52 for marital behavior and 0.54 on relationship quality at follow-up (mean 8.75 months). Hahlweg and Markman (1988) reported effect sizes of 1.07 to 1.16 at one year follow-up for the studies they reviewed. Studies that report follow-up data for longer than one year are rare and less encouraging. Jacobson, Shmaling, and

Holtzworth-Munroe's (1987) 2 year follow-up revealed that 30% of the couples who had recovered during BMT, relapsed. Further, a 4 year follow-up conducted by Snyder et al. (1991) reported that 38% of the couples that received BMT were divorced at the 4 year mark compared to 3% of the couples who received Insight-Oriented Marital Therapy. Byrne, Carr, and Clark (2004) reviewed several treatment outcome studies and determined that BMT leads to short and long-term gains for couples who are severely distressed. Despite conflicting data about of BMT's long-term effects, research clearly demonstrates that BMT is an efficacious and specific treatment for marital distress.

Cognitive and Cognitive-Behavioral Marital Therapy

Cognitive Marital Therapy (CMT) emerged when researchers became interested in the role of cognition in marital dysfunction and developed interventions designed to help spouses alter their thoughts and better understand their relationship (Baucom & Lester, 1986). CMT includes interventions such as encouraging spouses to reevaluate unrealistic standards for marriage or their spouse, consider new attributions for their partner's behavior, and identify how their current cognitions affect their behavior (Baucom et al, 1998).

The outcome research on CMT has yielded conflicting results. While, Huber, and Milstein (1985) reported that a 6- week CMT intervention was more effective than a wait-list condition in improving marital adjustment, Waring, Stalker, & Carver's (1991) study reported no significant improvement in couples who received a 10 session CMT intervention. Waring et al.'s (1991) study compared 41 severely distressed couples assigned to either the CMT or waitlist condition and found that the group receiving CMT did not improve relative to the waitlist group in either intimacy

or marital satisfaction. Byrne, Carr, and Clarke (2004) found that CMT was as effective as BMT in some studies, but required replication. Due to the conflicting results of these studies, Baucom et al. (1998) labeled CMT only a possibly-efficacious treatment.

Baucom and other researchers have included components of CMT into standard BMT in an attempt to improve the efficacy of BMT. The early studies involving Cognitive Behavioral Marital Therapy (CBMT) (Baucom & Lester, 1986; Baucom, Sayers, & Sher, 1990; Halford, Sanders, & Behrens, 1993) compared this type of marital therapy to BMT and waitlist conditions. These studies indicate that couples who received CBMT improved significantly compared to the waitlist control. However, their improvement was not significantly different from those couples who receive BMT. Recently, CBMT has been shown to be slightly more effective than BMT at post-treatment and follow-up (Christensen, Atkins, Yi, Baucom, George, 2006). Although limited in number, these studies indicate that CBMT is a possibly-efficacious treatment.

The follow-up data for CBMT is promising. Dunn and Schwebel (1995) included three outcome studies that involved CBMT and found effect sizes of 0.54 at post-treatment and 0.75 at follow-up on measures of marital behavior. Effect sizes for relationship quality were 0.71 at post-treatment and 0.54 at follow-up. The mean follow-up time was 6 months. These results suggest that couples who receive CBMT maintain their results or continue to improve in the months following treatment. Butler, Chapman, Forman, and Beck's (2006) meta-analysis of CBMT found that CBMT produced moderate effect sizes for reducing marital distress. Christensen et al (2006) found that couples receiving CMBT produced similar levels of clinically

significant improvement at 2 years to BMT. They also found that these couples were more stable during the 2 year follow-up than couples who received BMT.

Emotion-Focused Marital Therapy

Emotion-Focused Marital Therapy (EFT) is a psychodynamic approach to marital distress that attempts to modify distressed couples' interaction patterns and emotional responses (Greenberg & Johnson, 1986). The primary focus in EFT is affect, communication, and intimacy (Johnson & Greenberg, 1994). It conceptualizes marital difficulties in terms of attachment theory and proposes that marital distress is the result of the failure of the relationship to meet individual's needs for security. This failure leads to strong feelings of abandonment and anger. Therapists using EFT help their clients access and process their emotional experiences and restructure their interaction patterns. As couples experience these powerful emotions, they learn more about themselves and each other and are able to alter their interactions in a way that satisfies their needs (Christensen & Heavey, 1999).

Several studies have demonstrated the efficacy of EFT, including Johnson and Greenberg's (1985) comparison of EFT, BMT and waitlist control. Couples were assigned to one of these conditions and the researchers found that both treatments were superior to the control, and EFT was more effective than BMT. James (1991) has demonstrated that EFT is superior to a waitlist control group. Byrne, Carr, and Clark (2004) found that EFT was most effective for mildly to moderately distressed couples. Baucom et al. (1998) concluded that EFT is possibly efficacious and specific, because EFT has proven to be more effective than a waitlist control by two separate groups of researchers and it was superior to another form of treatment. Johnson (2007) summarized nearly 20 years of research on EFT and concluded that it is a

unique and empirically validated intervention that is effective with a wide range of couples.

Meta-analytic data indicate that EFT produces lasting change. Dunn and Schwebel (1995) report an effect size of 0.87 at post-treatment and 0.69 at follow-up. Four EFT outcome studies were included in this meta-analysis and the average length of follow-up was one year. Although these numbers are fairly strong, Johnson, Hunsley, and Greenberg (1999) argue that the Dunn and Schwebel's review is inaccurate because many EFT outcome studies were published after they completed their review. Johnson et al. (1999) produced another meta-analysis that included four randomized clinical trials and omitted a study with a small sample size. This analysis yielded an effect size of 1.28. This large effect size does include the James (1991) study, where a large percentage of the couples in both the control (50%) and experimental (86% and 93%) groups improved. Further James (1991) excluded couples if neither of the spouses had scores on the Dyadic Adjustment Scale (Spanier, 1976) between 70-100. This effectively eliminated the most distressed couples from the study. Thus, Johnson et al.'s (1999) large effect size must be accepted with a degree of caution. Despite some controversy about the effect size of EFT, it appears that EFT is an effective treatment for marital distress.

Insight-Oriented Marital Therapy

Insight-Oriented Marital Therapy (IOMT) is a psychodynamic approach to marital distress that emphasizes the interpretation of underlying intrapersonal and interpersonal dynamics (Snyder et al., 1991). Therapists also address developmental issues, differences in expectations, and maladaptive relationship rules. Through using

probes, clarification, and interpretation, therapists work to uncover and explore spouses' unconscious feelings and beliefs that contribute to the marital difficulties.

IOMT shares many similarities with EFT including a focus on emotions and needs, and the belief that each partner must share the vulnerable aspects of themselves to allow their partner to gain greater empathy and understanding. It is this understanding that leads to changes in behavior. Due to these similarities, some researchers, including Dunn and Schwebel (1995), have examined them together as one approach to marital distress. While Snyder and Wills (1989) note similarities between EFT and IOMT, they explain that EFT differs from IOMT in terms of the emphasis on immediate, conscious affect as opposed to longer-standing intrapsychic conflicts that stem from childhood. Further EFT is based in attachment theory. For these reasons, many researchers, including Baucom et al. (1998) treat EFT and IOMT as separate forms of marital therapy.

Snyder and Wills (1989) compared IOMT and BMT to a waitlist control and found that both types of therapy were more effective than the control. There were, however, no significant differences between IOMT and BMT as the effect sizes were 0.96 and 1.01 respectively. This trend continued at a 6 month follow-up, however, Snyder et al.'s (1991) 4 year follow-up study revealed significant differences between IOMT and BMT. Snyder et al. contacted 96% of their subjects and found that 38 % of the couples who received BMT had divorced, while only 3% of the IOMT couples had divorced. IOMT couples also demonstrated significantly better marital adjustment. Although Jacobson has questioned these results (see earlier discussion), they demonstrate the long-term success of IOMT in reducing marital distress. As a

result of these studies, Baucom et al. (1998) have labeled IOMT a possibly-
efficacious treatment.

Despite the positive results of marital therapy efficacy studies, it is important to note that there are couples for whom these treatments are not effective. The effect sizes reported above indicate that many, but not all couples benefit from the marital therapy they receive. Further, no one form of marital therapy shows a distinct advantage over any other form. Therefore, it is necessary to look at the predictors of outcome for marital therapy to determine if some types of therapy are more appropriate for specific populations.

Predictors of Marital Therapy Outcome

Many variables that may influence therapy outcomes have been examined, including client and therapist variables. The most important predictors of marital therapy outcome appear to be client variables. Most marital therapy outcome studies have examined such client variables as: demographic information, personality factors, relationship characteristics, and symptomatology (Johnson & Talitman, 1997).

Despite a large number of studies devoted to identifying predictors of outcome, there has been a lack of consistency that makes it difficult to identify specific predictors for any of the marital therapy interventions (Snyder, Castellani, & Whisman, 2006).

Nonetheless, many researchers have attempted to identify those variables that best predict who will benefit from a particular intervention. The following discussion will address each of these variables and examine the influence of the therapeutic alliance.

There is some evidence that demographic variables such as age may be related to marital therapy outcomes. Baucom (1982) suggests that BMT is more effective with younger couples. While the structure and focus of BMT may be most effective

for younger couples, research suggests that, at termination, men over 35 benefit more from EMT (Johnson & Talitman, 1997). In addition to age, low job status predicted negative 4-year outcome for couples receiving both IOMT and BMT. While gender differences have generally not been significant, some research indicates that men improve more rapidly at the beginning of therapy and then taper off (Atkins, Berns, George, Doss, Gattis, & Christensen, 2005). These researchers also found that therapy was generally more successful for couples married more than 18 years than for couples married less than 10. Although other demographic variables have not predicted outcome at termination or follow-up, it is important to continue examining these variables to better match couples with modalities that are more likely to be effective.

Several personality factors are predictors of outcome both at termination and follow-up. Affection and tenderness have been shown to predict positive outcomes with BMT (Hahlweg, Revenstorf, & Schindler, 1984). Snyder, Mangrum, and Wills (1993) determined that high levels of negative affect at intake predicted distress at both termination and 4-year follow-up for both BMT and IOMT. In addition to negative affect, Snyder and his colleagues determined that low emotional responsiveness predicted negative outcome for both BMT and IOMT at the 4-year follow-up.

The predictive ability of one personality factor, traditionality, has been the focus of several studies. Jacobson, Follette, and Pagel (1986) found that highly affiliative wives, those women who place more emphasis on maintaining relationships, and highly independent husbands responded poorly to BMT. They concluded that more traditional couples were less likely to benefit from BMT. Unlike

IOMT and BMT, traditionality was not a significant predictor of outcome for EFT (Johnson & Talitman, 1997). Snyder et al. (1993) reported that lower femininity scores predicted negative outcomes for husbands and wives receiving BMT or IOMT. Spouses with higher femininity scores, who value relationships and attend and respond to the needs of others, benefited more from these types of marital therapy.

Overall marital satisfaction and relationship characteristics are also predictors of outcome. Snyder et al. (1993) determined that lower pretreatment levels of marital satisfaction, greater power inequality, and problem-solving deficits predict negative outcomes in BMT and IOMT. Snyder and his colleagues also found that poor problem-solving skills predicted negative outcome for both BMT and IOMT at the 4-year follow-up. Marital distress was predictive of outcome at both short- and long-term outcome, but it was substantially less predictive at the four-year follow-up.

Symptomatology is also related to outcome. Snyder et al. (1993) found that depressive symptomatology is negatively related to outcome for both BMT and IOMT. They examined both short and long term predictors of outcome and found that depressive symptomatology was predictive of negative outcome both at termination and 4 year follow-up. In addition to depression, Snyder and his colleagues determined that low psychological resilience, predicted negative outcome for both BMT and IOMT at the 4-year follow-up.

Research on the predictors of outcome for EFT has pointed to the importance of therapeutic alliance. Johnson and Talitman's (1997) study of predictors indicates that, rather than initial level of distress, the most significant predictor of outcome for EFT is therapeutic alliance. Specifically, agreement between the therapist and the couple about the tasks of therapy was most predictive of improvement.

The discussion above outlines the variables that are most likely to predict outcomes. While some variables have predicted outcome for different types of intervention, others are only predictive for one type of marital therapy. These differences seem to indicate that marital therapies operate differently and there may be some improvement in outcome if therapists tailor marital therapy interventions to match the couple's presenting problems and characteristics. The differences between short-term and longer-term predictors indicate the need to continue to perform long-term outcome studies in order to better understand how couples change over time. This will allow researchers to determine the areas of marital distress that must be targeted in order to maintain long-term improvement.

The Importance of Clinical Significance.

Although efficacy studies provide useful information about the success of various modes of therapy, some (e.g. Jacobson & Follette, 1985; Schmitz, Hartkamp, & Franke, 2000) have questioned the relevance of these studies due to their focus on group means and statistical significance. They argue that interventions may be deemed effective that, in reality, have not had a noticeable impact on the client. In order to better identify those treatments that significantly impact the client, Jacobson and colleagues (Jacobson & Follete, 1985; Jacobson & Revenstorf, 1988; Jacobson & Truax, 1991) developed a method of assessing the change that occurs from pre-treatment to post-treatment for the individual. This method includes two factors: reliable change and clinically significant change.

Reliable change is an indication that the change that occurred in the individual's score is due to the intervention rather than chance. The change in an individual's score must be large enough to rule out the change as a simple

measurement error. The reliable change index (RC) tests the significance of an individual's score using the formula:

$$RC = \frac{x_{\text{post}} - x_{\text{pre}}}{S_{\text{diff}}}$$

where

x_{pre} = individual pre-test score

x_{post} = individual post-test score

S_{diff} = standard error of difference

Reliable change scores that are greater than +/- 1.96 (.05 level) indicate reliable change (Jacobson & Truax, 1991). A score that falls in the area of uncertainty (between -1.96 and 1.96) cannot be classified as improved or deteriorated, even if there is a change relative to the pre-test scores. Individuals whose scores are outside this range can be deemed "reliably improved," but do not necessarily meet the criteria for clinical significance.

Jacobson and Truax (1991) describe an individual's score as clinically significant if it is more likely to be from the functional population rather than the dysfunctional population. The cut-off point for clinical significance is usually the midpoint between the means of the dysfunctional and functional populations (Jacobson & Revenstorf, 1988). This point can be determined for a measure when normative data for functional and dysfunctional populations are available using the formula:

$$C = \frac{s_0 M_1 + s_1 M_0}{s_0 + s_1}$$

where

s_0 = standard deviation of the normative sample

s_1 = standard deviation of the dysfunctional sample

M_0 = mean of the normative sample

M_1 = mean of the dysfunctional sample

While Jacobson and Truax's (1991) equations for determining reliable and clinically significant change have been used frequently in marital therapy outcome research, other methods have also been introduced. New equations have been developed that claim to be more sensitive and better able to reliably separate those who have responded to therapy from those who have not. McGlinchey, Atkins, and Jacobson (2002) compared 5 different methods for assessing clinical significance. They found that all five were able to successfully predict relapse from chance discrimination, but there were no significant differences between the methods. These results were replicated by Bauer, Lambert, and Neilsen (2004) who found that the Jacobson and Truax method was comparable to several other methods for determining clinical significance. Therefore, for the purposes of this study, the Jacobson and Truax (1991) method is used.

Clinical Significance Cut-Offs on Three Major Therapy Outcome Measures

Demonstrating reliable and clinically significant change in therapy outcome studies has become an important focus of the literature. This standard has been applied to marital therapy outcome studies by researchers (Jacobson & Follette, 1985; Jacobson & Truax, 1991; Schmitz et al., 2000) who have interpreted results using three widely-used outcome measure in this literature: the DAS (Spanier, 1976), a measure of marital satisfaction; the Areas of Change Questionnaire (ACQ; Weiss, Hops, & Patterson, 1973), a measure of perceived problem areas in the relationship; and the Symptom Checklist 90-revised, (SCL-90-R; Derogatis, Rickels, & Rock,

1976), a measure of individual distress.

The principles of reliable and clinically significant change were applied to the DAS and ACQ in a study that compared behavioral marital therapy (BMT) to a wait-list control group and to two components of BMT (Jacobson & Follette, 1985). These components were behavioral exchange, which aims to increase the frequency of positive interactions and communication/problem-solving, which involves teaching the couples communication and conflict reduction skills. A total of 60 couples were divided among the four groups and they were given outcome measures at pretreatment, post-treatment, and at a 6-month follow-up. Jacobson and Follette (1985) found that 72.1% of the treated couples demonstrated reliable improvement on the DAS at post-treatment and 62.8% of these couples showed reliable change on the ACQ. Only 17.6% of the wait-list couples demonstrated reliable change on the DAS and 23.5% improved on the ACQ. Using a DAS cut-off of 97, 58.1 % of the treated couples showed clinically significant improvement, compared to 11.8% of the wait-list couples. Further, 55.8% of the treated couples demonstrated clinically significant change on the ACQ (cut-off of 21), while 11.8% of the control group showed clinically significant improvement. The differences between the treatment group and wait-list control group were all statistically significant.

Jacobson and Truax (1991) further elaborated on the use of clinical significance with the DAS (Spanier, 1976). They discuss the previous use of a DAS cutoff of 97, but question the use of that cut-off due to Spanier's inclusion of couples in the normative group, regardless of their level of marital satisfaction. Including distressed couples in the normative group shifts the distribution in the direction of dysfunction (Jacobson & Truax, 1991). For this reason they assert that a more

appropriate cut-off for the DAS is 105. This is a more conservative cut-off that is two standard deviations beyond the dysfunctional mean in the positive direction. Using this criteria to analyze the results of 30 couples who received BMT, Jacobson and Truax found that 33% of the couples demonstrated reliable and clinically significant improvement, 30% showed reliable change, and 37% did not improve significantly or showed deterioration. The use of the 105 cut-off for the DAS has generated some controversy and it has been suggested that it increases the likelihood of Type 2 error. As the cut-off of 97 is still more commonly used in research, this study used this cut-off.

