

CHAPTER I: INTRODUCTION

The purpose of this study was to test the efficacy of emotion focused therapy as a combined treatment of relational distress and somatoform disorders, or conditions that present medically, but are not medically explainable. This study also examined whether or not quality of life variables, recognition of positive feelings toward partner, and co-morbid depression and anxiety improved or changed during the couple treatment intervention.

In medicine, there is considerable interest in somatic complaints and those who seek healthcare services because of them. Recent attention has been given to somatoform disorders (SD's) after being labeled a "crisis" in health care (Barsky & Borus, 1995; p. 1931). Conservative estimates suggest that 10-15% of primary care patients experience SD's (Spitzer, Williams, Kroenke, 1994; Kellner, 1985) while one study reported a 25% prevalence rate of SD's in primary care settings (Kirmayer & Robbins, 1991). Many patients, estimates ranging from 30-60%, experience somatic symptoms but seldom find medical relief from them because they can't be medically explained (Stuart & Noyes, 1999).

Currently, no evidence-based treatment for SD's exist (Sharpe, Gill, Strain, & Mayou, 1996). When medical pathology can't be detected, their primary care physician or specialist may refer somatic patients for behavioral health treatment. To date, behavioral health treatment for SD's has typically consisted of cognitive-behavioral individual and group therapy and has been used to treat somatic symptoms ranging from facial pain to irritable bowel syndrome (Harrison, Watson, & Feinmann, 1997; van Dulmen, Fennis, & Bleijenberg, 1996; Blanchard & Malamood, 1996). These individual models of treatment, compared to symptom monitoring alone, have received support for their effectiveness in reducing symptoms of pain, depression and anxiety

that are commonly associated with SD's (Harrison, et al., 1997; van Dulmen, et al., 1996; Blanchard & Malamood, 1996).

At present, no marital or couples psychotherapy has been studied in the behavioral health treatment of SD's. Therefore, the purpose of this study was to test emotion focused therapy as a treatment of relational distress and SD's. Additional goals were to examine whether relationship satisfaction, quality of life, recognition of positive feelings toward partner, and co-morbid depression and anxiety symptoms improved or changed during the course of couple intervention.

Following are the primary hypotheses in this study:

1. Somatic symptoms will improve in individuals with SD or USD after 8 sessions of EFT compared to couples on a 12-week wait list.
2. Participants will have greater relationship satisfaction after 8 sessions of EFT than couples on a 12-week wait list.

Following are the secondary hypotheses in this study:

1. Individuals with SD or USD will have improvement in quality of life after 8 sessions of EFT compared to couples on a 12-week wait list.
2. Individuals with SD or USD will indicate more positive feelings towards their partners after 8 sessions of EFT compared to couples on a 12-week wait list.
3. Co-morbid anxiety symptoms present in participants with SD or USD will decrease after 8 sessions of EFT compared to couples on a 12-week wait list.
4. Co-morbid depressive symptoms present in participants with SD or USD will decrease after 8 sessions of EFT compared to couples on a 12-week wait list.

CHAPTER II: REVIEW OF THE LITERATURE

The review of the literature will address the prevalence, co-morbidity, definitions, cultural idioms, and theoretical explanations of somatoform disorders. A relational model of somatization, heavily borrowed from attachment theory and an interactional model of depression, will be presented. Finally, a rationale is described for using emotionally focused therapy as the combined treatment of somatic symptoms and relationship distress for this outcome study.

Somatoform Disorders

The term somatic has been defined and studied in various ways (Kellner, 1990) and has been described as “a widespread and largely unsolved problem, at the borderland between psychiatry and medicine” (Lipowski, 1988, p. 1358). Early on, psychoanalysts believed somatic expressions were reactions spawned by subconscious neuroses and used as defense mechanisms. A psychoanalyst first used the term somatization, describing it as a neurosis-based bodily disorder that mimicked Freud’s conversion concept (Steckel, 1943, as cited in Hinsie & Campbell, 1960) which was viewed as a defense mechanism to avoid conflict.

More recently, somatization has been referred to as “a tendency to experience and communicate somatic distress and symptoms unaccounted for by pathological findings, to attribute them to physical illness, and to seek medical help for them.” (Lipowski, 1988, p. 1359). This definition suggests that people who somatize do not acknowledge psychological causes for their symptoms (McWhinney, Epstein, & Freeman, 1997). Accordingly, this lack of acknowledgement becomes a problem in predominate Western medicine when a person routinely seeks help for a condition that cannot be seen or detected by conventional examination. This can

drive up health care costs through the prescribing of unnecessary medicines, surgeries, lab tests, and procedures (Lipowski, 1988).