Schmitz et al. (2000) calculated clinical significance and reliable change cut-offs for the SCL-90-R. The authors developed two cut-off points to separate the functional population from the moderately symptomatic population (persons in need of outpatient services) and this moderately symptomatic population from the severely symptomatic population (those in need of inpatient treatment). Schmitz et al. calculated these cut-offs for the Global Severity Index (GSI) of the SCL-90-R, as well as nine subscales. The GSI cut-off was .60 between the functional and moderately distressed populations and 1.20 for the moderately to severely distressed populations. As clinical significance data is available for the DAS, ACQ, and SCL-90-R, it is quite beneficial to use these measures in marital therapy outcome studies to facilitate the comparison of results between studies.

Support-Focused Marital Therapy: Theoretical Considerations

Support-Focused Marital Therapy is an approach to marital distress that builds on the existing approaches described above, while adding new theoretical considerations and interventions. It draws from many areas of interpersonal and inter-

relational research including: social support, triangulation, derogation, communication, and conflict avoidance. SMFT is also informed by research on gender differences and therapeutic alliance. Understanding the influence of these areas has on marriage and marital satisfaction will help illustrate the unique ways in which SMFT helps couples experiencing marital distress.

Social Support

Social support is a complex concept that has been defined in several ways (Barrera & Ainlay, 1983; Cutrona, 1996). Generally, social support involves the concept of individuals relying on each other to meet basic needs. These needs may be emotional, but they also may be more practical in terms of needing assistance in reaching goals or reassurance to improve self-esteem. Cutrona, (1996) indicates that social support involves both on-going requirements for well-being such as love, caring, esteem, and belonging, as well as needs that originate due to a crisis in a person's life. Most adults perceive their spouse as their primary source of social support (Levinger & Huston, 1990), suggesting that spouses look to their partners not just for emotional support, but also for goal and self-esteem support.

Types of social support. Couples that provide each other with emotional support, such as supportive communication, may strengthen their sense of trust and the emotional bond. This bond can help couples better cope with difficulties in their marriage. Further, in times of stress, emotional support between spouses can reduce feelings of isolation, prevent conflict escalation, and reduce the likelihood of depressive symptoms (Cutrona, 1996).

Goal support is defined as support for feasible objectives that carry personal meaning for an individual such as personal strivings, current concerns, or life tasks

(Brunstein, Dangelmayer, & Schultheiss, 1996). Brunstein et al. investigated the link between perceived goal support and marital satisfaction. They evaluated goal support by asking spouses to rate the amount of appreciation, encouragement, and participation in their goals they received from their spouse. Subjects were also asked to rate spousal behavior that conflicted with their personal goals. Brunstein et al. focused on perceived support rather than indicators of the partner's intent to be supportive, because research indicates that it is the perception of support, rather than the partner's intent that is most closely related to more successful stress management (Cutrona, 1996). In addition to measures of perceived support, subjects also completed the Dyadic Adjustment Scale (Spanier, 1976) to measure marital satisfaction. Brunstein et al determined that perceived goal support contributed significantly to marital satisfaction.

The third area of social support involves self-esteem support. Self-esteem is one's sense of worthiness in areas such as social acceptability, competence, physical self-concept, and global self-worth (Harter, 1983). Self-esteem support is the affirmation of one's worth and value that is provided by a partner. This emotional acceptance and affirmation of the partner is an important component of marital therapy and is often used to help improve marital relationships (Katz, Beach, & Anderson, 1996). Rugel (1997) particularly emphasizes the social acceptability domain of self-esteem, as defined by Harter, because of the partners' core needs to be loved, valued, and accepted by each other.

Like goal support, research indicates that it is perceived, rather than actual partner esteem that is important to marital satisfaction. Perceived esteem is the subject's perception that he or she is valued and deemed worthy by the partner. Katz

et al. (1996) explored the influence of perceived esteem on marital quality. They found that partners who felt undervalued by their spouses had significantly lower levels of marital quality than those partners who perceived being verified or overvalued. Thus, the perception that one is valued by one's partner may influence marital adjustment.

Mechanisms of social support. While evidence suggests a relationship between social support and marital quality, there are competing theories regarding how social support improves marriages (Burman & Margolin, 1992). The main effects model proposes that high levels of social support promote happy marriages regardless of stress level. Another model is the stress-buffering model. It states that social support diminishes the negative effects of stress, but is less important during periods of no stress. Lastly, the social strain model proposed by Rook (1990) states that it is the quality of marriage that is most important and that troubled relationships may disrupt well-being.

The main effects and stress-buffering models were compared in a study that examined the ability of social support to enhance marital quality. Franks and Stephens (1996) studied husbands' support for wives who were the primary caretakers of impaired parents. Both emotional support in the forms of husbands' expressed care and concern about wives' responsibilities and instrumental support in the form of husbands' assistance with caregiving tasks and household chores were evaluated. The results of this study generally supported the main effects model in that spousal support resulted in greater marital satisfaction for the wife, regardless of the amount of caregiving stress experienced. Some support for the buffering effects model was demonstrated in that wives whose husbands provided more instrumental support to

the parent experienced better health at higher levels of stress when compared with those whose husbands provided less support. These results again indicate that social support significantly influences marital quality, although the mechanism by which this occurs remains unclear.

Other research has extended these findings into more specific areas. Vinokur, Price, and Caplan, (1996) proposed that social support is related to the effect of specific life stressors such as the loss of a job. They hypothesized that social support would mediate the effect of job loss on marital satisfaction. The loss of a job is likely to increase frustration, depression, and hostility among couples, but these negative consequences may be buffered by supportive interactions. Vinokur et al. studied 693 couples and determined social support was a mediator between this life stressor and the couples' relationship satisfaction. Couples who were able to provide social support during the crisis surrounding the loss of a job experienced less deterioration in marital satisfaction than those couples who were not able to provide support to each other during this difficult situation.

While it is important to examine the benefits of social support, it is also necessary to explore what occurs when social support is lacking. There are several patterns of negative interaction that develop as a result of spouse's perceived lack of support and the self-esteem threat that engenders.

Triangulation

Triangulation is a harmful pattern of marital interaction that occurs when a spouse feels excluded within the marriage due to a third party or activity (Bowen, 1978). The outside force can be a spouse's career, friends, or an extramarital affair. The relationship is strained due to the spouse's perception that the partner cares more

for something or something else than for the spouse. Rugel (1997) states that in marital relationships where the partners are aligned on the same side of the triangle, to the exclusion of careers, families, and hobbies, the relationship is secure and self-esteem threat does not occur. When a spouse feels excluded, however, self-esteem threat occurs.

Rugel (1997) suggests that marriages may be destabilized by these real or imagined third parties who reduce the amount of attention and affection received by the spouse. A triangular situation can fuel negative self-evaluations by the spouse. Lakey, Tardiff, and Drew (1994) demonstrated that negative social interactions predicted psychological distress, low self-esteem, lower interpersonal trust, and dysfunctional attitudes about self and others. Thus, the self-esteem threat posed by triangulation can lead to interpersonal and intrapersonal difficulties.

Derogation and Escalation

Derogation refers to negative verbal and nonverbal communications that cause the spouse to feel attacked or humiliated. The perception of derogation by one partner can set off a pattern of negative interactions where the attacked partner protects the self by attacking back. This exchange of negative feedback causes both partners to feel self-esteem threat and increase the likelihood that the situation will escalate and become more volatile (Rugel, 1997). Dissatisfied couples are significantly more likely to demonstrate this pattern than satisfied couples (Bradbury & Fincham, 1992).

Research has delineated several forms of derogation. Gottman (1994) outlines four types of derogation that indicate troubled relationships: criticism, contempt, defensiveness, and stonewalling. Criticism occurs when a partner attacks their

spouse's personality or some aspect of their character, rather than a specific behavior or situation. Contempt involves a partner's successful attempt to insult or emotionally abuse their partner. Gottman states that contempt often leads to defensiveness, as the partners use their energy protecting themselves from attack rather than problem solving. Lastly, defensiveness can lead to stonewalling, a situation where both partners discount each other and communication ceases.

The literature regarding derogation and escalation repeatedly demonstrate its devastating effect on marital relationships. Derogation is more likely to occur when couples are facing an external stressor, such as financial difficulties or illness. Vinokur et al. (1996) found that couples facing a stressful situation were more likely to engage in derogatory interactions and their marital satisfaction decreased significantly. Cutrona (1996) further emphasized the impact of derogation in her research demonstrating that negative interactions, such as criticism and sarcasm, may have more impact on relationship satisfaction than positive behaviors. Thus, providing assistance and encouragement is helpful in a marriage, but it is not enough to counteract the damage caused by derogation and escalation.

Communication and Conflict Avoidance

Open communication is a hallmark of successful marriages. In order for couples to resolve misunderstandings and problem situations effectively, both partners must feel comfortable sharing their ideas and opinions and feel that they will be listened to and understood. Couples that are able to communicate openly can address conflicts quickly and avoid building up resentment (Haefner, Notarius, & Pellegrini, 1991). In distressed marriages, partners are often uncomfortable sharing

with each other and avoid self-disclosure. This lack of open communication impedes them from resolving conflicts effectively.

Christensen and colleagues have examined a common communication pattern in distressed marriages called the pursue-withdraw pattern (Christensen & Heavey, 1993). The pursue-withdraw occurs when the wife demands attention and is critical of the husband, while the husband withdraws and distances himself from the wife. They speculate that the women more often pursue their husbands because the changes they desire in their relationship (i.e. help with housework or child care), require the assistance of the husband. Husbands withdraw to protect the status quo.

Because Christensen and Heavey (1993) found that nearly 60% of all couples engage in the pursue-withdraw pattern, they explored several theories that may explain the pattern. Heavey, Layne, and Christensen (1993) proposed a gender differences model that claims that women are socialized to place greater emphasis on relationships and may pursue when their husbands withdraw in order to maintain the connection. This can, however, lead to polarization. They also explored the conflict structure model which states that men withdraw in order to protect their greater status and power in the relationship. Conflict arises as men withdraw to maintain the status quo while women pursue to make changes that will equalize the relationship (Heavey et al., 1993).

To test these models, Heavey et al. (1993) videotaped 29 married couples during the course of two conversations. In one discussion the couple discussed a change the husband would like from the wife, while the second discussion centered on the wife's request for change in the husband. They discovered that couples engaged in the pursue-withdraw pattern when discussing the wife's suggestion for change, but

did not do so while discussing the husband's suggestion. Heavey et al. concluded that the pursue-withdraw pattern is the result of both gender differences and social structure. It appears that women are more willing to change their behaviors to please men, so men did not have to pursue their wives to obtain change. In contrast, women escalate their requests for change as men withdraw to protect their position of status.

Weger (2005) examined the pursue-withdraw pattern in order to better understand the cognitions and emotions behind each partners' behavior. He asked husbands and wives to describe their negative interactions and answer questions about them. Weger determined that both husbands and wives feel less understood and supported after a pursue-withdraw interaction. While this is expected, he also noted that this perception of not being understood has particularly damaging effects on wives' marital satisfaction. Weger found that wives with lower levels of marital satisfaction were more likely to being withdrawing from their husbands, reversing the traditional pattern, and contributing to severe communication deficits in the marriage.

The pursue-withdraw is one example of communication avoidance, but there are other important forms of communication avoidance that also occur in distressed marriages. Rugel (1997) states that women may disregard their needs and priorities in order to meet those of their husband. They yield to their partner in order to maintain harmony in the relationship or out of fear of conflict. While yielding may maintain short-term harmony in the relationship, it is often at the expense of the wife's self-esteem, as she struggles to contain her anger and frustration with the situation. Rugel (1997) suggests that yielding in a relationship can be a functional part of a marriage, if both partners yield occasionally. When one partner consistently yields to the other, it can damage the relationship and lead to feelings of resentment.

Intimacy

Intimacy is an important part of successful relationships. In a review of several studies, Ries (1984) found that psychological health and well-being are most often the result of contact with intimate partners. The importance of intimacy in relationships is also supported by the fact that most of the difficulties raised in therapy are related to intimacy (Dandeneau & Johnson, 1994). Despite the importance of intimacy in relationships, it is a difficult concept to define. Harvey and Omarzu (1997) likened intimacy to their concept of minding the relationship. This concept involves behaviors and attributions that facilitate the relationship as well as self-disclosure from both partners. They concluded that intimacy and minding both result in feelings of acceptance and respect.

Research has repeatedly demonstrated the importance of intimacy, especially self-disclosure, in improving marital relationships. Dandeneau and Johnson's (1994) comparison of EMT and CMT on marital intimacy and satisfaction demonstrated that both types of therapy increased intimacy at posttest, but only the couples in the EFT group maintained the gains at follow-up. They proposed this difference in intimacy was related to differences in self-disclosure between the therapies. Specifically, EFT encourages the expression of emotion and vulnerability, both of which facilitate empathy and intimacy and encourage disclosure. CMT focuses on disclosure about thoughts rather than emotions, which may not increase intimacy in the same way. Thus, intimacy seems tied to the expression of affect and the ability of the partner to understand and empathize with these emotions.

While self-disclosure is important in the development of intimacy, the importance of partner responsiveness cannot be dismissed. Both husbands' and

wives' feelings of intimacy are based on their perception of partner responsiveness (Laurenceau, Feldman Barrett, & Rovine, 2005). Partners were asked to keep daily diaries to document self disclosure, partner disclosure, partner responsiveness, and feelings of intimacy. While self-disclosure and partner responsiveness predicted intimacy for both husbands and wives, self-disclosure was much less significant for wives. Partner responsiveness predicted wives' ratings of daily intimacy more than self or partner disclosure. This suggests that sharing personal information may be an important intimacy booster for men, but feeling understood and listened to is the most important intimacy factor for women.

Gender Differences

There are many well-documented group differences in thought, feeling, and behavior between men and women. In keeping with these findings, marriage often affects husbands and wives differently. For example, the quality of marriage plays a more important role in the mental health and marital satisfaction of wives, while simply being married is a stronger predictor of happiness, mental health and physical health for men (Gove, Hughes, & Style, 1983). Newton and Kiecolt-Glaser (1995) found that wives' marital satisfaction was significantly correlated with husbands' hostility while husbands' marital satisfaction was not correlated with wives' hostility. Husbands and wives differ on the importance of sex in the marriage (Schenk, Pfrang, & Rausche, 1983), what they perceive as supportive behavior, and even in their definition of marital satisfaction (Brunstein et al., 1996). While these gender differences are statistically significant, it is important to note that these studies, as well as those described below, based on group means and are not necessarily true for all men and women.

Gender differences are particularly notable in the literature involving social support. While social support is important to both wives and husbands, men and women differ significantly in how and why they seek social support. Husbands are more likely to rely on their wives alone for social support whereas wives seek support from friends and family in addition to their husbands (Antonucci & Akiyama, 1987). Further, men and women seek different kinds of social support. Women seek support in the form of affirmation and appreciation from their spouses, but are also interested in receiving tangible support in the form of help with child care and household tasks (Cutrona, 1996). Men also seek emotional support and intimacy, but are more interested in receiving support of goals outside the relationship. Thus men are more satisfied if they feel their spouse supports their career and other external goals, while women derive marital satisfaction when they perceive their husbands support for relationally-oriented goals (Brunstein et al., 1996).

Gender also plays a significant role in how partners offer support. Dehle and Landers (2005) studied personality traits and social support. They found that wives were more likely to consider their husband's personality traits when providing support. Men in the study were more likely to offer their wives support based on their own personal beliefs and preferences. Dehle and Landers suggest that wives process information in relational terms and are better able to adjust the type of support they offer to meet the needs of their spouse. This idea is supported by research that demonstrates wives are more likely to vary their attributions based on a specific event, while husbands tend to make attributions based on their personal cognitive constructs (Sanford, 2005). Taken together, these studies suggest that women are better able to use their understanding of their partner and the specific situation to modify their

approach, while husbands tend to be more consistent in their response, regardless of the context.

Communication is another area in which men and women differ significantly. In fact, communication difficulties are the most common presenting problem in marital therapy (Wolcott & Glezer, 1989). Women tend to encourage conversations through the use of tag questions (It's fun, don't you think?) and back-channel responses (uh-huh) more often than men (Ickes, 1993). Women are also more likely to make tentative statements and agree with others rather than boldly assert their opinions and confront those who disagree. Tannen (1990) suggests that traditional gender roles help explain differences in communication styles. The traditional female gender role is more socially oriented and emphasizes solidarity and closeness, while the traditional masculine role emphasizes power and status.

Gender-role orientation plays an important part in the gender differences noted above. The traditional feminine and masculine roles may yield strong associations, but research indicates that these concepts are quite broad. Feiring (1999) noted that masculine characteristics can include assertiveness, aggressiveness, competitiveness, independence, and achievement orientation. Feminine characteristics may include nurturing, caring, focus on others, self-disclosure, and dependence. Rugel (1997) describes men as having an autonomous orientation, while women are relationally-oriented.

Gender role differences can be the source of marital dissatisfaction and conflict as partners are not always able to understand the goals and needs of their partner (Rugel, 1997). Marital conflict is particularly likely in marriages that contain a traditionally masculine man and a traditionally feminine woman. Ickes (1993)

found that these couples reported poor interactions, were less satisfied, and had the lowest amount of marital satisfaction when compared to other combinations of high/low femininity/masculinity husbands and wives. Couples where both partners are androgynous, that is, they exhibit both relational and autonomous orientations, are the most satisfied (Peterson, Baucom, Elliot, & Farr, 1989). Research has also demonstrated that marital satisfaction is related to femininity in both husbands and wives (Antill, 1983). Having a partner who is caring, willing to express emotions, and able to provide support and empathy is an important component of a happy marriage.

Both evolutionary and socialization hypotheses have been developed to explain the formation of gender roles. Evolutionary hypotheses are based on the innate biological and genetic differences between men and women (Buss & Schmitt, 1993). These researchers propose that the nurturing and social orientation common in women is a result of their role as child-bearers and caretakers. The likelihood that a woman's genes would be passed on was based on her ability to care for her children. Men have a more indirect link to their children because they provide resources such as food and protection. Thus, women developed a relational orientation that focused on caring for others, while men developed an autonomous orientation that sought to maintain power and resources.

Socialization or culturally based explanations of gender differences rely on social learning theory, rather than evolution. Gender roles are shaped by cultural beliefs and practices. Ickes (1993) describes several socialization models. These include the gender role socialization model, which proposes that individuals observe the attitudes and behaviors that culture defines as appropriate by observing other

males and females. Over time, these beliefs and behaviors are imitated and internalized. Another explanation is the situation model that suggests that gender differences develop as a result of the different organizations in which men and women spend their time (i.e. work for men, home for women). Ickes also discusses the oppression model that sees gender roles as a reflection of the power differential between men and women. Men instill gender roles in order to maintain the imbalance of power. While these hypotheses differ in important ways, each emphasizes the importance of learning gender roles from the social environment.

Both the evolutionary and socialization models are useful in understanding marital conflict and dissatisfaction. Both theories indicate that women and men have different experiences from a very early age and different biological mandates that influence how they think, feel, and behave. These models fall short in that they are unable to account for the research that indicates that couples where both partners have traditional orientations are less satisfied in their relationships. This concept is referred to as the fundamental paradox (Ickes, 1993). A partial explanation of the fundamental paradox is that traditional gender roles are a product of genes and cultural norms that clash with the current Western culture. As women enter the workplace and become equal breadwinners, families must adjust to meet the social and emotional needs of family members. Rugel (1997) suggests that men need to increase their relational awareness and behaviors just as women have increased their role in obtaining resources. Imbalances in the work force are diminishing, yet they remain at home, where women still perform most housekeeping and childcare responsibilities (Biernat & Wortman, 1991). The reticence of men to take on more household responsibilities may represent an unwillingness to change traditional roles and relinquish their

privileges within the marriage (Heavey et al., 1993; Rugel, 1997). Marital stress and dissatisfaction can stem from the inequity in household responsibilities, as women become not only tired, but angry and depressed regarding the perceived injustice.

Therapeutic Alliance

One area of research that plays an important role in marital therapy in general, and Support-Focused Marital Therapy in particular, is the relationship between the therapist and the clients. This therapeutic alliance includes both the ability of the therapist to establish an emotional bond with the clients and the therapist and clients agreeing on the tasks and goals of therapy (Weinberger, 1995). Borkin (1979) proposed that there are three separate components of therapeutic alliance: bonds, goals, and tasks. Bonds are the quality of the interpersonal relationship between the client and therapist. This includes the client's feelings that the therapist cares about and accepts them. Tasks involve the therapist's ability to help the client gain an understanding of the relevance of the methods and techniques of therapy. Lastly, the goals aspect of therapeutic alliance refers to the extent to which the therapist and client agree on the objectives of therapy. Borkin states that all three components are necessary for a strong therapeutic alliance.

Research indicates that the quality of the therapeutic alliance is significantly related to outcome (Horvath & Greenberg, 1989; Johnson & Talitman, 1997). Johnson and Greenberg (1985) found that the emotional bond between therapist and clients may play a stronger role in therapy than tasks and goals. It is likely that clients must first feel accepted and secure in the therapeutic relationship before they are able to focus on the tasks and goals of therapy. Developing a therapeutic alliance is a special challenge in marital therapy, as the therapist must develop ties to each spouse

individually and as a couple (Bourgeois, Sabourin, & Wright, 1990). This may be particularly difficult with husbands who are less likely than wives to discuss intimate issues. Rugel (1997) states that this reticence to explore emotional issues may make it more difficult for the therapist to develop a strong bond with husbands. Sperry and Maniaci (1998) emphasize the need for therapists to convey to the couple that neither of them is to blame, rather they both contribute to difficulties in the relationship.

The Support-Focused Marital Therapy (SMFT) Approach

SFMT is designed to address the five areas of marital distress discussed above: 1) lack of support, 2) triangulation, 3) derogation and escalation, 4) communication avoidance, and 5) lack of intimacy. Couples are encouraged to become more aware of the impact their behavior has on their spouse, as well as begin to examine the process of their interactions.

In the SFMT approach, marital distress and deterioration begins with perceived lack of support followed by increased anger and decreased companionship and intimacy. When a partner feels this lack of support from their spouse, the partner begins to feel intentionally disregarded. The perception that the partner is withholding support and affection can become so pervasive that the spouse becomes less willing to offer help and support. Feeling intentionally disregarded elicits feelings of anger and hurt which compromises a spouse's ability to be tactful and polite. Criticism, derogation, and hostility replace positive behaviors and can create an environment so negatively charged that the couple is unable to remain friends, companions, or lovers. Over time they begin to avoid each other and the pattern of lack of support, disregard, avoidance, and misunderstanding continues.

The goal of SMFT is to disrupt this cycle by encouraging partners to consistently ask themselves the following questions:

- 1) Is this important to my spouse?
- 2) How do I contribute to the problem by appearing not to care?
- 3) How can I act in a way that is more responsive to my partner and shows that I care?

These questions are designed to facilitate change in the couples' thoughts, feelings, and behaviors. The first question encourages spouses to accept that their partner may hold different views and opinions from their own. The ability of spouses to acknowledge that an issue is important to their partners, even if it is not important to them, will benefit the relationship. By being aware of a spouse's views and honoring them, the partner is offering esteem support to their spouse.

The second question encourages the partner to consider his or her role in the dynamics of the relationship. The spouse must examine how his or her behaviors invoke unwanted behavior from the spouse. This can help spouses understand the interlocking nature of their own and their partners' behaviors and more importantly, they realize the power they have to influence how their spouses feel about and react to them.

The third question highlights the partners' ability to effect change by working to alter patterns of mutual disregard. Couples are encouraged to replace negative behaviors with supportive and caring behaviors in order to achieve their goals of improving their marriage. Thus, SMFT helps partners evaluate their contributions to marital distress and change their own behavior in order to improve their marriage.

SMFT posits that improvements in the relationship will occur in the presence of supportive behavior, but also emphasizes the role of self-esteem. The therapist must communicate to the couple that partners can impact the self-esteem of their spouses through their behavior. Partners are encouraged to consider the effects of their actions on the self-esteem of their spouse. SMFT helps the couple to recognize behaviors such as withdrawing and attacking and to understand how they may be perceived as a threat to their partner's self-esteem. In this way couples are able to see how each contributes to the cycle of mutual disregard and how each has the ability to break the cycle by acting to bolster their partners' self-esteem. Using these themes, SFMT addresses the following areas:

Increasing Support

In distressed marriages it may appear that one partner's needs are frequently disregarded and that partner must take on a disproportionate amount of responsibility in the relationship. Three common patterns of lack of support are: 1) husband's lack of support, 2) wife's lack of support, 3) mutual lack of support.

The most common pattern addressed in SFMT is the husband's lack of support. This pattern often stems from the socialization differences between men and women described above. Thus, traditional marriages are typically organized around meeting the husband's rather than the wife's needs (Heavey et al., 1993). When this pattern occurs, the wife expresses her negative feelings about this inequity through complaints and criticisms. The husband responds by becoming defensive and withdrawn, rather than more helpful. As the wife's anger increases, she begins to pursue the husband with more energy, which encourages him to retreat further. When the pattern of husband's lack of support is present, the goal of SFMT is to increase the

husband's support which will relieve him of his wife's criticism and anger. A secondary goal is to help the wife better manage her anger and depersonalize her husband's need for autonomy.

The second pattern involves the wife's failure to support her husband. When this pattern occurs, the husband is often passive and people-pleasing, while the wife is self-involved, sometimes to the extent that she suffers from a personality disorder. The wife is completely unaware of her husband's needs and demands a great deal of attention from him. The husband indulges his wife's demands because of his own passivity or as a result of her manipulation. SFMT works to increase the wife's awareness of her husband's needs, while encouraging the husband to be more assertive and maintain appropriate boundaries. In this way the husband is able to withstand unrealistic requests from his wife.

The third pattern is one of mutual lack of support and disregard, which may result in power struggles. Partners exhibit an "I'm right, you're wrong" attitude and dismiss the needs and opinions of their spouse if they differ from their own. SFMT helps to resolve the impasse by encouraging each spouse to acknowledge the legitimate feelings and needs of the other spouse and recognize when an issue is more important to their spouse. They learn that supporting the spouse, even when it doesn't seem important, can help reduce conflict.

Decreasing Triangulation

As described earlier, triangulation occurs when one partner is involved with some third party, to the exclusion of the spouse. Two triangular patterns are common in distressed couples. This first pattern is an isolated husband who feels excluded from the family and parenting issues. A common example is a wife who views her

husband as overly harsh in his discipline of their children and responds by protecting them. Her actions undermine his attempts at discipline and fail to provide a united parental front to the children. Arguments follow as the husband feels disrespected and left out of the family and the children take advantage of their divided parents. SFMT works to break this pattern by helping the couple develop and present a united front. They must negotiate a position that avoids harsh treatment and does not undermine the husband. The husband learns to understand his wife's concern for the children, while the wife learns to be supportive of her husband's interactions with them.

Another common triangulation pattern involves the isolated wife who feels excluded because of her husband's preoccupation with work or leisure activities. The wife feels that her husband would rather spend time at work or engaged in a hobby than with her. This interest is a self-esteem threat to the wife and she becomes angry and critical in pursuit of her husband. Although it is possible that the wife has overpersonalized her husband's actions and her interpretation of his priorities is skewed, her angry attacks may create tension that drives the husband to seek refuge in work or other activities. Thus, the perception becomes reality. The goal of SMFT in this situation is to help the husband understand his wife's experience and engage in actions that detriangulate the situation. A secondary goal is to help the wife depersonalize situations where her sense of exclusion is not realistic.

Reducing Derogation and Escalation

As discussed earlier, the downward spiral of negative and derogatory behavior is common in deteriorating marriages. One pattern of derogation-negative escalation is characterized by volatile exchanges between partners where both are emotionally

reactive and willing to battle their spouse. One partner attacks the other, who responds in kind and both partners become increasingly harsh and critical. This pattern is damaging to the both the quality of the relationship and to both partners' self-esteem.

Another pattern of derogation-escalation is more subtle and conflict-avoidant. These couples use innuendo, sarcasm, or a negative tone of voice to convey their devaluing message. Over time, the repeated use of these tactics results in an imbalance in the relationship. The subtle, yet critical spouse uses these remarks to remain "one-up" in the relationship while the other partner experiences the threat to self-esteem that comes with continuously being in the "one-down" position. Couples work hard to avoid being wrong in order to protect self-esteem. SFMT helps couples recognize that an emphasis on right and wrong results in one partner feeling devalued. Further partners are encouraged to see their partner's perspective and recognize their contributions to the problem in order to facilitate mutual concern for their spouse. Couples are taught to de-escalate by refraining from responding to derogatory remarks made by their spouse.

Encouraging Open Communication

Clear communication is vital in order for spouses to be able to meet the needs of their partner. Poor communication may be the result of low self-esteem, an autonomous orientation, or poor conflict resolution skills. Partners with low self-esteem may not convey their needs to their partner because they don't feel their needs are important enough to address. The belief that their needs are not legitimate may even prevent some partners from being able to identify their needs. Spouses with low self-esteem may also fear rejection and sacrifice their needs in order to meet every

need of their partner. Over time, this fearful partner may become resentful and withdraw, or become angry because their partner “should know what I need.”

Communication can also be hampered by the autonomous orientation of spouses. These spouses, often husbands, may credit their professional success to their independence and lack of vulnerability. Expression of needs may have been discouraged in their family of origin or work place. When spouses apply the same standards of independence within their marriage, the relationship suffers because their spouse is unable to consider their needs. This pattern results in an emotionally distant and cold relationship.

Poor communication can also be the result of difficulty resolving differences. Conflict-avoidant spouses avoid raising issues for fear of their partner’s reaction, which they predict will be hostile or rejecting. Passive-aggressive spouses also avoid open communication with their spouse and instead, fulfill their needs secretly. This pattern results in evasive conversations, lies, secretive behavior, and an erosion of trust between the partners.

SFMT assists partners in becoming more direct in their communication. Partners learn to express their needs clearly and discover that their inability to share their needs limits their partner’s ability to respond appropriately.

Increasing Intimacy

Deteriorating marriages are marked by a growing distance between the partners. Couples fail to engage in pleasurable activities such as evenings away from the children, having sexual relations, or even discussing the day’s events. When couples begin to fight and become critical, they protect themselves by denying their need for closeness and affection. They may even experience their partner’s attempts

at intimacy as an invasion of their privacy. SFMT works to tear down the barriers each spouse has erected to protect themselves. Therapists must be mindful, however, that encouraging partners to open themselves to each other increases their vulnerability. Thus, therapy must first focus on increasing support, decreasing derogation, and improving communication before asking the couples to take the risks required to experience greater intimacy.

The Structure of Support Focused Marital Therapy

SFMT involves 12 weekly, one hour sessions of therapy. The third and fourth sessions are individual session with each spouse and the remaining sessions are conjoint. Therapy was conducted by clinical doctoral-level students and recent Ph.D. graduates of George Mason University. Supervision consisted of at least 1 ½ hours per week provided by Dr. Rugel.

The Role of the Therapist

SFMT requires the therapist to be a relationship instructor and take on many roles to improve the quality of the marital relationship. An effective therapist is, at times, a conveyor, translator, reframer, advocate, gatekeeper, mediator, behavior modifier, and homework checker. One of the therapist's first tasks is to gain the perspective of each partner and determine the major areas of distress. The therapist then conveys the inner experience of each partner to the other by summarizing their perspective. The therapist reframes each spouse's viewpoints by identifying misinterpretations of intent, finding the positive aspects, and helping each partner re-examine the issue from the other's position.

The therapist may translate a partner's behavior as self-esteem protection or educate the spouses about socialization differences. They may advocate for a spouse

when a couple has become tolerant of destructive and inappropriate actions such as abuse of drugs or alcohol. Early in therapy the therapist must function as a gatekeeper, when conversations are particularly intense. The therapist may also assign specific homework assignments to encourage behavioral changes that both partners can easily identify and respond.

The Therapeutic Process

SFMT helps spouses understand that the power to effect change in their relationship rests with them, through changing their own behavior. The therapist encourages each spouse to change the way they respond to and interact with their spouse in order to improve the relationship. This approach contradicts the common stance partners begin with in therapy, which focuses on relaying to the therapist what behaviors their partner must change. Helping each spouse focus on their own behavior, frees the therapist to encourage the other spouse change. Couples are advised that the process of behavior change and marital improvement is not linear, but involves movement in the right direction as well as lapses and recurrences of old behavior.

In order for the therapist to effect change in the couple's relationship, it is vital to establish rapport with both partners. This can be achieved by carefully listening and gaining an understanding of each partner's perspective and conveying that understanding through empathic probing. When both partners have expressed their concerns, the therapist works collaboratively with the couple to develop appropriate goals for therapy. The subsequent sessions are used to explore the actual interactions between the couple to deepen the understanding of each partner's experience of those interactions. The therapeutic alliance allows the therapist to offer observations about

negative patterns that appear in the sessions. Identifying lack of support, derogation, or poor communication when it occurs in the session is a power tool for behavior change.

The process of change in marital relationships is often quite difficult, as negative behavior patterns become habitual. SFMT addresses this concern by including homework assignments designed to break entrenched behaviors and foster new patterns of interaction. Early in therapy each spouse may be encouraged to ask themselves “What can I do to help?” As therapy progresses and the couple’s difficulties become more clear, homework tailored to the partners’ specific needs can be assigned. Homework assignments can involve increasing positive behaviors (i.e., going on a daily walk together) or decreasing negative behaviors (refraining from critical remarks). Each spouse may also be given different tasks that complement each other such as asking the husband to cook dinner once during the week and asking the wife to refrain from making editorial comments about the meal.

A therapist may need to work more with some partners who have difficulty completing homework assignments. Couples may feel that an assignment to say “I love you” every day is awkward or uncomfortable. Thus, the therapist must work with the couple to create a new assignment that feels more natural and captures the essence of the task. Further, the therapist might praise the couple for identifying their needs and clearly communicating them to the therapist. Throughout therapy the therapist must unearth, reframe, and reduce the obstacles to attempting and completing homework assignments.

One important component of SFMT process occurs as therapy draws to an end. Spouses must be encouraged to accept and respect that their spouses have

different needs and opinions from their own and this is not a personal rejection of them. Some differences cannot be overcome and each partner must learn to tolerate these different needs and wants. SFMT proposes that change in relationship is the result of a focus on mutual support and caring, self-change, and the therapist as a relationship instructor.

Efficacy of Support Focused Marital Therapy

Shapo (2001) conducted an efficacy study of SFMT and found that couples in the treatment group differed significantly from those in the wait-list group in both marital satisfaction and requests for change. Husbands also demonstrated this effect. With regard to reliable change and clinically significant improvement, Shapo found that 50% of wives and 14% of husbands showed reliable change, while 27% of wives and 5% of husbands showed clinically significant change in marital satisfaction. Wives in the SFMT group experienced more reliable improvement, recovery, and clinically significant change than wait-list wives, while there were no significant differences in these outcomes for husbands or couples.

In addition to comparisons between the wait-list and treatment groups, Shapo also examined several potential predictors of outcome. Demographic variables such as age, race, length of marriage, and number of children were not related to marital satisfaction for couples (Shapo, 2001). Marital satisfaction was positively correlated with age for wives, and household income was negatively correlated with marital satisfaction for husbands. Several therapist variables were examined and were not significantly related to outcome. Husbands' initial marital satisfaction (DAS) scores predicted outcome, with those with lower scores demonstrating greater improvements

than those with higher scores. This preliminary study of SFMT demonstrated its efficacy and began to explore the predictors of success for this type of treatment.

DeJonge (2001) provided further evidence for the efficacy of SFMT. She examined the wait-list couples, who received treatment after waiting for 12 weeks. DeJonge found that the wait-list couples also demonstrated significant improvement in marital satisfaction after receiving SFMT. Further, these couples showed significant decreases in anger from post-wait to post-treatment. Wait-list couples were compared to the treatment couples and DeJonge found no significant differences between the groups on demographic variables or magnitude of response to treatment.

In addition to outcome variables, DeJonge (2001) also examined the role of therapeutic alliance on SFMT outcomes. Couples' responses to the therapeutic alliance measure were correlated to marital satisfaction as measured by the DAS and approached significance for anger. Subscales of therapeutic alliance were also compared to the outcome measure. DeJonge found that bonds and tasks were positively correlated with the DAS and tasks alone were positively correlated with anger.

Comparing Support-Focused Marital Therapy to Other Therapies

As SFMT is a relatively new therapy, it benefits from vast psychotherapy research on factors related to positive therapeutic change. Thus, SFMT draws from existing therapies such as EFT, CMT, and BMT, and extends them in new ways.