Throughout the past decade numerous epidemiological and community studies have been conducted on the prevalence and presentation of somatization, or medically unexplained symptoms, in primary care. As a result of this work, Katon & Walker (1999) have identified six main tenets to describe medically unexplained symptoms in primary care and include the following:

1. Most of the symptom presentation in primary care is not linked to organic disease.
2. The presence of a psychiatric disorder increases rates of healthcare utilization and disability, regardless of whether an organic disease exists.
3. Factors including poor early family environment, prior illness experience, and certain personality traits can predispose one to develop medically unexplained symptoms.
4. Medically unexplained symptoms greatly impact the quality of the doctor-patient relationship.
5. Medically unexplained symptoms are responsible for a large percentage of health care costs.
6. There is a relationship between the number of medically unexplained symptoms and the lifetime risk of psychological distress and psychiatric disorder. The strength of this relationship increases as patients transfer to medical areas of specialization.

Operationalizing Somatic Illness

For the purpose of this research, medically unexplained symptoms, or somatic illness, will be defined according to the criteria offered in the DSM-IV (APA, 1994, pp.449-450).

Following are the DSM-IV criteria for Somatization Disorder (SD):

- A. A history of many physical complaints beginning before age 30 years that occur over a period of several years and result in treatment being sought or significant impairment in social, occupational, or other important areas of functioning.
- B. Each of the following criteria must have been met, with individual symptoms occurring at any time during the course of the disturbance:
- (1) *Four pain symptoms*: a history of pain related to at least four different sites or functions (e.g., head, abdomen, back, joints, extremities, chest, rectum, during menstruation, during sexual intercourse, or during urination).
 - (2) *Two gastrointestinal symptoms*: a history of at least two gastrointestinal symptoms other than pain (e.g., nausea, bloating, vomiting other than during pregnancy, diarrhea, or intolerance of several different foods)
 - (3) *One sexual symptom*: a history of at least one sexual or reproductive symptoms other than pain (e.g., sexual indifference, erectile or ejaculatory dysfunction, irregular menses, excessive menstrual bleeding, vomiting throughout pregnancy)
 - (4) *One pseudoneurological symptom*: a history of at least one symptom or deficit suggesting a neurological condition not limited to pain (conversion symptoms such as impaired coordination or balance, paralysis or localized weakness, difficulty swallowing or lump in throat, aphonia, urinary retention, hallucinations, loss of touch or pain sensation, double vision, blindness, deafness, seizures; dissociative symptoms such as amnesia; or loss of consciousness other than fainting)
- C. Either (1) or (2):
- (1) after appropriate investigation, each of the symptoms in Criterion B cannot be fully explained by a known general medical condition or the direct effects of a substance (e.g., a drug of abuse, a medication)
 - (2) when there is a related general medical condition, the physical complaints or resulting social or occupational impairment are in excess of what would be expected from the history, physical examination, or laboratory findings
- D. The symptoms are not intentionally produced or feigned (as in Factitious Disorder or Malingering).

For a diagnosis of Undifferentiated Somatoform Disorder (USD), the following criteria must be met in the DSM-IV (APA, 1994, pp.451-452):

- A. One or more physical complaints (e.g., fatigue, loss of appetite, gastrointestinal or urinary complaints).

- B. Either (1) or (2):
 - (1) after appropriate investigation, the symptoms cannot be fully explained by a known general medical condition or the direct effects of a substance (e.g., a drug of abuse, a medication)
 - (2) when there is a related general medical condition, the physical complaints or resulting social or occupational impairment is in excess of what would be expected from the history, physical examination, or laboratory findings
- C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The duration of the disturbance is at least 6 months.
- E. The disturbance is not better accounted for by another mental disorder (e.g., another Somatoform Disorder, Sexual Dysfunction, Mood Disorder, Anxiety Disorder, Sleep Disorder, or Psychotic Disorder).
- F. The symptom is not intentionally produced or feigned (as in Factitious Disorder or Malingering).

Criticism has surrounded the diagnostic criteria for SD's (Rief & Hiller, 1999). Researchers have argued that the DSM-IV criteria for SD are too stringent with the multiple symptom threshold that must be met and exclude a number of people who experience impairment and excessive health care use (Hiller, Rief, Fichter, 1995; Escobar, Rubio-Stipec, Canino, & Karno, 1989). The classification of USD was added to the DSM-III-R and DSM-IV as a residual category, but most patients who are persistent somatizers are falling under this diagnosis (Rief & Hiller, 1999; Kroenke, Spitzer, deGruy, & Swindle, 1998). The Somatic Symptom Index (SSI-4/6; Escobar et al., 1989) and Multisomatoform Disorder (MSD; Kroenke, Spitzer, deGruy, Hahn, Linzer, Williams, Brody, & Davies, 1997) constructs were developed in response to the difficulty with the DSM-IV high symptom threshold in SD and single symptom classification designated by USD. However, reliability and validity problems have been reported with these constructs and empirical evidence does not support the use of these constructs at this time.