SFMT shares specific techniques and ideas with EFT, CMT, and BMT. Like EFT, SFMT acknowledges the importance of affect in both establishing a bond with the therapist and exploring negative interactions (Johnson & Greenberg, 1985; Rugel, 1999). In both therapies a spouse's painful inner experience is shared with the other

spouse to create an emotionally-charged atmosphere where a corrective emotional experience can occur. SFMT, like CMT, helps partners to self-disclose, which helps them understand the other's perspective. This conversation can help to reframe negative attributions and modify unrealistic beliefs (Dattilio & Padesky, 1990). SFMT shares with BMT an emphasis on homework assignments designed to encourage behavioral change, direct communication and problem-solving skills.

While SFMT shares aspects of these approaches, it is significantly different from each. Significant differences exist in the theoretical foundations of SFMT, which include social support, self-esteem, and gender differences (Rugel, 1995, 1997). Unlike SFMT, BMT's foundation lies in behavioral principles such as reinforcement and punishment and EFT is grounded in Bowlby's attachment theory. CMT's theoretical foundation involves the idea that how one thinks about himself, the world, and the future impacts feeling and behavior. Rather than focus on any one component, SFMT addresses affect, cognition, and behavior. Cognitive thought records, daily behavioral calendars, and early attachment issues are not emphasized in SFMT. Rather, SFMT is a more unified approach that encompasses both observable behavior and inner psychological events (i.e. affect and cognitions). SFMT is an attempt to synthesize various concepts in the marital therapy literature to create an effective treatment for marital discord.

The Current Study

The purpose of this study was to examine the efficacy of SFMT at six-month follow-up and predictors of therapeutic success over time. In this study, several independent sets of hypotheses were evaluated using a within-subjects design. Hypotheses were examined by comparing couples pre and post-treatment scores with

their follow-up scores. Because no significant differences between the treatment and wait-list couples were found, the groups were collapsed into one for the purposes of this study.

SFMT can be considered a possibly efficacious treatment, as it is superior to a wait-list control in one study. An important next step in documenting the utility of SFMT is to determine if the gains achieved at the end of treatment are maintained when treatment ends. This investigation included a comparison of means to determine statistical significance, but also involved the examination of reliable and clinically significant change. It was expected that couples would maintain their post-treatment gains at follow-up. Although it was not expected that demographic variables such as age, race, length of time married, etc. would predict efficacy over time for couples, these variables were examined. The variables that were significant for husbands at post-treatment were re-evaluated to determine their importance at follow-up. While demographic variables were not expected to effect efficacy over time, several other variables were examined as possible predictors. Hypotheses regarding therapeutic alliance, anger, and psychological distress were included to examine their impact on couples after treatment. Indicators of subjective well-being were explored in order to better understand how the couples fare when treatment ends.

Hypotheses:

1. At six month follow-up, couples will maintain post-treatment improvement in marital satisfaction. There will not be significant differences between post-treatment and follow-up scores on the DAS and ACQ for couples, husbands, or wives.

2. I predict that couples, wives, and husbands will maintain their scores on the measures of distress (RSE, STAS, SCL-90-R) and there will not be significant changes in these scores from post-treatment to follow-up.
3. Couples, wives, and husbands who demonstrated clinically significant improvement or reliable change on measures of marital satisfaction at post-treatment will continue to meet these criteria at follow-up.
4. 4a. Similar to post-treatment findings, race, length of marriage, length of time dating, number of previous marriages, education level, and number of children will not predict follow-up levels of marital satisfaction for couples. Variables for husbands and wives were examined separately to determine if the few variables that were significant at post-treatment continue to be related to marital satisfaction.

4b. It is also predicted that these demographic variables will not be related to changes in marital satisfaction from post-treatment to follow-up. The same demographic variables were compared to couples', husbands', and wives', changes in marital satisfaction from post-treatment to follow-up to look for any significant relationships.
5. The couple's subjective evaluations of therapeutic alliance will be related to marital satisfaction at follow-up. Couples' therapeutic alliance scores will be positively correlated with couples' scores on the DAS and ACQ at follow-up.
6. Pre and Post-treatment scores on the SCL-90-R and STAI will predict changes in marital satisfaction from post-treatment to six month follow-up.
7. I predict that some husbands, wives, and couples will respond to treatment in a strong way. I predict that there will be variables that reliably separate these

strong responders from the other participants. I will identify these strong responders and identify their unique characteristics.

METHOD

Participants

Married couples were recruited for the study between July, 1998 and June, 2000. The sample size was determined by the number of responses to recruitment efforts, the number of couples who participated throughout both the waitlist and/or treatment phases of the study, and those who completed and returned follow-up packets. The sample consists of heterosexual couples who reside in the communities surrounding a metropolitan area on the East Coast of the United States. The participants were recruited through newspaper advertisements placed in *The Washington Post* and through referrals to the project. While an ideal sample would include diversity of income, ethnicity, education, and number of marriages, due to the recruitment process and affiliation with a university, this sample was more educated, had a higher income, and was less diverse than an ideal sample.

In the initial phase, 11 couples were treated. The second phase involved randomly assigning couples to a wait-list or treatment condition. After a period of 12 weeks, the wait-listed couples received treatment. Thirty-seven couples were treated in this phase. A total of 48 couples completed treatment and will be treated as one group for the purposes of this study. Of the 48 couples, 36 returned the follow-up measures, a 75% response rate. This response rate is similar to other marital therapy follow-up studies of similar length (Kurdek, 1999).

Procedure

Couples interested in marital therapy contacted the George Mason University Marital Therapy Project after seeing an advertisement in the Washington Post or receiving a referral from an outside source. The initial phone conversation included a screening procedure to determine if the couple met any of the study's exclusionary criteria. Couples were excluded if they met any of the following conditions: 1) couples were not living at the same residence, 2) either spouse "had a problem" with drugs or alcohol, 3) physical violence had occurred in the relationship within the past year (including scratching, hitting, or pushing) 4) to the caller's knowledge, an extramarital affair was ongoing for either spouse, 5) to the caller's knowledge, either spouse had a serious mental illness that was untreated or exhibited suicidal ideation. These exclusionary criteria were selected in order to identify those couples for whom marital distress was the primary issue as opposed to couples who were struggling with problems that focused more on an individual or required crisis intervention. Couples were required to live together because the focus of treatment in SFMT is the daily interactions between the spouses. Further, an ongoing affair reduces the efficacy of therapy because the spouse involved in the affair has competing interests and may not have the resources to devote to marital therapy. Couples engaging in physical violence are inappropriate for SFMT because this problem typically requires more than 12 sessions to resolve and conceptualizes the interactional pattern between the husband and wife differently. Couples who appeared to meet the criteria for asked to set up a preliminary questionnaire session. Phone screenings were conducted by the project manager. During the 23-month recruitment period, 3 females served as project manager.

Due to the limitations of the telephone screening, some couples were not identified as meeting exclusion criteria until after they met with a member of the marital therapy project team at the preliminary questionnaire session. This session included another examination to determine substance abuse and domestic violence via the demographics questionnaire. Further, if both partners scored over 100 on the DAS, they were considered non-distressed and were excluded (Christensen & Heavey, 1999). If, during the course of therapy, the therapist learned that a couple met any of the exclusion criteria listed above, their data were not included in the study and they were referred for more appropriate treatment.

During the preliminary session, couples met with a Marital Therapy Project team member who described the study and provided information about confidentiality. Potential couples were given an informed consent letter that explained their rights as subjects in the study. Couples were informed that they would receive marital therapy at no financial cost. They were also told that their participation was voluntary and they could end their participation at any time, without consequence. Couples were told that all sessions would be audio-taped and these tapes, along with their questionnaires would remain anonymous and only identifiable by a code number.

After providing informed consent to participate in the study, couples were instructed to complete a packet of questionnaires carefully and thoroughly. They were told they had as much time as they needed to complete the packet. The team member asked that each spouse complete the packet without consulting their partner. The team member remained available to answer any questions. Couples were told that they would be notified within a week regarding their inclusion in the study and

that depending on which group they were assigned, they may not be able to start therapy for up to 12 weeks. All qualified couples were told they would eventually receive treatment. In addition, couples were notified that they could not receive marital therapy during the waiting period and still participate in the study. Couples were told that they would complete the questionnaire packet again during the first session if they were placed on the waiting list and that all couples would be asked to complete the packet again at the end of treatment and 6 months after treatment. If a participant exhibited or reported signs of immediate danger (i.e. suicidality, homicidality, child abuse), the team member provided immediate support and referral for further assistance.

Couples were seen for 12 sessions of SFMT, with every attempt made to keep weekly sessions. During the tenth session each spouse completed the therapeutic alliance measure and during the final session, they again completed the questionnaire packets. Six months after the couple's termination session, the project manager mailed the couple two copies of the questionnaire packet to complete and return. The project manager sent follow-up letters, mailed additional packets, and telephoned couples who did not return their packets in a timely fashion.

Current students and recent graduates of the George Mason University Ph.D. program in Clinical Psychology participated as preliminary session administrators and/or therapists. The team consisted of seven females and two males, who received training through reading the treatment manual, the use of training tapes, attending weekly group supervision meetings, and receiving individual supervision as needed. All therapists were supervised by Dr. Robert Rugel, a licensed psychologist.

The primary investigator in this study participated in all aspects of the project. She conducted initial phone screenings and preliminary sessions with potential participants. She also scored pre-treatment measures to determine if couples were eligible for therapy. The investigator served as a therapist for several couples and provided 12 sessions of SFMT. She participated in regular supervision with Dr. Rugel. She scored post-treatment measures and provided outreach to obtain follow-up data. She also participated in data entry for the project.

Measures

Demographics Questionnaire. The demographics section of the initial questionnaire asked couples to provide their age, gender, race, level of education, income, and occupation. The questionnaire also included background information such as: length of dating prior to marriage, length of marriage, number of children living in and out of the home, number of previous marriages, number of children from different spouses, and number, age, and relationship of other people residing in the household. Couples were also asked to provide information on current medications, previous mental health treatment, alcohol and drug use, and the presence of physical violence within the home.

Dyadic Adjustment Scale (DAS, Spanier, 1976). The DAS is a measure of adjustment in marriages and other close relationships. It is comprised of 32 items using a Likert scale with descriptive anchors (i.e. “Always Agree” to “Always Disagree”). The DAS is scored by summing the responses to the items and can range from 0-151. It is able to discriminate distressed from non-distressed couples, with lower scores indicating dissatisfaction (Margolin, 1981).

The DAS is the most common measure of marital satisfaction used by researchers of marital therapy outcome. Piotrowski (1999) examined the PsychINFO database and determined that the DAS was used in 159 studies conducted between 1990 and 1997; significantly more often than other measures of marital satisfaction. The internal consistency of the DAS, calculated using Cronbach's coefficient, is .96 (Spanier, 1976). Spanier and Thompson (1982) calculated a coefficient alpha of .91. Content validity was addressed by judges who determined that the items of the DAS were appropriate to the theoretical dimensions of marital adjustment (Touliatos, Perlmutter, & Strauss, 1990). Additionally, a clinical significance cut-off has been determined for this measure, indicating that it can be used to determine clinically significant improvement.

Areas of Change Questionnaire (ACQ, Weiss et al., 1973). The ACQ is a 68 item, self-report measure of each partner's desired change in the relationship. Specific areas of marital behavior are assessed with each partner indicating what they want their partner to do and what behavior they could do to please their partner. Each response is indicated using a Likert scale that ranges from -3, which means "much less" to +3, which means "much more" of the behavior is desired. The ACQ is scored by summing the areas where both spouses indicate change is necessary (agreements) and areas where only one spouse indicates the need for change or they disagree in the direction of the change (disagreements). This determines the Total Change score. The ACQ is based on the assumption that the more change a couple desires in the relationship, the more difficulties exist.

The internal consistency reliability of the ACQ, using Cronbach's alpha, is .89 (Weiss et al., 1973). Margolin, Talovic, and Weinstein (1983) demonstrated

concurrent validity between the DAS and ACQ. The ACQ has also been shown to discriminate between distressed and non-distressed couples and changes as a function of therapy (Fals-Stewart, Schafer, & Birchler, 1993; Margolin & Fernandez, 1983). Jacobson and Follette (1985) calculated a clinical significance cut-off score of 21 for the ACQ, indicating that scores falling below this cut-off are considered in the functional range.

Symptom Checklist 90- Revised (SCL-90-R; Derogatis, 1989; Derogatis, Rickels, & Rock, 1976). The SCL-90-R is a self-report measure of general psychological functioning. It includes 90 items designed to assess the presence of a number of psychiatric symptoms during the past week. A Likert scale is used where 0 indicates “not at all” and 4 means “extremely.” The SCL-90-R contains several dimensions including: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobias, paranoid ideation, and psychoticism. There are three more broad factors as well. These are: the Global Severity Index (GSI), the Positive Symptom Total (PST), and the Positive Symptom Distress Index (PSDI). Scores for each factor are determined by summing the appropriate items and dividing the total by the number of items.

The SCL-90-R is a face valid instrument that had been used in numerous studies to assess psychiatric symptoms. The test-retest reliability for the subscales of the measure ranged from .78 to .90 (Derogatis, 1977). While the validity coefficient of the total scale is .96 (Short, Sandler, & Roosa, 1996), the subscale coefficient alphas range from .77 to .90 (Payne, 1994).

Rosenberg Self-Esteem Inventory (RSE; Rosenberg, 1965). The RSE is self-report measure consisting of 10 items. This self-esteem measure conceptualizes high

self-esteem as the belief that one is a worthy person who deserves respect. This measure utilizes a Likert scale where 1 means “always false” and 5 means “always true” Some items in the measure are worded in the reverse and these items must be re-coded prior to scoring. Higher scores on the RSE indicate greater self-esteem.

The RSE is a scale whose reliability and validity have been clearly demonstrated. Rosenberg (1989) established the convergent validity of the scale by demonstrating the inverse relationship between the RSE and measures of anxiety and depression. He also compared the scale to measures of interpersonal attitudes, peer group participation, and occupational values and aspirations to further demonstrate its convergent validity. The split-half validity of the scale is .92 (Rosenberg, 1989).

Spielberger Trait Anger Scale (STAS; Spielberger, Jacobs, Russell, & Crane, 1983). This 10 item, self-report measure is designed to measure trait anger.

Individuals who have high levels of trait anger are more likely to be easily annoyed or frustrated by situations and are more likely to respond by becoming tense, irritable, or furious (Spielberger et al., 1983). Individuals record how they “usually feel” using a Likert scale where 1 means “almost never” and 4 means “almost always.” The scores are summed to determine the total score. Internal consistency coefficients for the STAS have ranged from .81 to .92 (Corcoran & Fischer, 1987; Spielberger et al., 1983; Spielberger et al., 1985). Concurrent validity was established by comparing the STAS with the Buss-Durkee Hostility Inventory (Buss & Durkee, 1957), a well constructed measure of anger. Spielberger et al. (1985) reported concurrent validity scores between .66-.73.

Couples Therapy Alliance Scale (CTAS; Pinsof & Catherall, 1986). The CTAS measures therapeutic alliance in three ways: the bond between therapist and

client, agreement about the specific goals of therapy, and the perceived relevance of the tasks presented in therapy (Pinsof & Catherall, 1986). It is a 29-item, self-report measure which contains three subscales that rate the bond, tasks, and goals in relation to self, other, and the relationship. Scores are derived using a Likert scale where 1 is “completely disagree” and 7 is “completely agree.” Johnson and Greenberg (1985) reported internal consistency alpha coefficients of .88, .92, and .85 for self, other, and relationship subscales, respectively. The overall internal consistency was .96.

RESULTS

Preliminary Comparisons of Post-Treatment and Follow-up Data

The Marital Therapy Project at George Mason University provided Support-Focused Marital Therapy to a total of 48 couples. Of the 48 couples who completed the 12 session marital therapy intervention, 36 couples completed and returned the follow-up measures. In order to determine if there were any significant differences between the husbands, wives, and couples who completed the data and those who did not, independent sample t-tests were conducted. Demographic variables, as well as pre and post-treatment scores of marital satisfaction, psychological distress, self-esteem, anger, and therapeutic alliance were included for husbands and wives. None of the t-tests were significant, indicating that there were no statistically significant differences between those who responded to the requests for follow-up data and those who did not respond. The pre and post-treatment combined scores on measures listed above for couples who responded and did not respond to follow-up were also compared. These t-tests were not significant. Table 1 contains the results of the t-tests for husbands and wives.

Tables 2 and 3 contain means and standard deviations for the 5 outcome measures. Scores for the DAS decreased slightly for husbands, wives, and couples, indicating a slight decrease in marital satisfaction. Husbands', wives', and couples' scores on the ACQ decreased slightly, which indicates a slight decrease in requests for change. For the three measures of distress, husbands' scores changed very little. The

Table 1

T-tests For Participants Who Completed and Did Not Complete Follow-up Measures

	<u>Husbands</u>		<u>Wives</u>	
	t	p	t	p
Age	.21	.84	.76	.46
Years Dated	-.82	.43	-1.19	.26
Years Married	-.32	.76	-.19	.85
Previous Marriages	-.52	.62	1.51	.14
Education	-.12	.91	1.26	.21
Total Income	-.32	.75	.12	.91
Children in the home	-.43	.67	-.57	.58
DAS Pre-treatment	-.52	.61	1.40	.17
DAS Post-treatment	.44	.66	1.38	.19
ACQ Pre-treatment	-.55	.59	-.60	.56
ACQ Post-treatment	-1.24	.23	-1.21	.29
SCL-90-R Pre-treatment	-1.21	.24	.06	.95
SCL-90-R Post-treatment	-.76	.46	-.04	.97
RSE Pre-treatment	-.31	.76	-.15	.88
RSE Post-treatment	-.55	.59	-.74	.47
STAS Pre-treatment	-1.24	.23	.32	.75
STAS Post-treatment	-1.91	.08	.49	.63
Therapeutic Alliance	-.21	.83	-.47	.65

Table 2

Descriptive Statistics for Measures of Marital Satisfaction

		Post- treatment	Follow-up	Post- treatment	Follow-up
Husbands	Mean	95.03	94.74	9.31	7.29
	Standard Deviation	13.06	16.76	7.02	5.14
Wives	Mean	95.06	91.81	10.25	8.61
	Standard Deviation	16.26	16.84	6.19	4.93
Couples	Mean	189.97	187.46	19.03	18.64
	Standard Deviation	24.84	28.88	12.17	11.41

Table 3

Descriptive Statistics for Measures of Distress

		Self- Esteem Post- treatment	Self- Esteem Follow- up	Anger Post- treatment	Anger Follow -up	Distress Post- treatment	Distress Follow- up
Husbands	Mean	41.03	40.83	15.81	15.94	28.92	28.91
	Standard Deviation	5.75	7.38	3.41	4.71	29.18	32.77
Wives	Mean	40.22	36.67	18.44	17.63	45.28	38.71
	Standard Deviation	6.36	6.72	4.55	5.24	41.45	25.47
Couples	Mean	81.25	80.57	34.25	33.76	72.34	67.91
	Standard Deviation	9.39	11.15	6.22	7.82	38.74	40.72

mean for wives self-esteem decreased from post-treatment to follow-up, as did their levels of psychological distress. Couples' follow-up means were slightly lower than pre-treatment on all three measures. This indicates decreased self-esteem, anger, and psychological distress.