Descriptions of Somatic Patients

Somatic patients have been described as difficult, challenging (Kroenke, et al., 1997), and as substantial utilizers of health care services (Lipowski, 1988). Historically, somatic patients have been recognized in medicine over centuries and have been labeled in various ways including ‘hysterical’, ‘hypochondriacal’, and ‘melancholic’ (Lipowski, 1988). More recently, somatic symptoms have been referred to as psychosomatic, psychogenic, somatoform, and functional. Disrespectful terms have also been used to refer to these patients and include “crocks,” “the worried well,” and “problem patients” (Lipsitt, 1970; McGaghie & Whitenack, 1982). These terms reflect the belief that a person’s symptoms are not legitimate, and imply that they may even be made up (Lipowski, 1988). “Problem patients” have been identified according to various medical specialties as follows in Table 1.

Table 1. Areas of Medicine and Their “Problem Patients”*

Orthopedics	Lower back pain
OB/GYN	Pelvic pain, PMS
Internal Medicine	Chronic Fatigue Syndrome
Neurology	Dizziness, Headache
Cardiology	Atypical chest pain
Pulmonary	Hyperventilation
Dentistry	TMJ Syndrome
Rheumatology	Fibromyalgia Syndrome
Gastroenterology	Irritable Bowel Syndrome
Rehabilitation	Closed head injury

Endocrinology	Hypoglycemia
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*Table adapted from Katon & Walker (1998).

Co-morbidity

It is common for SD's to coexist with other conditions including other mental illness and general medical conditions. This process is referred to as co-morbidity and is defined as more than one disorder coexisting in a person within a specific time period (Wittchen, Lieb, Wunderlich, & Schuster, 1999; Wittchen, 1996). High rates of depression, anxiety, and personality disorders have been found in several studies on SD's (Leibbrand, Hiller & Fichter, 1999). Due to the high incidence of co-morbidity, recognizing somatic symptoms can be challenging as they frequently overlap with symptoms of depression and anxiety (Simon, Manning, Katzelnick, Pearson, Hanks & Helstad, 2001). For example, fatigue, psychomotor agitation or retardation, and significant weight gain or loss are listed in the DSM-IV as criteria for a major depressive episode (APA, 1994), yet these may be symptoms related to a general medical condition (Simon et al., 2001). As examples, significant weight loss may be attributed to cancer in one patient whereas fatigue may result from congestive heart failure in another (Koenig, 1999). As these examples illustrate, teasing apart general medical conditions from depression can be difficult.

Somatoform Disorders and Depression

It can become even more challenging to recognize depression in the context of SD's as many depressed people have somatic symptoms as opposed to psychological depressive symptoms (Kroenke, et al., 1997). Identifying and treating SD's is needed to improve the prognosis of depression, which can be deadly. Evidence has shown that when psychiatric

conditions are left untreated, they contribute to mortality, morbidity, and health care expenditures. Further, it has been reported that people with depression tend to use health care services three times more than the general population (Katon & Schulberg, 1992) and people with SD's use health care resources nine times more than general consumers (Smith, 1994). These conditions often coexist and can effect the presence of morbidity (Weich, Lewis, Donmall, & Mann, 1995). For example, people who experience pain that cannot be medically explained in two different sites in the body are five times more likely to have major depression when compared to healthy controls (Dworkin, Von Korff, & LeResche, 1990). Further, individuals with at least three unexplainable medical pains are eight times more likely to have major depression (Dworkin et al., 1990). Epidemiological and clinical studies have shown a positive relationship between somatization and depression (Blacker & Clare, 1987; Prestige & Lake, 1987; Silver, 1986; Katon, Kleinman, Rosen, 1982).

To illustrate the co-morbidity of depression, longitudinal research investigating the temporal relationship between depression and secondary mental disorders suggest that anxiety and SD's are risk factors for the onset and continuation of depression. The relationship between depression and SD continues to remain unclear due to its complexity and the inability to tease out mediating effects. Whether depression develops before or after the onset of somatic illness is unknown (Arolt, Fein, Driessen, Dorlochter, & Maintz, 1998). What researchers have found regarding the relationship between somatic illness and depression is that one's social adjustment is worse when depression precedes somatic illness than when it succeeds somatic illness (Hawton, 1981).

Somatiform Disorders and Anxiety

People who experience anxiety often present in primary care settings with multiple somatic complaints including palpitations, headache, dizziness, fainting, and chest pain (Katon, 1986). Factors that have been suggested to account for somatization in anxiety disorders include increased arousal of the sympathetic nervous system, negative appraisal of one’s health (Noyes, Reich, & Clancy, 1986), and over-awareness of bodily sensations (MacLeod, Mathews, & Tata, 1986). It has also been suggested that individuals with anxiety have a limited threshold in tolerating discomfort which may increase the focus of attention on physical symptoms (Katon & Walker, 1998).

Clarke & Smith (2000, p. 112) have identified the epidemiology of somatization as a common process that is “frequently accompanied by symptoms of depression and anxiety. The expression of distress...in Western countries is not either/or, but most frequently involving both psychological and somatic symptoms.” Further, research is showing that as the rate of occurrence of depression and anxiety is correlated with the incidence of unexplained physical symptoms, the likelihood of depression and anxiety increases in relationship to the number of unexplained symptoms present as shown in Table 2 (Clarke & Smith, 2000; Katon & Walker, 1998).

Table 2. The Rates of Occurrence of Depression and Anxiety with Somatoform Symptoms*

Number of Unexplained Physical Symptoms	Depression	Anxiety
0-1	3%	1%
2-3	12%	7%
4-5	23%	13%

6-8	44%	30%
9 or more	60%	48%

*Table Adapted from Clarke & Smith, 2000

Several theories have been proposed to describe the nature of the relationship between general medical conditions and psychiatric disorders. For instance, genetic factors have been linked to somatization, but have played a minor role overall as a theoretical framework as research efforts have been contradictory (Kellner, 1990). In contrast, there has been consistent empirical support for the theory that somatization is a function of depression and/or anxiety (Kellner, 1990). Some support has been offered toward the theory that somatization may be an attempt at conflict resolution in relationships (Kellner, 1990). These theoretical frameworks are described below.

Somatization has been described as a manifestation of depression or anxiety. Consistent empirical findings have demonstrated that somatization and depression and anxiety are related (Kellner, 1990). Depressed and anxious persons have more somatic symptoms than people who are not depressed or anxious (Kellner, 1985; 1988). Somatization has been described as “masked depression” (Kellner, 1990, p. 152) where individuals respond to stressors with somatic symptoms instead of emotions. Somatic symptoms may also be manifestations of anxiety (Kellner, 1990). Such symptoms may include palpitation, sweating, and hyperventilation as indicated in psychophysiological data.

Somatization has also been theorized about as an attempt at conflict resolution. Specifically, somatization has been described as a defense mechanism where one denies or rationalizes in order to blame physical symptoms for personal failings (Kellner, 1990).

Similarly, somatization has been theorized as an attempt to resolve conflict by becoming focused or preoccupied with physical symptoms as a means to avoid conflict. While case studies have supported this theory of an individual's intolerance of or inability to face conflict (Ford, 1983) studies to date have not linked this theory to somatic complaints in a relational context.

Gottman (1994), however, has studied the psychophysiological effects of conflict avoidance in marriages and has shown that marital interaction influences physiologic processes. Gottman (1994) has hypothesized that continuous patterns of marital interaction producing consistent levels of physiologic arousal can be detrimental to one's health. Some physiological correlates of marital discord that have been studied include hypertension and atherogenesis (Ewart, Taylor, Kraemer, & Agras, 1991), systolic blood pressure reactivity (Denton, Burleson, Hobbs, Von Stein, & Rodriguez (2001), immune functioning (Keicolt-Glaser, Malarkey, Chee, Newton, Cacioppo, Mao, & Glaser, 1993; Keicolt-Glaser & Glaser, 1995), and endocrinological changes (Keicolt-Glaser, Glaser, Cacioppo, MacCallum, Syndersmith, Kim, & Malarkey 1997). In addition to Gottman's psychophysiology theory of marital interaction, there is a foundation of literature that describes relational conflict avoidance in the form of initiate-avoid interaction patterns and is described in a later section of this paper.

People who somatize may share certain characteristics with each other, but are described as a heterogeneous group (Weich, et al., 1995) who experience a variety of physical symptoms and psychological attributes making it difficult to define the construct, conduct research, and provide helpful treatment to this population (Lipowski, 1988). Multiplicity, complexity, and diversity exist within this group of people who experience somatic illness resulting in several theories about how and why individuals experience symptoms. For instance, some individuals who are depressed believe that their physical symptoms are not related to any type of emotional

or psychological process (Lipowski, 1988). In contrast, some patients may present to their doctors with physical symptoms while recognizing psychological issues or causes, but feel that it is safer or more acceptable to present with a less stigmatized physical symptom (Lipowski, 1988).