Major Comparisons Between Post-treatment and Follow-up

Hypothesis I

Hypothesis I predicted that improvements in marital satisfaction would be maintained from post-treatment to follow-up. I predicted that there would not be significant differences in marital satisfaction from post-treatment to follow-up as measured by the DAS and ACQ for couples, husbands, and wives. Separate repeated measures ANOVA analyses were conducted for the DAS and ACQ as these measures are scored in different directions. Higher scores on the DAS indicate higher levels of marital satisfaction, while higher scores on the ACQ indicate more requests for change in the relationship. The repeated measures ANOVA design allows for the examination of time (post-treatment vs. follow-up) and gender (husbands vs. wives), as well as interaction effects. Separate repeated measures ANOVAs were calculated using couple scores. As these results followed the same pattern as the ANOVAs completed with husbands and wives, only the ANOVAs with husbands and wives will be reported and discussed.

The repeated measures ANOVAs for the DAS and ACQ contain information on the within-subjects variables of time and time x gender, as well as information on the between-subjects variable of gender. There were no significant results for time ($F(1, 69) = 1.32, p = .25$), time x gender ($F(1, 69) = .81, p = .37$) or gender ($F(1, 69) =$

.20, $p = .66$) for the DAS, indicating that neither husbands, wives, or couples experienced significant change in their DAS scores from post-treatment to follow-up. Similarly, there were no significant results for time ($F(1,54) = 3.52, p = .07$), time x gender ($F(1, 54) = .15, p = .70$), or gender ($F(1, 54) = .57, p = .45$) for the ACQ. Figures 1 and 2 contain these results.

As much of the outcome literature includes discussions of effect size (Campbell, 2005), these were calculated for each of the 5 outcome measures. Effect size was calculated using the equation:

$$E = \frac{X_2 - X_1}{\sqrt{\frac{SD_2^2 + SD_1^2}{2}}}$$

Effect sizes were calculated separately for husbands, wives, and couples, and included effect sizes from pre-treatment to post-treatment, post-treatment to follow-up, and pre-treatment to post-treatment. Tables 4 and 5 contain this data.

Hypothesis II

Hypothesis II investigated changes in distress from post-treatment to follow-up. I predicted that husbands, wives, and couples would maintain the improvements in distress from post-treatment to follow-up and that there would be no significant change in distress as measured by the RSE, STAS, and SCL-90-R.

Separate repeated measures ANOVA analyses were conducted for the RSE, STAS and SCL-90-R as these measures are scored in different directions. Higher scores on the RSE indicate higher levels of self-esteem, while higher scores on the STAS and SCL-90-R indicate more anger or psychological distress, respectively. The repeated measures ANOVA design allows for the examination of time (post-treatment

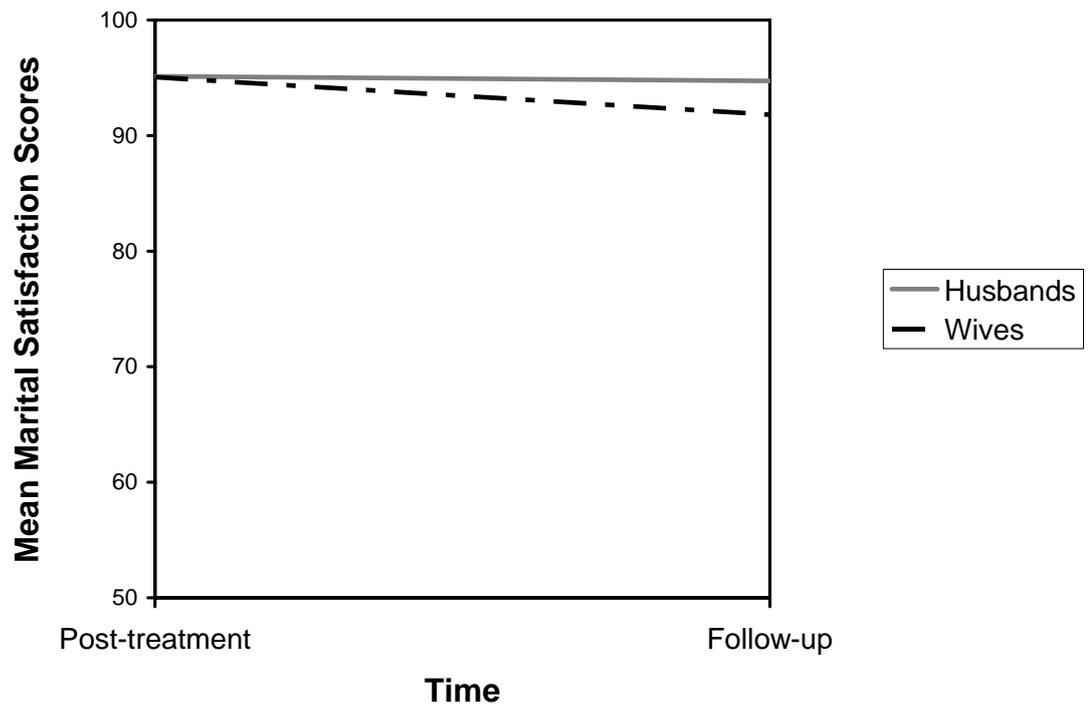


Figure 1. Repeated measures ANOVA results for Marital Satisfaction

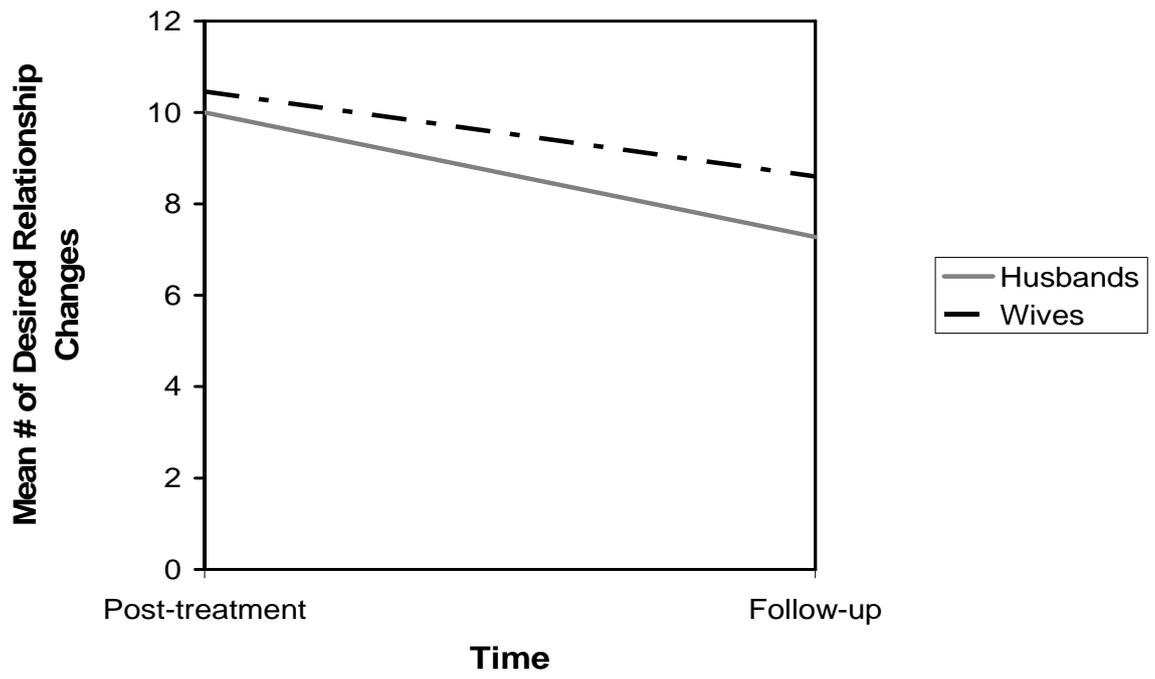


Figure 2. Repeated measures ANOVA results for Requests for Change

Table 4

Effect Sizes for Outcome Measures for Husbands and Wives

	<u>Husbands</u>		
	Pre-treatment to Post-treatment	Post-treatment to Follow-up	Pre-treatment to Follow-up
Marital Satisfaction	.71	-.01	.60
Request Change*	-.38	-.33	-.80
Distress*	-.30	0.00	-.28
Self-Esteem	-.01	-.03	-.03
Anger*	-.41	.03	-.32

* Higher scores on these measures indicate more distress.

	<u>Wives</u>		
	Pre-treatment to Post-treatment	Post-treatment to Follow-up	Pre-treatment to Follow-up
Marital Satisfaction	.79	-.20	.57
Request Change*	-.42	-.29	-.78
Distress*	-.45	-.19	-.67
Self-Esteem	.17	-.08	.09
Anger*	-.40	-.17	-.52

* Higher scores on these measures indicate more distress.

Table 5

Effect Sizes on Outcome Measures for Couples

	<u>Couples</u>		
	Pre-treatment to Post-treatment	Post-treatment to Follow-up	Pre-treatment to Follow-up
Marital Satisfaction	.89	-.10	.72
Request Change*	-.44	-.03	-.49
Distress*	-.42	-.13	-.51
Self-Esteem	.11	-.07	.04
Anger*	-.48	-.07	-.50

* Higher scores on these measure indicate more distress.

vs. follow-up) and gender (husbands vs. wives), as well as interaction effects.

Separate repeated measures ANOVAs were calculated using couple scores. As these results followed the same pattern as the ANOVAs completed with husbands and wives, only the ANOVAs with husbands and wives will be reported and discussed.

The repeated measures ANOVAs for the RSE, STAS, and SCL-90-R contain information on the within-subjects variables of time and time x gender, as well as information on the between-subjects variable of gender. There were no significant results for time ($F(1, 69) = .58, p = .45$), time x gender ($F(1, 69) = .08, p = .78$), or gender ($F(1, 69) = .47, p = .49$) for the RSE, indicating that neither husbands, wives, nor couples experienced significant change in their RSE scores from post-treatment to follow-up. Similar results were found for the SCL-90-R as time ($F(1, 67) = .33, p = .57$), time x gender ($F(1, 67) = .15, p = .67$), and gender ($F(1, 67) = 2.68, p = .11$) were not significant. While there were no significant results for the STAS for time ($F(1, 68) = .40, p = .53$) or time x gender ($F(1, 68) = .90, p = .35$) there was a significant effect for gender ($F(1, 68) = 4.58, p = .03$). Wives were more angry than husbands at both post-treatment and follow-up. Figures 3, 4 and 5 contain these results.

Hypothesis III

Hypothesis III predicted that husbands, wives, and couples who demonstrated reliable change or clinically significant change at post-treatment would continue to meet these criterion. Reliable change and clinical significance were determined for husbands, wives, and couples for marital satisfaction as measured by the Dyadic Adjustment scale. Reliable change (statistically significant improvement) was determined using the formula developed by Jacobson and Truax (1991) previously

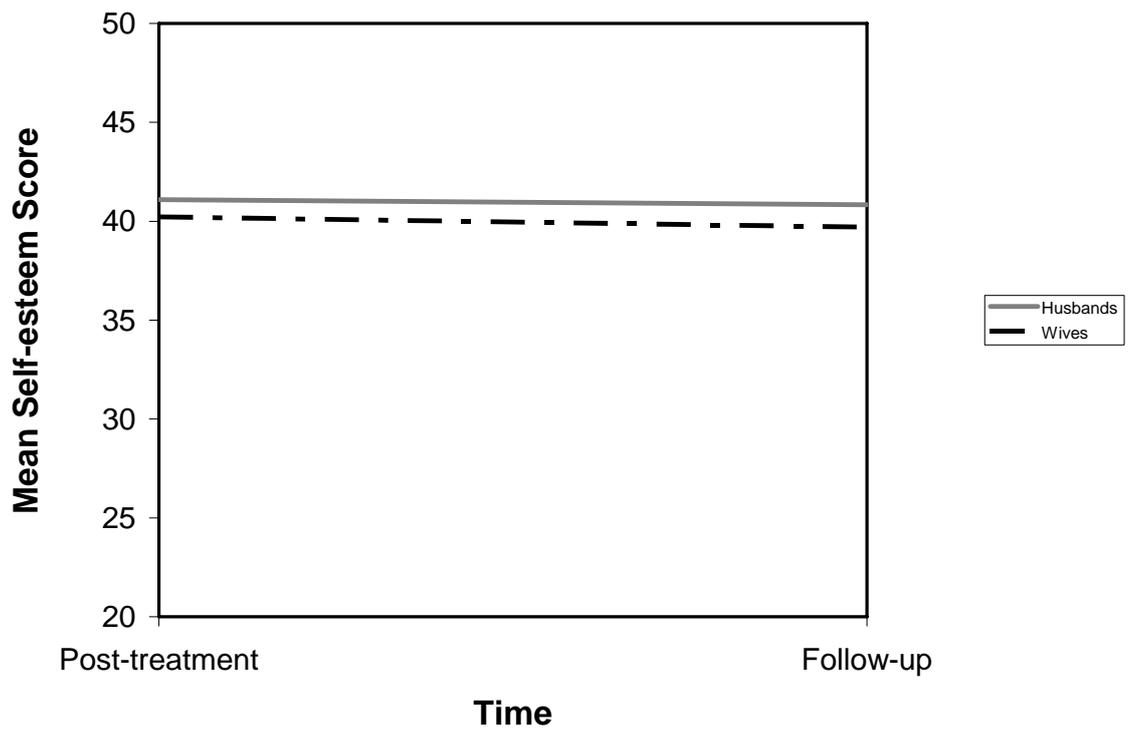


Figure 3. Repeated measures ANOVA results for Self-esteem

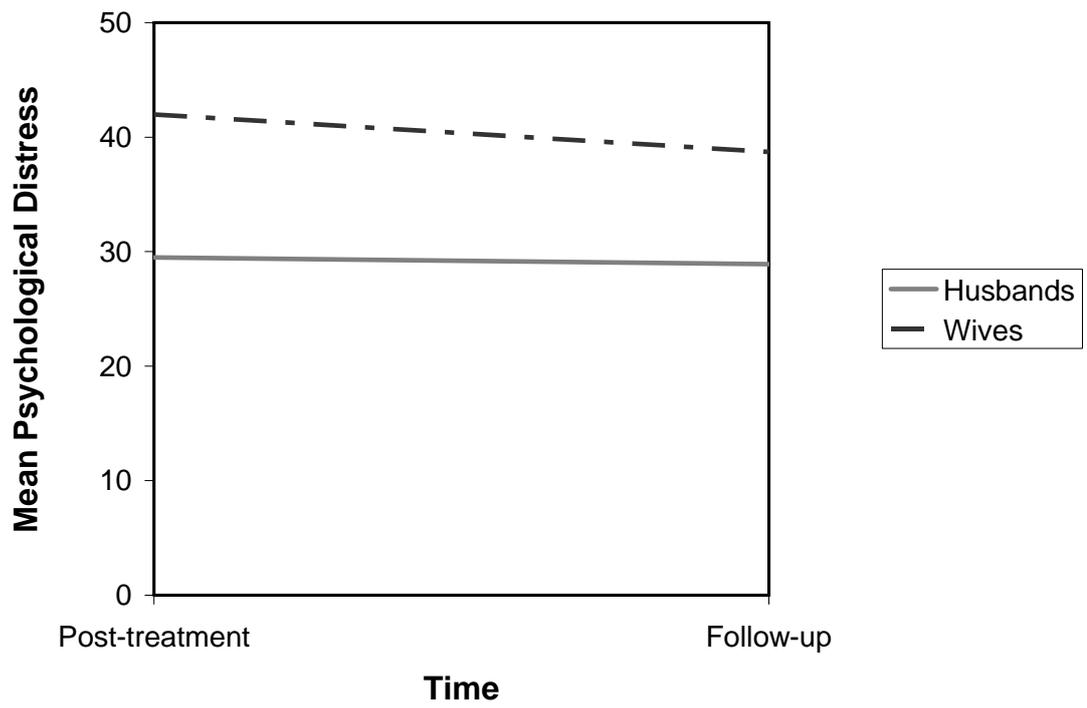


Figure 4. Repeated measures ANOVA for Psychological Distress

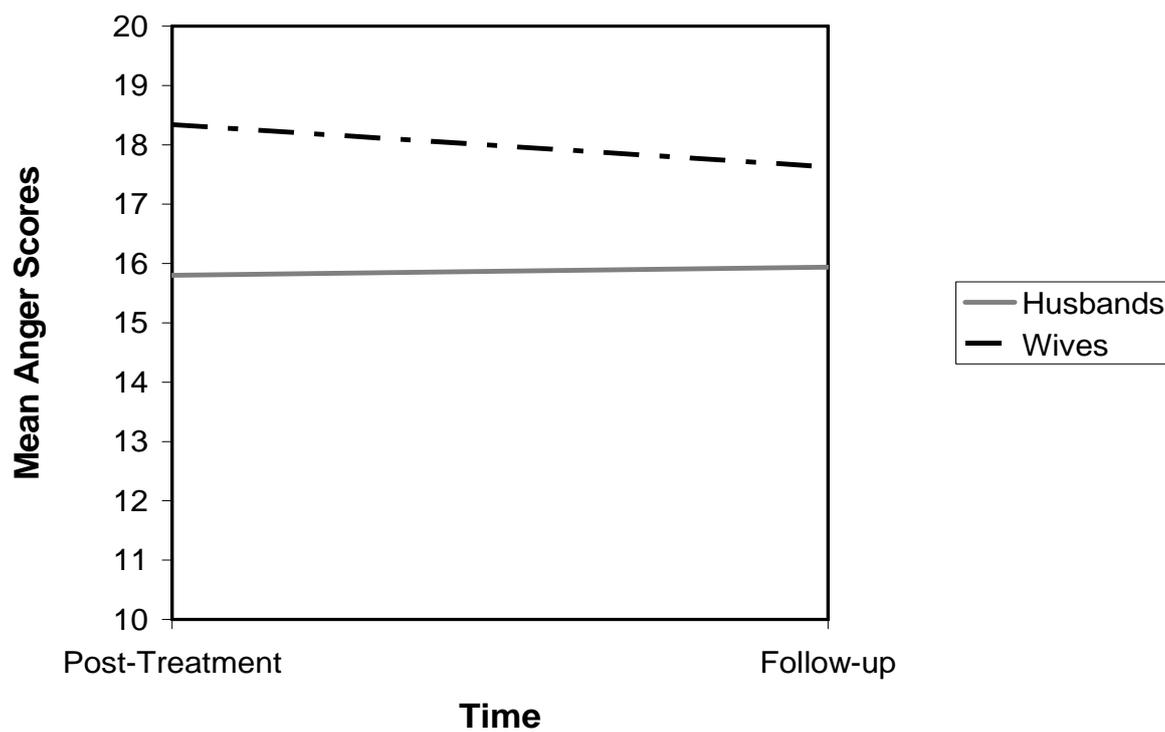


Figure 5. Repeated measures ANOVA results for Anger

described.