Trauma and Violence Correlates of Somatoform Disorders

Research has shown that many women who have experienced violent acts such as rape, physical violence, and childhood sexual, physical, and emotional abuse may develop somatic illness as a later consequence of such violent acts (Walker, Keegan, Gardner, Sullivan, Bernstein, & Katon, 1997; Koss & Heslet, 1992; Burge, 1989). Further, studies have shown that some women who have a history of sexual assault and/or abuse may later suffer from unexplained gastrointestinal problems (Drossman, Talley, Leserman, Olden, & Barreiro, 1995), fibromyalgia symptoms (Walker, et al., 1997), chronic headache (Golding, 1999), and chronic pelvic pain (Hendricks-Matthews, 1991; Reiter, Sharkerin, Gambone, & Milburn, 1991; Reiter & Gambone, 1990; Harrop-Griffiths, Katon, Walker, Holm, Russo, & Hickok, 1988). Other literature has focused on somatization in relationship to cultural idioms or norms as described below (Kirmayer & Young, 1998).

Cultural Influences in Somatization

The process of somatization is common among all cultures and societal groups that have been studied, according to Kirmayer & Young (1998). Differences are reported to exist among cultural styles of expression depending on the beliefs and health care practices of the culture (Kirmayer, & Young, 1998). The prevalence and characteristics of somatization vary among cultures, yet appear to be common expressions of emotional distress universally (Issac, Janca, & Orley, 1996). Research has not been able to establish the prevalence and significance of somatic

symptoms due to a lack of standard methodologies and varying definitions of the term somatic (Kirmayer & Young, 1998). However, a key component in the cross-cultural study of somatization is symptom attribution. How one makes sense of her symptoms is largely based upon cultural experience (Kirmayer, Young, & Robbins, 1994).

Cultures differ in levels of openness in the expression of emotion and in beliefs about mind-body issues. For example, in Korean culture, Hwa-Byung is a condition that is believed to be a somatic expression of suppressed rage and anger (Kim, 1993; Pang, 1990). Hwa-Byung has been studied in Koreans who live in the United States and their symptoms include burning in the epigastric region, muscle aches, headaches, dry mouth, palpitations, indigestion, insomnia, and feelings of heaviness. It also includes symptoms of depression such as sadness, loss of interest, feelings of guilt, regret, suicidal ideation, and irritability. Hwa-Byung is perceived not as a syndrome among Koreans, but as an expression of suppressed resentment and anger. Further, Hwa-Byung is viewed within the context of 'haan', a pile up of intense feelings including anger, despair, and resentment toward historical injustices, which reflects social and moral beliefs of Koreans. Hwa-Byung is not viewed as a somatization disorder in Korean culture. In contrast, it tends to be naturally identifiable among Koreans who are experiencing social and intrapersonal problems that contribute to the suppression of anger leading to illness (Kirmayer & Young, 1998). In contrast to thinking about the mind and body as mutual influences, predominant Western medicine has created the construct of somatization and has supported the split of the mind and body (McWhinney, et al., 1997).

Theoretical Explanations of Somatic Processes

The term somatization has been defined as “An idiom of distress in which patients with psychosocial and emotional problems articulate their distress primarily through physical

symptoms” (Clarke & Smith, 2000, p. 110). Somatization processes have been theorized about and interpreted by clinicians and researchers in many ways to understand the symptoms that people experience. These interpretive theories are not mutually exclusive and include the following:

- 1) A somatic expression may be an index of a disorder, as a signal that something is wrong with the body, even if it can't be confirmed diagnostically (Kirmayer, et al., 1994).
- 2) Symptoms may be symbolic expressions of psychological conflict that the individual may not be aware of or may deny (Young, 1995).
- 3) Somatic symptoms may develop from one's inability to express conflict and cope with emotional distress (Taylor, 1984).
- 4) Symptoms may be cultural idioms of distress, as depicted in the Hwa-Byung example mentioned above.
- 5) Somatic expressions may be metaphors of experience that are socially embedded and have meaning when they are described in a certain context (Kirmayer, 1992).
- 6) Symptoms may be acts of social positioning within families and other social systems; for instance, it has been theorized that exposure during childhood to familial illness behaviors, as in family members with chronic illness, influences the development of later life somatization (Stuart & Noyes, 1999).
- 7) A biopsychosocial model has been used in the field of medical family therapy to explain somatic fixation as described below.
- 8) Somatic symptoms have also been identified as serving a function in the family as outlined in the Psychosomatic Family Model below.

The Biopsychosocial Model of Somatic Fixation

In the field of medical family therapy, Susan McDaniel and colleagues (McDaniel, Campbell, & Seaburn, 1990) use a biopsychosocial framework to understand and treat somatic fixation. This framework borrows heavily from Engel's biopsychosocial systems theory that suggests problems may be rooted in and effect multiple systems including the biological or organ systems, psychological system, and social and relational systems (Engel, 1980). McDaniel and colleagues have defined somatic fixation as the "process whereby a physician or a patient or family focuses exclusively and inappropriately on the somatic aspects of a complex problem" (McDaniel et al., 1990, p. 5). This definition evolved from their clinical work with somatically fixated patients and their families and is unique in that they incorporate the physician into the conceptualization of the maintenance of the problem of somatization.

The Psychosomatic Family Model

While little has written about somatic illness in the context of couple relationships, somatic symptoms have been looked at in the context of family systems stemming from the work of Minuchin and colleagues with psychosomatic families (Minuchin, Baker, Rosman, Liebman, Milman, & Todd, 1975; Minuchin, Rosman, & Baker, 1978). The "psychosomatic family model" evolved from their work with children with diabetes mellitus who had recurrent episodes of ketoacidosis or chronic acetonuria even though their diabetes was adequately managed according to medical standards (Minuchin, et al., 1975). They also included anorectics and asthmatics and their families in their research and model development of psychosomatic families. Their model was later expanded to include families with sickle-cell anemia and ulcerative colitis as presenting problems (Minuchin & Nichols, 1993).

Minuchin and colleagues (1975) found that these families displayed patterns of enmeshment, rigidity, overprotection, triangulation of the chronically ill child, and conflict

avoidance or poor conflict resolution. These family patterns trigger physiological processes in chronically ill children which then aggravate the illness. The aggravated illness then maintains the dysfunctional family patterns creating a mutually reinforcing cycle for the family (Minuchin et al., 1975). This model has since been adapted and further developed by Wood (1993) and is described as a biobehavioral model of pediatric illness, again focusing on family interaction around children with chronic illness. While family interaction patterns have received clinical attention in regard to somatic processes in children, there is a paucity of clinical or research efforts involving couple or marital relationships and somatoform disorders.

As outlined above, several theories have been developed to explain the process of somatization. For the purpose of this study, attachment theory provided the backdrop for conceptualizing the interaction between somatic patients and their partners and in designing couple therapy intervention.

Attachment Theory

Over the past decade, attachment theory has received attention in the literature as it has been applied to adult love relationships (Johnson & Whiffen, 1999; Johnson, 1996). Bowlby (1969) developed the concept of attachment as an “evolutionary survival system” where humans have the instinctive need to form attachments, or bonds, with other people. Attachment bonds have been defined as emotional ties and behaviors that create and maintain closeness to an attachment figure (Baldwin, 1992). According to this theory, the type of attachments that are formed early on lead to the development of social bonds with others that inherently affect the perceptions we have of ourselves.

Attachment Theory, SD's, and Relational Distress

The role of attachment has been linked to communication styles in somatic patients (Maunder, & Hunter, 2001; Stuart & Noyes, 1999). According to a recent review, it was hypothesized that somatic patients exhibit an anxious attachment style that results from experiences with childhood caregivers (Stuart & Noyes, 1999). After reviewing the research on personality and childhood antecedents in SD's, it was further hypothesized that early exposure to illness increases the probability that distress will be manifested through somatization. This exposure during childhood then plays out in adulthood when physical complaints are used to elicit care from others. This style of interaction commonly leads to rejection that reinforces the patient's belief that she will be abandoned. In this review, the authors recommended that physicians should modify their responses toward somatic patients in order to improve the outcome of treatment (Stuart & Noyes, 1999). The partner of the patient was not addressed in this review in terms of treatment.

An Interactional Model of Somatization

Along the same lines of communication and somatic expression, a recent study identified that chronic pain patient-partner interaction influences pain levels and intensity (Romano, Jensen, Turner, Good, & Hops, 2000). It was found specifically that partner solicitous and negative behaviors were significantly related to the rate of patient pain behaviors after controlling for age, gender, and intensity of pain. These findings, in conjunction with other behavioral studies of chronic pain conditions, have lent themselves to a behavioral model of chronic pain, which reinforces the patients sick role and pain symptoms (Romano, et al., 2000). This literature has uniquely identified the interaction between patients and their partners as playing a role in symptom maintenance.