To determine clinically significant change, the midpoint between the means of the dysfunctional and functional populations is commonly used as a cut-off point (Jacobson & Truax, 1991) for recovery. The cut-off point for recovery listed in the literature are 97 for the DAS. Three separate chi-square analyses were conducted on post-treatment and follow-up scores. Chi-square analysis compared the percentage of participants who achieved reliable change, recovery, and clinically significant change (both reliable change and recovery). All chi-square analyses were 2x2 (post-treatment vs. follow-up and improvement vs. no improvement) and were performed separately for husbands, wives, and couples.

Reliable and clinically significant change in marital satisfaction. Separate reliable change index calculations for husbands, wives, and couples at post-treatment and follow-up determined the percentages of participants who experienced reliable change in marital satisfaction as measured by the DAS. The standard deviations of the pre-treatment sample of 36 husbands, wives, and couples on the DAS were 14.69, 15.50 and 25.26 respectively. The test-retest reliability coefficient was .96, as reported by Budd and Heilman (1992). Based on these data and the reliable change index formula, it was possible to determine which participants scores were 1.96 or above, which indicated reliable change. The same criteria were applied to determine if participants maintained reliable change from pre-treatment to follow-up.

The DAS recovery cut-off was 97, and was applied to post-treatment and follow-up scores to determine which husbands, wives, and couples achieved recovery. This cut-off was used to determine recovery at post-treatment and determine who maintained recovery at follow-up. A separate clinical significance variable was

developed to identify the husbands, wives, and couples who achieved reliable change and recovery.

Table 6 presents percentages who demonstrated reliable change, recovery, and clinically significant change for husbands. All of the chi-square analyses for husbands were significant, indicating that the post-treatment and follow-up scores are significantly related to each other. While nearly half (17) of the husbands did not achieve reliable change on the DAS, it is important to note that 58% of husbands who achieved reliable change at post-treatment maintained the change at follow-up. Results for recovery were similar; of the husbands who recovered at post-treatment, 67% were still recovered at follow-up. While some husbands achieved clinically significant change at post-treatment (n=10), only 50% of husbands achieved it at post-treatment remained at follow-up.

The results for the wives and couples were very similar to the husbands. Nearly half of the wives and couples (15 and 16 respectively) did not achieve reliable change at post-treatment or follow-up, but of those that did achieve reliable change at post-treatment, 48% of wives and 60% of couples maintained at follow-up. The recovery rates for wives and couples were also similar to the husbands and the number of wives that achieved clinically significant change was also low. More than 60% of the wives did not achieve clinically significant change at post-treatment or follow-up. The clinical significance rates for couples were slightly better. While 43% of couples did not achieve clinically significant change at post-treatment or follow-up, 60% of couples that had clinically significant change at post-treatment maintained clinically significant change at follow-up. Table 7 contains the results for wives and Table 8 contains the results for couples.

Table 6

Chi-Squares for Husbands' Marital Satisfaction

Husband Reliable Change

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	17	100%	47%	0	0%	0%
Post-treatment Responder	8	42%	22%	11	58%	31%

Husband Recovery

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	13	72%	36%	5	28%	14%
Post-treatment Responder	6	33%	17%	12	67%	33%

Husband Clinical Significance

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	25	96%	69%	1	4%	3%
Post-treatment Responder	5	50%	14%	5	50%	14%

Table 7

Chi-Squares for Wives' Marital Satisfaction

Wives Reliable Change

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	15	100%	42%	0	0%	0%
Post-treatment Responder	11	52%	31%	10	48%	28%

Wives Recovery

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	13	77%	36%	4	24%	11%
Post-treatment Responder	7	37%	19%	12	63%	33%

Wives Clinical Significance

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	22	100%	61%	0	0%	0%
Post-treatment Responder	8	57%	22%	6	43%	17%

Table 8

Chi-Squares for Couples on Marital Satisfaction

Couple Reliable Change

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	16	100%	43%	0	0%	0%
Post-treatment Responder	8	40%	23%	12	60%	34%

Couple Recovery

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	10	71%	29%	4	29%	11%
Post-treatment Responder	6	27%	17%	16	73%	43%

Couple Clinical Significance

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	16	100%	43%	0	0%	0%
Post-treatment Responder	8	40%	23%	12	60%	34%

Predictors of Outcome for Support-Focused Marital Therapy

Hypothesis IV

Hypothesis IV predicted that no demographic factors would correlate with marital satisfaction at follow-up or with the change in marital satisfaction from post-treatment to follow-up. The demographic factors examined were: race, age, length of marriage, length of time dating, number of previous marriages, education level, income, and number of children in and total number of children. The race variable was coded 1-5 with 1 for Caucasian, 2 for African American, 3 for Asian American, 4 for Hispanic, and 5 for other. Education was also a 5 point scale where 1 indicated a high school education, 2 indicated some college, 3 was a college degree, 4 was some advanced classes, and 5 was a master's degree or higher.

Separate correlations were conducted for husbands, wives, and couples for both marital satisfaction and change in marital satisfaction. Linear regressions were also conducted to better understand the relationship between the demographic variables and marital satisfaction. As these results were very similar to the correlations, only the correlations will be reported for simplicity. The change in marital satisfaction variables were created by subtracting the individual's DAS score at post-treatment from his/her DAS score at follow-up. The couple variable was created by adding the couple's DAS scores together and taking the mean to create a couple DAS at follow-up. The post-treatment DAS was subtracted from the follow-up DAS to create the couple's change in marital satisfaction variable.

As race is a categorical variable, it was not included in the correlations. Instead, separate ANOVAs were conducted for husbands, wives, and couples for marital satisfaction at follow-up and change in marital satisfaction from post-

treatment to follow-up. None of these ANOVAs were significant, suggesting that the ethnicity of the participants did not play a role in their response to SFMT.

Contrary to my predictions, some demographic variables were significantly correlated to marital satisfaction and change in marital satisfaction from post-treatment to follow-up. Table 9 provides the Pearson product moment correlations of the demographic variables and marital satisfaction at follow-up as indicated by the Dyadic Adjustment Scale. For husbands, both the number of years the couple dated prior to getting married and the husbands' level of education were positively correlated with marital satisfaction. Higher total household income was also significantly correlated with higher levels of marital satisfaction at follow-up for husbands. Similar to husbands, the number of years the couple dated prior to marriage was positively correlated to marital satisfaction at follow-up for wives. The number of children living in the home was also positively correlated with marital satisfaction. Wives' age and number of previous marriages were negatively correlated with marital satisfaction at follow-up. There were several significant correlations for couples and marital satisfaction. The number of years the couple dated and total household income were positively correlated with marital satisfaction, while the number of previous marriages was negatively correlated with marital satisfaction.

Correlations were also conducted to determine if the demographic variables were correlated with changes in marital satisfaction from post-treatment to follow-up. Again, it was predicted that there would be no significant correlations. The only significant correlation for husbands was a positive correlation between level of

Table 9

Correlations Between Demographic Variables and Marital Satisfaction Score at Follow-up

Demographics	Husbands	Wives	Couples
Age	.06	-.36*	-.28
Years Dated	.38*	.34*	.42**
Years Married	.06	-.24	-.09
Previous Marriages	.09	-.35*	-.44**
Income	.30*	.21	.33*
Education	.51**	-.02	.20
Children in home	.08	.39**	.26*
Total children	.17	.17	.06

Note: $p < .05$ * $p < .01$ **

education and change in marital satisfaction. There were three significant correlations for wives. Both the number of previous marriages, and wives' age were negatively correlated with change in marital satisfaction. Older wives and wives with more previous marriages experienced more decline in marital satisfaction from post-treatment to follow-up. The number of children living in the home was positively correlated with change in marital satisfaction for wives. The only significant correlations for couples were the number of children living in the home and previous marriages. Similar to the wives' scores, the correlation was positive for children in the home and negative for previous marriages. Table 10 contains the results for change in marital satisfaction.

Hypothesis V

Hypothesis V predicted that the couple's subjective evaluation of therapeutic alliance would be related to marital satisfaction at follow-up. It was predicted that couples' therapeutic alliance scores would be positive correlated with couples' scores on the DAS and ACQ at follow-up. Results did not support this hypothesis. Pearson product moment correlations with 2-tailed significance, presented in Table 11, are not significant for couples on the DAS ($r = -.19, p = .13$) or ACQ ($r = .03, p = .82$). As this result is counter to other findings (Johnson & Talitman, 1997), the relationship between therapeutic alliance and the husbands and wives were also investigated. Similar to the couple correlations, there was not a significant relationship between alliance and the DAS ($r = -.09, p = .61$) or ACQ ($r = .30, p = .14$). Results were different for the wives. While the wives' alliance scores were not significantly correlated with

Table 10

Correlations Between Demographic Variables and Marital Satisfaction Change Score From Post-treatment to Follow-up

Demographics	Husbands	Wives	Couples
Race	-.03	.07	.04
Age	-.02	-.32*	-.25
Years Dated	.02	.03	.01
Years Married	-.01	-.02	-.05
Previous Marriages	.27	-.33*	-.34*
Income	.28	.03	.08
Education	.35*	.05	.137
Children in household	.21	.40**	.33*
Total children	.24	-.06	-.12

Note: $p < \text{or} = .05$ * $p < \text{or} = .01$ **

Table 11

Correlations Between Therapeutic Alliance and Marital Satisfaction Outcome Measures

	r	p
Couples (N=28)		
Requests for Change	.03	.82
Marital Satisfaction	-.19	.13
Husbands (N=28)		
Requests for Change	.03	.14
Marital Satisfaction	-.10	.61
Wives (N=28)		
Requests for Change	.39	.05*
Marital Satisfaction	-.07	.68

Note: p < or = to .05 (2-tailed significance)*

the DAS ($r = -.07$, $p = .68$), their alliance scores were significantly correlated with ACQ ($r = .398$, $p = .05$).

Hypothesis VI

Hypothesis VI predicted that pre and post-treatment scores of psychological distress and anger would predict changes in marital satisfaction from post-treatment to follow-up. Separate analyses were conducted for husbands, wives, and couples to determine if greater levels of psychological distress and anger produced decreased change in marital satisfaction over time. Separate regressions were also conducted for pre-treatment levels of psychological distress and anger and post-treatment levels of distress and anger. Psychological distress was measured using the SCL-90, and anger was measured using the STAI.

For husbands, psychological distress and anger did not predict changes in marital satisfaction from post-treatment to follow-up. There were no significant results for pre-treatment or post-treatment levels of anger or psychological distress. For wives, while there were no significant pre-treatment predictors of change in marital satisfaction from post-treatment to follow-up, there were two post-treatment measures that significantly predicted change in marital satisfaction. The wives' post-treatment level of anger predicted greater decrease in marital satisfaction from post-treatment to follow-up. Contrary to the hypothesis, wives' psychological distress at post-treatment significantly predicted improvements in marital satisfaction from post-treatment to follow-up. Table 12 contains these results.

Husbands', wives', and couples' scores were also used to predict couples' change in marital satisfaction at follow-up. Couple's combined pre-treatment levels of anger predicted greater decreases in marital satisfaction from post-treatment to

follow-up. Table 13 contains these results. Wives' post-treatment levels of anger predicted greater decreases in marital satisfaction between post-treatment and follow-up and, similar to the results for wives, wives' post-treatment levels psychological distress significantly predicted improvements in marital satisfaction from post-treatment to follow-up. These results were mirrored using the couple's combined post-treatment scores. Greater anger at post-treatment predicted greater decreases in marital satisfaction from post-treatment to follow-up, while couple's combined psychological distress at post-treatment predicted improvements in marital satisfaction.

Hypothesis VII

Hypothesis VII predicted that certain individuals or couples may benefit from SFMT more than others. I was interested in identifying those husbands, wives, and couples who not only improved during the course of treatment, but continued to make gains from post-treatment to follow-up. If I can identify characteristics that these participants with strong results have in common, I can better identify couples prior to treatment who would be most appropriate for SFMT. In order to determine the individuals and couples who responded best to SFMT, within individual across time regressions were conducted using DAS scores at pre-treatment, post-treatment, and follow-up. The slope and intercept of each individual and couple line was used to create a predicted post-treatment score for each individual. If the individual or couple's actual post-treatment score was higher than the predicted score, they were labeled a responder to SFMT, as their improvement from pre-treatment to follow-up was linear or higher at the end of data collection. Individuals and couples whose predicted score was higher than their actual DAS score at post-treatment were labeled

Table 12

Unstandardized Beta weights for Pre-treatment Psychological Distress and Anger on Change in Marital Satisfaction

		Distress	Partner Distress	Anger	Partner Anger
Husband	Change in Satisfaction	.03	-.03	-1.20	.09
Wives	Change in Satisfaction	.05	-.04	-.86	-.40

Note: p < or = .05* p < or = .01**

Unstandardized Beta Weights for Post-treatment Psychological Distress and Anger on Change in Marital Satisfaction

		Distress	Partner Distress	Anger	Partner Anger
Husband	Change in Satisfaction	.06	.05	-.62	-.71
Wives	Change in Satisfaction	.17**	-.08	-1.09*	.03

Note: p < or = .05* p < or = .01**

Table 13

Unstandardized Beta weights for Pre-treatment and Post-treatment Psychological

Distress and Anger on Couple's Change in Marital Satisfaction

	Pre-treatment	Post-treatment
Husbands Distress	-.02	-.05
Husbands Anger	-1.26	-.16
Wives Distress	-.01	.22*
Wives Anger	-.73	-1.98*
Couples Distress	-.01	.28*
Couples Anger	-.91	-1.28**

Note: $p < .05$ * $p < .01$ **

non-responders, as the slope of their line indicates that they either did not improve from post-treatment to follow-up or that they did not maintain their trajectory from post-treatment to follow-up. There were 13 husbands, 13 wives, and 10 couples that were responders to treatment using this criterion.

The variables selected for the logistic regression comparing SFMT responders to non-responders were chosen based on findings from other studies and the results of Hypothesis IV. For couples, couple variables, as well as variables from husbands and wives were investigated. Table 14 contains the regression results for the couple variables. No demographic variables, including income and length of marriage, or previous marriage were significant. The husbands' and wives' initial measures of distress as well as age and education, were also entered into the regression. The distress measures used were the initial scores on the SCL-90-R, RSE, and STAS. There were no significant findings for husbands' or wives' variables, indicating that these variables cannot be used to predict the couple's response to SFMT.

Separate analyses for husbands and wives were also conducted to determine if any variables would predict the response to treatment. As with couple response, both demographic and initial levels of distress were entered as variables. Unfortunately, there were no variables that predicted response to SFMT for husbands or wives. Table 15 contains the results of these analyses.

Supplemental Analyses

In order to further clarify the results of this study and provide additional understanding of how SFMT works, additional analyses were conducted for Hypotheses III, IV and VI. These analyses help clarify the follow-up analyses by

Table 14

Predicting Couple Response Based on Couple, Husband, and Wife Variables

	B	SE	P
Children in household	.89	.34	.74
Income	.97	.01	.07
Years Married	1.03	.04	.55
Therapeutic Alliance	1.95	.51	.19
Husband Age	1.08	.058	.15
Husband Education	.37	.59	.10
Husband Distress	.10	.01	.92
Wife Age	1.05	.05	.32
Wife Education	.77	.29	.38
Wife Distress	.99	.01	.23
Anger	1.17	.09	.10
Self-Esteem	1.05	.06	.48

Table 15

Predicting Husbands' Response to Treatment

	B	SE	P
Education	.79	.56	.66
Total Income	.98	.02	.24
Children in home	.65	.402	.28
Years Dated	1.69	.42	.21
Distress	.99	.02	.63
Self Esteem	1.01	.12	.95
Anger	1.24	.17	.22

Predicting Wives' Response to Treatment

	B	SE	P
Education	.63	.30	.12
Age	1.01	.06	.24
Children in home	.49	.79	.36
Years Dated	1.45	.42	.38
Distress	.95	.03	.12
Self Esteem	.97	.23	.88
Anger	1.81	.35	.09

providing additional information about how husbands, wives, and couples responded to SFMT.

Hypothesis III Supplemental Analyses

In addition to examining reliable and clinically significant change for marital satisfaction as measured by the DAS, I also looked at these variables for the ACQ and SCL-90-R. Marital satisfaction is the most important indicator of change, but it is also useful to look at changes in the husbands', wives', and couples' requests for change and psychological distress. Recovery scores for these measures are 21 for the ACQ, with lower scores indicating recovery (Jacobson & Follette, 1985), and 54 for the SCL-90_R, with lower scores indicating recovery (Schmitz et al., 2000).