It is my clinical impression that somatic expressions may play out in intimate relationships in one of two ways. One is that symptoms may be attempts at avoiding conflict in the relationships similar to Coyne's interactional theory of depression (1976a, 1976b). Coyne's model proposes that symptoms of depression have the powerful ability to invoke guilt in others which then dampen negative reactions, such as hostility or annoyance, from a spouse (Coyne, 1976a). This model is recursive in that the nondepressed spouse rejects and avoids the person who is depressed, which then promotes the expression of more symptoms in the depressed spouse (Coyne, Kahn, & Gotlib, 1987).

Another way that somatic expressions may be useful in relationships is making attempts at connection with others by eliciting care from them as Stuart & Noyes (1999) have suggested. Both of these clinical impressions are congruent with family systems thinking which identifies the feedback processes between people that create circular patterns of interaction (e.g., Watzlawick, Bavelas, & Jackson, 1967). Perhaps the role of attachment in somatic symptoms, along with Coyne's interactional model of depression, can shed some light on how relationships maintain symptoms to regulate closeness and distance.

The Initiate-Avoid Pattern of Interaction

There is a couple interaction pattern that has long been studied in the field of marriage and family therapy and has been described in various ways ranging from "pursuer-distancer" (Bowen, 1975; Fogarty, 1976; Greenberg & Johnson, 1988) and "demand-withdraw" (Wile, 1981) to more recently, "initiate-avoid" (Denton et al., 2001). For the purpose of this research, this pattern will be referred to as initiate-avoid which received its name from the dynamic where one spouse makes demands or criticizes and the other spouse withdraws or distances in response to the conflict (Bowen, 1975; Fogarty, 1976). Typically, women attempt conflict resolution with

their spouses while men hope to quickly end conflict by disengaging. This is the crux of Gottman & Levenson's (1992) psychophysiological theory explaining these gender and behavioral differences in marital relationships. Further, psychophysiological data has supported gender differences in the demand-withdraw sequence which proposes that marital conflict is experienced and approached differently by men and women (Christensen, 1988; Christensen & Heavey, 1990; Gottman & Levenson, 1992). These patterns are clinically useful in working with systemic process issues in couple therapy and may be useful in tracking somatic symptoms and initiate-avoid communication patterns in couple therapy.

Rationale for Couples Therapy Intervention

EFT couples therapy was selected as the intervention in this study. Couples therapy has been used as a treatment of significant individual problems in the 1990's (Johnson & Lebow, 2000). A growing body of literature is supporting the use of couple's therapy in the treatment of mental disorders including depression, addictions, obsessive-compulsive disorders, and agoraphobia (Baucom, Shoham, Mueser, Daiuto, & Stickle, 1998). Partner involvement in therapy has become an important aspect of treatment for alcoholism and substance dependence and has also been shown to improve treatment outcomes in agoraphobia and manic-depression (Lebow & Gurman, 1995). Further, the recognition of the importance of relationships in the context of mental disorders is growing (Fincham & Beach, 1999). As previously stated, "A lack of supportive relationships can potentiate other stressors, or can elicit the onset of symptoms and undermine a client's response to individual treatment. In a recursive cycle, symptomatic behavior may also elicit relationship distress, which, in turn, exacerbates symptoms" (Johnson and Lebow, 2000, p. 27).

As an illustration, couple's therapy has developed as an approach to treat depression as research has demonstrated that symptoms of depression are strongly related to marital distress, especially when relationship distress coexists with depression. In addition, women who experience distress in relationships are two times more likely to also experience depression in comparison to men (Nolen-Hoeksema, 1991) and the lack of satisfaction with one's relationship welcomes the recurrence of depression (Johnson & Lebow, 2000). In sum, couple's therapy has been shown to be helpful in improving relationship satisfaction and depressive symptoms in distressed couple relationships that have fostered depression.

Couple's therapy interventions have also been used in the treatment of sexual problems (Heiman, Epps, & Ellis, 1995; Schnarch, 1998) and in problems related to the effects of physical illness upon couple relationships (Rolland, 1994). Relational processes have been studied in conjunction with physical functioning and have shown that relational conflict and separation have been linked to immune system suppression (Keicolt-Glaser, Malarkey, Chee, Newton, Cacioppo, Mao, & Glaser, 1993). Recently, couple's therapy has been used as an intervention in the treatment of posttraumatic stress disorder of childhood sexual and physical abuse survivors (Johnson & Williams-Keeler, 1998). This research tested a model of couple's therapy as a treatment of SD and USD.