Reliable and clinically significant change in desired relationship changes.

Three separate reliable change index calculations were conducted to determine which husbands, wives, and couples experienced reliable change in the number of desired relationship changes as measured by the ACQ. Standard deviations were based on the pre-test sample and the standard deviation for husbands was 6.20, wives was 5.61, and couples was 10.74. The test-retest reliability coefficient for the ACQ is not reported in the literature, but Cronbach's alpha coefficients may also be used to generate the standard error term needed for calculating reliable change (Hageman & Arrindell, 1999). As Cronbach's alpha is a measure of internal consistency rather than test-retest reliability, it is not an ideal replacement, but it has been used consistently in the literature and is used in this study. The reliability coefficient for the ACQ used in the current study is .89, based on the reported Cronbach's alpha for the ACQ (Margolin et al., 1983). The reliable change index was used to determine which husbands, wives, and couple achieved reliable change at post-treatment and follow-

up. Recovery variables were created using the cut-off of 21 for couples, as reported in the literature (Jacobson & Follette, 1985). As I also investigated changes in husbands and wives, the cut-off score was halved to 11 for these groups. Clinical significance variables were created by determining which husbands, wives, and couples achieved reliable change and recovery at post-treatment and follow-up.

The results of the chi-square analysis for husbands, wives, and couples for reliable change and clinical significance were statistically significant, while the recovery chi-squares were not. See tables 16, 17, and 18 for results. For husbands, wives, and couples, many of the participants did not achieve reliable change at post-treatment (77% for husbands, 62% for wives, 70% for couples). Of those that did achieve reliable change, 67% of husbands and couples and 60% of wives maintained at follow-up. Although large numbers of husbands, wives, and couples, achieved recovery at post-treatment and many maintained at follow-up (76% for husbands and 72% for wives, 82% for couples), it is important to note that many of the participants' pre-treatment scores were in the recovery range. At pre-treatment, 52% of couples' scores on the ACQ fell into the recovered range. Pre-treatment scores for husbands and wives were similar. As this sample was relatively healthy and requesting few changes, the recovery and clinical significance data must be interpreted with caution. The clinical significance chi-squares for the ACQ suggest that most participants did not achieve clinical significance at post-treatment or follow-up, despite the high recovery levels. Only 3 husbands, 4 wives, and 5 couples achieved clinical significance at post-treatment and follow-up.

Reliable and clinically significant change in psychological distress.

Table 16

Chi-Squares for Husbands' Request for Change

Husband Reliable Change

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	20	100%	77%	0	0%	0%
Post-treatment Responder	2	33%	8%	4	67%	15%

Husband Recovery

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	2	22%	7%	7	78%	27%
Post-treatment Responder	4	24%	15%	13	76%	50%

Husband Clinical Significance

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	21	100%	81%	0	0%	0%
Post-treatment Responder	2	40%	7%	3	60%	11%

Table 17

Chi-Squares for Wives' Request for Change

Wives Reliable Change

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	16	100%	62%	0	0%	0%
Post-treatment Responder	4	40%	15%	6	60%	23%

Wives Recovery

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	3	38%	12%	5	62%	19%
Post-treatment Responder	5	28%	19%	13	72%	50%

Wives Clinical Significance

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	16	89%	64%	2	11%	8%
Post-treatment Responder	3	43%	12%	4	57%	15%

Table 18

Chi-squares for Couples' Request for Change

Couples Reliable Change

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	21	100%	70%	0	0%	0%
Post-treatment Responder	3	33%	10%	6	67%	20%

Couples Recovery

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	4	57%	13%	3	43%	10%
Post-treatment Responder	4	18%	13%	18	82%	60%

Couples Clinical Significance

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	22	100%	73%	0	0%	0%
Post-treatment Responder	2	25%	7%	6	75%	20%

Three separate reliable change index calculations for husbands, wives, and couples were conducted to determine who experienced reliable change in psychological distress as measured by the SCL-90-R. Standard deviations used for the calculations were based on the pre-treatment sample and were 33.21 for husbands, 53.79 for wives, and 70.19 for couples. The test-retest reliability of the SCL-90-R is .97 (Derogatis, 1989) and was used to calculate the standard difference score. Separate reliable change variables were created for husbands, wives, and couples for post-treatment and follow-up. The recovery cut-off for the SCL-90-R is 54, which was used for husbands and wives. As the couple scores were the sum of the husbands and wives scores, a cut-off of 108 was used. Reliable change and recovery scores were used to determine which husbands, wives, and couples achieved clinical significance at post-treatment and follow-up.

Chi-square calculations for reliable change and clinical significance were significant for husbands, wives, and couples. Recovery chi-squares were not significant for any group, indicating that the variables are not related. The majority of husbands, wives, and couples (58%, 54%, and 46%, respectively) did not achieve reliable change at post-treatment or follow-up. However, 79% of the wives who did achieve reliable change at post-treatment maintained the change at follow-up. Husbands and couples did not maintain to the same degree, although 58% of couples who achieved reliable change at post-treatment maintained at follow-up.

The recovery chi-squares suggest that the vast majority of husbands, wives, and couples recovered at post-treatment and many maintained at follow-up (96% for husbands, 93% for wives, and 88% for couples). It is important to note that the majority of participants were in the recovery range of the SCL-90-R at pre-treatment.

At pre-treatment, 47% of wives, 72% of husbands, and 67% of couples were in the recovered range. This suggests that the participants in this study may have had significant marital problems, but they were not exhibiting significant psychological distress at the time of the study. The clinical significance results for the SCL-90-R are similar to the reliable change results, as 64 % of husbands and wives, 52% of couples did not achieve clinically significant change at post-treatment or follow-up. While 64% of wives who did achieve clinically significant change at post-treatment were able to maintain it at follow-up, most of the husbands and couples who achieved clinical significance at post-treatment were unable to maintain their achievement at follow-up. Tables 19, 20, and 21 contain these results.

Hypothesis IV

The analyses for Hypothesis IV focused on predictors of marital satisfaction at follow-up and changes in marital satisfaction from post-treatment to follow-up. In order to better understand these results, it is helpful to look at the variables that predicted marital satisfaction at post-treatment and changes in marital satisfaction from pre-treatment to post-treatment. These analyses help will help identify variables that predict marital satisfaction throughout all of the time-points and facilitate understanding of the process of participants in SFMT.

Correlations between the demographic variables and post-treatment levels of marital satisfaction yielded two significant variables. For husbands, wives, and couples, the length of time the couple dated prior to marriage was significantly correlated with higher levels of marital satisfaction. For husbands, higher levels of education were correlated with higher levels of marital satisfaction at post-treatment. The results for changes in marital satisfaction from pre-treatment to post-treatment

Table19

Chi-Squares for Husbands' Psychological Distress

Husband Reliable Change

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	21	81%	58%	5	19%	14%
Post-treatment Responder	6	60%	17%	4	40%	11%

Husband Recovery

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	4	44%	11%	5	56%	14%
Post-treatment Responder	1	4%	3%	26	96%	72%

Husband Clinical Significance

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	23	82%	64%	5	18%	14%
Post-treatment Responder	5	63%	14%	3	37%	8%

Table 20

Chi-Squares for Wives' Psychological Distress

Wife Reliable Change

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	19	86%	53%	3	14%	8%
Post-treatment Responder	3	21%	8%	11	79%	31%

Wife Recovery

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	6	75%	17%	2	25%	6%
Post-treatment Responder	2	7%	6%	25	93%	69%

Wives Clinical Significance

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	23	92%	64%	2	8%	6%
Post-treatment Responder	4	36%	11%	7	64%	19%

Table 21

Chi-Squares for Couples' Psychological Distress

Couples Reliable Change

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	16	100%	46%	0	0%	0%
Post-treatment Responder	8	42%	23%	11	58%	31%

Couples Recovery

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	0	0%	0%	1	100%	3%
Post-treatment Responder	4	12%	11%	29	88%	83%

Couples Clinical Significance

	Follow –up Non-responder			Follow-up Responder		
	N	Row %	Total %	N	Row %	Total %
Post-treatment Non-responder	18	90%	52%	2	10%	6%
Post-treatment Responder	7	50%	21%	7	50%	21%

were quite different. While none of demographic variables predicted changes in marital satisfaction for husbands, the number of children living in the home was significantly correlated with changes in marital satisfaction for wives. The number of children in the home was significantly correlated with more improvement in the marital satisfaction from pre-treatment to post-treatment. For couples, education and income were correlated with change in marital satisfaction. Surprisingly higher levels of education and higher levels of income were significantly correlated with less change in marital satisfaction from pre-treatment to post-treatment. Tables 22 and 23 contain the correlations between the demographic variables and DAS scores at post-treatment.

Hypothesis VI

Hypothesis VI investigated pre-treatment and post-treatment levels of distress on changes in marital satisfaction at follow-up. In addition to looking at changes in marital satisfaction, it is helpful to look at how these measures predict marital satisfaction at follow-up. For husbands' marital satisfaction at follow-up, neither the husbands' nor wives' scores of psychological distress and anger were significant. The wives' pre-treatment levels of psychological distress did predict lower marital satisfaction at follow-up. Post-treatment levels of distress and anger did not significantly predict levels of marital satisfaction for wives. Table 24 contains these results. While none of the pre-treatment measures for husbands or wives significantly predicted the couple's marital satisfaction at follow-up, the couple's combined pre-treatment level of psychological distress significantly predicted lower marital satisfaction scores at follow-up. See Table 25 for results.

Table 22

Correlations Between Demographic Variables and Marital Satisfaction Score at Post-treatment

Demographics	Husbands	Wives	Couples
Age	.09	-.10	-.04
Years Dated	.49**	.33*	.45**
Years Married	.07	-.23	-.11
Previous Marriages	-.14	-.08	-.19
Income	.15	.19	.24
Education	.31*	-.07	.02
Children in home	-.10	.05	-.01
Total children	-.01	.23	.16

Note: $p < .05$ * $p < .01$ **

Table 23

Correlations Between Demographic Variables and Marital Satisfaction Change Score From Pre-treatment to Post-treatment

Demographics	Husbands	Wives	Couples
Race	.02	-.05	-.03
Age	-.01	-.24	.10
Years Dated	.15	.17	.17
Years Married	-.08	-.09	-.09
Previous Marriages	-.01	-.01	.07
Income	-.05	-.05	-.20*
Education	.13	-.23	-.34**
Children in home	.13	.43**	-.07
Total children	.07	.10	.06

Note: $p < \text{or} = .05$ * $p < \text{or} = .01$ **

Table 24

Unstandardized Beta weights for Pre-treatment Psychological Distress and Anger on Marital Satisfaction

		Distress	Partner Distress	Anger	Partner Anger
Husbands	Marital Satisfaction	-.08	-.01	.15	-.38
Wives	Marital Satisfaction	-.14*	-.03	.02	.78

Note: p < or = .05* p < or = .01**

Unstandardized Beta weights for Post-treatment Psychological Distress and Anger on Marital Satisfaction

		Distress	Partner Distress	Anger	Partner Anger
Husbands	Marital Satisfaction	-.03	-.04	-1.10	-.45
Wives	Marital Satisfaction	-.18	.04	-.33	.27

Note: p < or = .05* p < or = .01**

Table 25

Unstandardized Beta weights for Pre-Treatment and Post-treatment Psychological

Distress and Anger on Couple's Marital Satisfaction

	Pre-Treatment	Post-treatment
Husbands Distress	-.10	.01
Husbands Anger	.77	-.79
Wives Distress	-.16	-.12
Wives Anger	-.24	-.90
Couples Distress	-.14**	-.14**
Couples Anger	.08	.08

Note: p < or = .05 * p < or = .01**

DISCUSSION

Preliminary Comparisons

One of the challenges of conducting therapy outcome research is collecting follow-up data. It can be a time consuming and expensive process to locate participants months, or even years, after treatment to obtain new information. While some researchers (Snyder & Wills, 1989) were able to contact 96% of their couples for a one-year follow-up, most long-term outcome studies obtain follow-up data from 80-90% of their participants (Shadish & Baldwin, 2005). This study was able to collect data from 75% of the couples who completed treatment. While this number is slightly lower than average, it is acceptable given the limitations of funding and the exploratory nature of the research. It is also important to note that there were no significant differences between the couples who completed the follow-up data and those who did not. Thus, the follow-up sample, while not as robust as others, is representative of the sample as a whole.

One way to begin to understand how the husbands, wives, and couples changed from post-treatment to follow-up is to examine the effect sizes of the outcome data. Initial comparisons suggest that there were large effects for husbands, wives, and couples on the DAS from pre-treatment to post-treatment. Effect sizes were smaller for the ACQ, SCL-90-R, and STAS at post-treatment, but the effect sizes continued to grow at follow-up. The effect sizes between post-treatment and

follow-up were very small, particularly for husbands and couples, which suggests that participants experienced only slight decreases in marital satisfaction.

It is also useful to compare the effect sizes for SFMT to other treatment modalities. Marital satisfaction effect sizes for Behavioral Marital Therapy at post-treatment have ranged from .95 (Hahlweg & Markman, 1988) to .59 (Shadish & Baldwin, 2005). The effect size for CBMT was .54 and .87 for EFT at post-treatment. These marital satisfaction effect sizes are similar to the marital satisfaction effect sizes for SMFT, as measured by the DAS. The couples' DAS effect size of .89 is particularly strong. Dunn and Schwebel's (1995) meta-analysis of BMT outcome at follow-up produced an effect size of .54. The average follow-up period in this study was 8.75 months. They also reported six month follow-up effect size for CBMT at .75. A one-year follow-up of EFT produced an effect size of .69. Two outcome measures used in this study have follow-up effect sizes similar to those reported in prior research. Effect sizes for the DAS and ACQ for husbands, wives, and couples in this study ranged from .49-.80. Obtaining effect sizes for SFMT at post-treatment and follow-up that are similar to other treatment modalities is an important step in validating this intervention.

Primary Comparisons of Post-treatment and Follow-up Outcomes for SFMT

The current study hypothesized that there would be no significant changes on the five outcome measures from post-treatment to follow-up. I predicted that the skills and insights gained in the course of the 12 sessions of therapy would help couples maintain improvements for 6 months. Six months, while a common period of time for follow-up outcome studies (Dunn & Schwebel, 1995) is a relatively short time-frame that should be sustainable if the treatment modality is truly effective. It is

difficult, however, to statistically support a hypothesis of no change because the desired outcome, insignificant results, is difficult to interpret.

In order to investigate the changes from post-treatment to follow-up on my outcome measures I used repeated measures ANOVAs. This allowed comparisons for time, gender, and interactions for each outcome measure. Repeated-measures ANOVAs on the DAS, ACQ, SCL-90-R, and RSE yielded no significant results. There were no significant improvements or declines from post-treatment to follow-up. There was a significant gender effect for the STAS, wives were more angry than husbands at post-treatment and follow-up. As wives tend to initiate couples therapy (Rugel, 1997), it is probable that marital stress was a significant source of anger for the wives throughout treatment. As therapy progressed, the source of the wives' anger may have diminished as they began to feel more supported by their husbands, but it never reached the same level as the husbands.

While the effect sizes and repeated measures ANOVAs begin to give a picture of change from post-treatment to follow-up, looking at reliable and clinically significant change over time is also helpful. Assessing change in marital satisfaction, captured by the DAS, it is notable that more than half of the husbands and couples in the sample achieved reliable change a post-treatment. More importantly, the majority of those husbands and couples maintained the reliable change at follow-up. Recovery rates for husbands, wives, and couples at follow-up suggest that most of the people who recovered at post-test also maintained them at follow-up. The majority of couples (57%) achieved clinically significant change at post-treatment and 43% of couples in the sample maintained clinically significant change at follow-up. The number of husbands and wives who achieved clinical significance is lower at post-

treatment and follow-up, but nearly half of the individuals who achieved clinical significance at post-treatment were able to maintain it at follow-up. While these results seem promising, it is important to note that many of the chi-squares used for this analysis had fewer than 5 participants in a cell. We must, therefore, interpret them with caution and consider these results speculative.

It is helpful to put these findings in the context of other treatment modalities. As was done in the current study, many marital therapy efficacy studies addressing reliable change and clinical significance analyzed marital satisfaction scores (Halford et al, 1993; Jacobson & Follette, 1985; Snyder & Wills 1989). Some studies have analyzed husbands and wives separately (Baucom et al., 1990), while others used couple scores (Jacobson & Follette, 1985, Snyder & Wills, 1989). As this study has looked at both individual husband and wife scores as well as couple scores, I can make comparisons with both kinds of studies.

Both Baucom et al. (1990) and Halford et al. (1993) looked at husbands and wives separately. Baucom et al. reported that 56% of husbands reliably changed and 46% experienced clinically significant change at post-treatment with BMT. Halford et al. reported that 73% of husbands reliably changed and 54% experienced clinically significant change at post-treatment. The results for SFMT husbands are slightly lower, with 53% of husbands reliably changing and 28% experiencing clinically significant change. With regard to wives, 69% reliably improved and 54% experienced clinically significant change in Baucom et al.'s study. Wives in Halford et al.'s study also demonstrated high levels of change; with 65% of wives reliably changing and 42% experiencing clinically significant change. In the current study 61% of wives reliably changed on the DAS and 39% experienced reliable change at

post-treatments. Given the small sample size for this study, these findings are quite comparable.

With respect to couples, Jacobson et al. (1984) found that 56% of couples receiving BMT reliably changed, while 35% experienced clinically significant change. Snyder and Wills (1989) compared couples who received BMT and IOMT. They found that 72% of the couples receiving BMT reliably changed at post-treatment, while 55% reached clinical significance. For IOMT, 62% of couples reliably changed and 40% achieved clinical significance. In the current study, 57% of the couples achieved reliable change and the same percentage achieved clinically significant change at post-treatment. Thus, SFMT was able to create similar change to other well-known marital therapy interventions, despite a small sample size and novice therapists.

The literature on maintaining reliable and clinically significant change over time is much less robust. Jacobson and Follette (1985) completed reliable change and clinical significance statistics on marital satisfaction at post-treatment and 6 month follow-up. This is the same time-frame as this study, so it is a useful comparison. They found that 62.8% of their couples maintained reliable change at follow-up and 48.9% experienced clinically significant change. In the current study, 34% of couples maintained reliable change and 34% maintained clinically significant change at follow-up. The SFMT results are clearly lower than those in Jacobson and Follette, but the sample size of that study was much larger, included more therapy sessions, and had a higher response rate at follow-up.

The results for the ACQ are not as promising as the DAS. At post-treatment only 23% of husbands, 38% of wives, and 30% of couples achieved reliable change.

Although the majority of husbands', wives', and couples' scores were in the recovered range at post-treatment and follow-up, the clinical significance numbers were quite low. Few husbands, wives, and couples achieved clinical significance at post-treatment and only 57% of wives, 37% of couples, and 60% of husbands maintained at follow-up. An extensive literature review revealed only one other study that used this measure to assess reliable change and clinical significance at post-treatment and follow-up. Jacobson and Follette (1985) reported that 63% of couples improved and 56% experienced clinically significant change at post-treatment. These numbers dropped to 55% of couples reliably changing and 50% achieving clinical significance at follow-up.

The ACQ results must be interpreted with caution for two reasons. Statistically, most of the chi-square analyses for the ACQ had one empty cell, which makes interpretation more difficult. There is also a theoretical cause for concern. The ACQ measures the desired changes in the relationship. While it is logical to assume that distressed couples would desire more change in their relationships, than non-distressed couples, Jacobson and Follette (1985) posited another theory. They suggested that couples who are engaged in treatment and feel hopeful about possibility of improvement may report more desired changes than couples who feel hopeless about treatment. If a couple does not believe that change is possible, they may report fewer desired changes. This confusion may be one reason why the ACQ is not frequently used in marital therapy outcome research.

The reliable change, recovery, and clinical significance results for the SCL-90-R are notable because they reflect the lack of psychological distress in the sample. At pre-treatment, 47% of wives, 72% of husbands, and 67% of couples were in the

recovered range on this measure. With pre-treatment levels of distress this low, it was very hard to achieve reliable change. The wives' post-treatment results for reliable change were more impressive than the husbands', as 39% of wives achieved reliable change at post-treatment versus 28 % of husbands. The recovery statistics at post-treatment and follow-up were quite high, but the pre-treatment recovery levels must be considered. The clinical significance results are similar to the reliable change results as 22% of husbands, 31% of wives, and 42% of couples achieved clinical significance at post-treatment.

The very high levels of recovery on the SCL-90-R raise the possibility that the recovery cut-off used in this study was inappropriate. The cut-off was based on Schmitz et al.'s (2000) SCL-90-R cut-off between 1000 healthy volunteers in a German university community and 274 moderately symptomatic clients from a German university-sponsored outpatient clinic. Although this data was collected with the intention of deriving standardized cut-offs for this measure to be used in future studies, it is possible that norms based on German university students cannot be generalized to the population of persons in distressed marriages in the United States. Further, in determining the SCL-90-R cut-off scores, Schmitz pooled the index scores from males and females without considering that the scores may be different based on sex. Gender difference in the experience and reporting of psychological distress may dictate that separate cut-offs be created for males and females. Thus, small sample size and a questionable recovery cut-off may have obscured real effects of SFMT in relieving psychological distress. Unfortunately, there are no marital therapy outcome studies that employ the SCL-90-R as an outcome measure, so it is not possible to compare these results to other research.

Predictors of Outcome for SFMT

While the primary purpose of this study was to demonstrate the long-term efficacy of Support-Focused Marital Therapy, the study also aimed to further initial understanding of who would most benefit from this kind of intervention. As Dunn and Shewebel (1995) note, it is important to look beyond the efficacy of a therapeutic intervention and begin to explore if the intervention is more effective with a particular kind of client or condition. As such, this study looked at therapeutic alliance, as well as individual and couple characteristics to better understand who responded most to SFMT.

In order to begin to understand which couples would benefit most of SFMT, this study looked at several demographic variables to see if they correlated with marital satisfaction scores at follow-up and changes in marital satisfaction between post-treatment and follow-up. Shapo's (2001) initial study of the efficacy of SFMT found that husband's lower education and lower household income were significantly related to husband's changes in marital satisfaction from pre-treatment to post-treatment. She also found a significant correlation between wives' age and change in marital satisfaction. Surprisingly, these results were not replicated in the current study. All of the waitlist couples in her study completed treatment and were included in this study, and this increase in the number of participants may account for difference in the findings.

While there were very few demographic variables that were significantly correlated with marital satisfaction, as measured by the DAS, at post-treatment, a number of variables were correlated with marital satisfaction at follow-up. Fewer variables were correlated with changes in marital satisfaction from pre-treatment to

post-treatment than post-treatment to follow-up. This suggests that the traits and circumstances captured by the demographic variables may not be as important during treatment, but appear to influence how couples function longer-term. An example of this is the number of previous marriages for participants. While this variable was not correlated with marital satisfaction or changes in marital satisfaction at post-treatment, it was negatively correlated at follow-up for wives and couples. It is possible that a history of failed marriages does not influence a partner when they are actively engaged in improving their marriage by participating in weekly therapy, but it may influence their thoughts or feelings in the months following treatment and contribute to lower marital satisfaction. As previous marriages predict poorer outcomes, it is important that SFMT therapists address this issue during therapy to help inoculate couples against this trend.

Some demographic variables, such as age, previous marriages, income, and children in the home were correlated with both marital satisfaction and change in marital satisfaction over time; others were only correlated with one. While the number of years the couple dated was positively correlated with marital satisfaction at post-treatment and follow-up, it was not correlated with change in marital satisfaction over time. As this is an unusual result that has not been reported in other studies, further investigation was warranted. The number of years a couple dated was coded by year with a range of 1 to 8 years. There were a number of couples who dated 5 or more years prior to marriage. The length of dating prior to marriage was also significantly correlated with pre-treatment levels of marital satisfaction ($r = .27, p = .02$), suggesting that these couples were more satisfied with their marriages prior to beginning treatment. While it does not appear that SFMT is more effective for these

couples, it is interesting that couples who dated longer had higher levels of marital satisfaction. It is possible that the longer dating period helped couples create a stronger foundation for marriage.

The number of children in the household was positively correlated with wives' change in marital satisfaction from pre-treatment to post-treatment, wives' marital satisfaction at follow-up, and wives' and couple's change in marital satisfaction from post-treatment to follow-up. This finding may be due to the unique approach of SFMT. SFMT encouraged partners to be more supportive and more understanding of partner's needs. While both partners may be lacking in support, it is often husbands who are not adequately supporting their wives (Rugel, 1997). In the course of therapy, husbands are encouraged to develop a more relational orientation and become more aware of their wives' needs. In many households, wives handle more of the household tasks, and wives who have several children in the home may be in need of their husband's assistance with these tasks. In the course of SFMT, if husbands become aware of their wives' stress and take the opportunity to assist and help support them, it may lead to an improvement in the wives' level of marital satisfaction. This is similar to Brunstein, Dangelmayer, and Schultheiss' (1996) study that linked marital satisfaction with perceived goal support. Wives who feel their husbands are helping them meet their goals may feel greater satisfaction in their marriage.

Some of the variables that predicted marital satisfaction at follow-up are consistent with the literature. Baucom (1982) determined that Behavioral Marital Therapy was more effective for younger couples and younger wives in this study had better outcomes at follow-up. Low job status was correlated with poor outcome in

long term studies of the effectiveness of IOMT and BMT (Johnson & Talitman, 1997), which is similar to my finding that education and income were positively correlated with marital satisfaction for husbands at post-treatment and follow-up. One surprising result is that education and income are negatively correlated with change in marital satisfaction from pre-treatment to post-treatment for couples. These variables are not significant at follow-up nor are education and income negatively correlated with marital satisfaction at post-treatment or follow-up. This suggests that individuals with less income and education benefit more from SFMT during treatment, but these effects level off over time. It is possible that these poorer, less-educated couples benefit more from the opportunity to focus on their marriage and learn new skills to handle the stresses in their lives. Wealthier couples may have the ability to take vacations, go out on dates, and other relationship strengthening activities that poorer couples cannot afford. Therapy may be one of the few opportunities for poorer couples to spend quality time together.

The importance of therapeutic alliance in therapy outcome is a major focus of research and Johnson and Talitman (1997) found that therapeutic alliance was the most significant predictor of success for EFT. While it appears that therapeutic alliance is not significantly correlated with marital success for SFMT, it is important to investigate these results. The Couples Therapy Alliance Scale used in this study generates an alliance score between 1 and 7, with higher scores indicating stronger alliance. The mean alliance score for the participants in this study was 5.7, suggesting that most couples felt strongly aligned with their therapist. The lack of variability in the alliance score may contribute to the insignificant findings. Another possible explanation for the high therapeutic alliance scores is the unique nature of research

setting. Couples who chose to participate in the study did so with the understanding that they were receiving manualized treatment in a research setting. Their alliance scores may be high because of their confidence in the university, the presence of a treatment manual, or the intensive supervision the therapists received.

The only significant correlation with therapeutic alliance was a positive correlation for wives on the ACQ. This indicates that wives who felt a strong alliance with their therapist had more requests for change in the marriage. This significant result contradicts the hypothesis, as it suggests that a stronger relationship with the therapist is related to more requests for change at follow-up. It is possible that wives who felt comfortable with their therapist were more hopeful about the therapeutic process and therefore more willing to identify changes they would like to see in the marriage. Weinberger (1995) stated that therapeutic alliance includes bonds, tasks, and goals. Goals includes short and longer-term therapeutic objectives. Wives who had strong alliance with their therapist may have developed more goals for treatment that could be linked to requesting changes on the ACQ. Jacobson and Follette (1985) also note that the ACQ does not always reflect the success of therapy because hopeless couples request fewer changes than couples that are hopeful that therapy will be effective. This tentative hypothesis merits further investigation in a study with a larger sample size and more variability in levels of therapeutic alliance.

Another possible predictor of outcome in marital therapy is distress. In this study distress was measured by the SCL-90-R, an indicator of psychological distress, and the STAS, a measure of anger. The wives in this study had higher levels of anger and psychological distress and these measures of distress did predict levels of marital satisfaction and changes in marital satisfaction from post-treatment to follow-up for

wives and couples. Husbands' scores were not significant in any of the regressions. These results may be caused by wives' relational orientation. Rugel (1997) states that women are more oriented to relationships and more aware of changes in the quality of their relationships. They are more likely than their husbands to attribute feelings of anxiety, depression, or anger to the quality of their marriage, which influences levels of marital satisfaction (Gove, Hughes, & Style, 1983). Men, who are less relationally oriented, may attribute their anger or psychological distress more to work or financial stresses and less to their relationships.

Generally the results of this study support this theory. Wives' post-treatment level of anger predicts greater decreases in marital satisfaction from post-treatment to follow-up for wives and couples. Couples with higher anger scores at post-treatment also experienced decreased marital satisfaction from post-treatment to follow-up. This suggests that wives who remained angry at the end of treatment may have blamed their husbands for their anger and this anger eroded some of the gains they made in treatment. Further, wives' and couples' pre-treatment levels of psychological distress predict lower marital satisfaction at follow-up. This suggests that wives with greater distress may attribute their symptoms to their marriage. It is also possible that wives with higher levels of psychological distress have less ability to sustain the effort needed to maintain their marriage over time. While the specific mechanism is unclear, these results mirror other research (Snyder et al., 1993) and confirm the importance of continuing to investigate the relationship between distress and outcome.

There are some unusual results related to psychological distress. Wives' post-treatment levels of psychological distress predicted gains in marital satisfaction from post-treatment to follow-up for wives and couples. Couples' combined post-treatment

level of psychological distress was also a significant predictor of gains in marital satisfaction from post-treatment to follow-up. While this result contradicts most research and some of the findings of this study, it raises an interesting hypothesis. It is possible that wives who remained distressed at the end of treatment continued to focus a great deal of energy into improving the marriage, even after therapy was over. Less distressed wives may have been more likely to return to old patterns because they were less upset. Further studies of SFMT are needed to determine if this hypothesis has merit or if this is a result of this unique sample.

In addition to investigating general trends in demographics, alliance, and distress that help clarify who benefits from SFMT, I also hoped to identify individuals and couples who had significant increases in marital satisfaction at post-treatment and follow-up in order to see if they had specific qualities that helped them use SFMT so effectively. I looked for participants whose marital satisfaction scores showed linear improvement from pre-treatment to follow-up. Based on this criteria, 36% of husbands, 36% of wives and 28% of couples were responders.

Unfortunately, none of the variables I used to separate the responders from the non-responders were significant. There are several possible explanations for this result. The sample size of this study is quite small, making it difficult to obtain significant results. The participants in this study were also quite homogeneous. Couples were overwhelmingly Caucasian, highly educated, and earned more money than the national average, which limits the utility of these variables in separating responders from non-responders. This sample also had relatively low levels of psychological distress at pre-test, which limits the utility of this variable as well. A more diverse sample may have produced significant results.

The criteria established to define responders may also have been too stringent. Most marital therapy long-term outcome studies attempt to demonstrate that gains made in treatment are maintained at follow-up (Atkins et al, 2005); few suggest that couples will continue to improve. By proposing a linear model, this study labels participants who maintain marital satisfaction scores from post-treatment to follow-up non-responders. In fact, participants who slightly improved from post-treatment to follow-up would also fall into the non-responder category. While this definition of responder to treatment is narrow, there is value in looking for common traits in these “super responders” to help understand how SFMT works. Future studies may reconsider the definition of responder and lower the criteria.

Clinical Implications of the Current Study

This study builds on Shapo’s (2001) efforts to demonstrate the efficacy of SFMT by looking at changes in outcome six months after the end of the treatment intervention. Analyses of the follow-up data suggest that SFMT provides couples with the skills and understanding they need to maintain improvements in marital satisfaction for at least six months. Effect size data suggests that some husbands, wives, and couples continued to improve on measures of desired change and psychological distress between post-treatment and follow-up, although repeated measures ANOVAs were not significant. These findings indicate that the 5 goals of SFMT: increasing support, decreasing triangular behavior, decreasing derogatory behavior, improving communication, and increasing intimacy, can create lasting change in marriages. In fact, the effect sizes and reliable and clinically significant change results for marital satisfaction were quite similar to other marital therapy modalities such as BMT and EFT. Given the size of the current study and the George

Mason University Marital Therapy Project in general, these results are quite promising.

SFMT appears to help couples regardless of race, age or length of marriage. It may be particularly helpful to couples with children in the home, as encouraging husbands to adopt a more relational orientation and offering their wives more support, may be key to improving couples' marital satisfaction. Although some predictors of outcome such as wives' anger, were identified, it was not possible to identify particular traits that make individuals or couples more likely to benefit from SFMT.

This study points out several areas of focus for practitioners of couple's therapy. As couples in this study appeared to bond strongly with novice therapists, it may be that couples were comfortable with the structure of a manualized treatment approach. Therapists may benefit from describing their approach to treatment to couples in order to help them engage in the treatment process. An initial focus on the areas of frustration and anger for the wife, as well as encouraging the husband to take practical steps to provide support may be beneficial. If one or both members of the couple have been married previously, it may be useful to discuss the likelihood that this past experience may hinder long-term marital satisfaction. Helping couples identify negative beliefs or expectations may diminish this effect. Lastly, therapists may encourage couples to return for monthly "booster" sessions to reinforce skills and inoculate against the decline in marital satisfaction seen in some couples after treatment ended.

Limitations of the Current Study and Directions for Future Research

The current study was limited by its relatively small sample size, the lack of diversity in the subject pool, and the relatively short time between the end of

treatment and follow-up. Further research using a larger sample that is more ethnically and socioeconomically diverse and represents a couples with a broader range of psychological distress would help bolster the efficacy evidence for SFMT. While the ethnicity of the participants was not significantly correlated with outcome, the growing diversity of the country cannot be overlooked. It is important to seek out more ethnically diverse couples to determine if SFMT can be useful with couples from diverse backgrounds. This may be accomplished by developing partnerships with agencies throughout the Washington, DC Metropolitan area that serve a broad client base. Further, this study screened out participants who were engaged in an extramarital affair, abusing substances, or victims of domestic violence. A study that includes more severely distressed couples, such as these, would be beneficial.

In order to establish SFMT as a treatment modality equal to well known interventions such as BMT or CBMT, longer-term follow-up studies of a year or more are needed. Direct comparisons of SFMT to other treatment modalities are also needed. This study was also limited in that it did not examine: the extent to which therapists adhered to the SFMT manual, the role of homework completion, or couples' perception of improvements in the five targeted areas. It may also be useful to add additional monthly "booster" sessions after treatment is over to help couples maintain their gains and continue to develop their skills. This may also help alleviate the negative effect of previous marriages on marital satisfaction at follow-up.

Another limitation of this study was that it did not include any subjective evaluations concerning participants' evaluations of therapy efficacy at post-treatment or follow-up. Self-reported data, as outlined by Seligman (1995) would provide valuable information in addition to the outcome measures currently used. This self-

report data might include questions about how much treatment helped with the problems that led to seeking treatment or how satisfied the client was with their life as compared to the beginning of treatment. This data could be compared to the objective cut-off scores of the other measures used to determine if the participants' experience of improvement is accurately captured by the data. It may be that some couples meet the recovery criteria, but are still unhappy with their circumstances, while other couples are pleased with their relationship, even if they do not meet the objective criteria. Specific measures of support would also be useful, as increasing support is the hallmark of SFMT. A measure that includes items about each of the 5 main areas of intervention would help determine which areas are most important and how closely therapists are following the treatment manual.

Further research may also look at other outcome measures of satisfaction and distress, given the inconsistent findings with the ACQ and questionable cut-off score of the SCL-90-R. It would be helpful to incorporate measures that are more frequently used in marital therapy outcome studies to enhance the ability to directly compare results. The DAS is a common outcome tool, but it would be helpful to find other measures that are used regularly. Identifying measures of anger and distress that are focused on the marriage would also be helpful. General measures, such as the STAS, are a useful place to start, but measuring levels of anger directed toward the spouse would be very helpful. In order to replicate and validate the results of this study, continued use of the current measures is needed, but new measures could be added to enhance our understanding of SFMT and who benefits the most from this type of intervention.

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