Research Trends in Couples Therapy

A recent review identified emotion focused therapy (EFT; Greenberg & Johnson, 1988) and behavioral marital therapy (BMT; Jacobson, 1984) as the leading research trends in couples therapy (Johnson & Lebow, 2000). These trends represent two research and practice patterns that have demonstrated varying degrees of effectiveness in couples therapy research and have received the strongest empirical support to date (Johnson & Lebow, 2000). For the purpose of

this study, emotion focused therapy will be used as the model of treatment intervention for couples where one or both partners have SD or USD. EFT has been chosen as the model of intervention over BMT because it is a better fit for the type of intervention that will be tested in this research as it focuses on changing interaction patterns in couples and in strengthening adult attachment bonds.

Emotionally Focused Therapy (EFT)

Emotionally focused therapy is an approach that combines experiential and systemic interventions to “de-escalate the negative cycles that maintain insecurities and uses newly formulated emotional responses to expand the positions that partners take in the relational dance” (Johnson & Lebow, 2000, p. 26). This theoretical model has demonstrated evidence of being an effective treatment approach for distressed couples who exhibit minimal pathology. This approach is not recommended for couples experiencing domestic violence or substance abuse problems. There are both theoretical and empirical reasons to consider emotion focused couples therapy as a treatment for SD and USD. The theoretical crux of EFT is to improve dysfunctional patterns of interaction within the relationship along with each partner’s emotional experience (Greenberg & Johnson, 1988). The goal is to create different patterns of interaction that will foster emotional connection and empathy within the relationship by unblocking rigid patterns of interaction (Johnson & Greenberg, 1995).

Johnson & Greenberg (1985a, 1985b) have identified change processes in therapy that have created successful outcome, demonstrating recursiveness between research and clinical practice. Several researchers have studied the effectiveness of EFT in treating distressed marriages (e.g., Goldman & Greenberg, 1992; James, 1991; Johnson & Greenberg, 1985a) while one study investigated the use of EFT with couples who have children with chronic illness

(Walker, Johnson, Manion, & Cloutier, 1996). Studies have also examined EFT as a treatment to enhance intimacy and sexual desire in couples who were not distressed (Dandeneau & Johnson, 1994; MacPhee, Johnson, & Van der Veer, 1995). Further, follow up studies have demonstrated that marital distress improves even after EFT has ended. These studies have included follow up intervals ranging from three months to two years (Johnson & Talitman, 1997; Johnson & Greenberg, 1985a; Walker et al., 1996).

Research Aims and Hypotheses

According to Gottman (1994) the central nervous system becomes overwhelmed in times of relational distress. Physiologic differences among individuals exist in levels of tolerance of emotional reactivity and nervous system arousal. Debates have been launched about gender differences in regard to tolerance and arousal levels. It may be that couples do not have the language or ability, due to the over arousal of the nervous system, to express emotional concerns within the relationship. Further, individuals may feel they can't afford to be vulnerable and share their emotions with their partner or may not feel secure in addressing relationship issues directly, resulting in somatic attempts for emotional connection and empathy. For example, a husband may experience chronic headaches that serve the function of engaging his spouse in attending to his suffering, temporarily creating connection and empathy within the relationship.

Because EFT has been used as an intervention in changing rigid interactional patterns in couples by engaging the withdrawer (Johnson, 1996), this model was used as an intervention in this study to change couple interaction patterns around somatic symptoms. Specifically, EFT was used as a combined treatment of somatic symptoms and relational distress to change patterns of interaction. The primary aims of this study were to investigate whether or not EFT was effective in reducing somatic symptoms and improving relationship satisfaction in couples by

helping them unblock rigid patterns of interaction needed to make direct requests for empathy and connection.

Following were the primary hypotheses in this study:

1. Somatic symptoms will improve in individuals with SD or USD after 8 sessions of EFT compared to couples on a 12-week wait list.
2. Participants will have greater relationship satisfaction after 8 sessions of EFT than couples on a 12-week wait list.

Following were the secondary hypotheses in this study:

3. Individuals with SD or USD will have improvement in quality of life after 8 sessions of EFT compared to couples on a 12-week wait list.
4. Individuals with SD or USD will indicate more positive feelings toward their partner after 8 sessions of EFT compared to couples on a 12-week wait list.
5. Co-morbid anxiety symptoms present in participants with SD or USD will decrease after 8 sessions of EFT compared to couples on a 12-week wait list.
6. Co-morbid depressive symptoms present in participants with SD or USD will decrease after 8 sessions of EFT compared to couples on a 12-week wait list.

The methods used to test these hypotheses are described in the following chapter.

CHAPTER III: METHODOLOGY

This outcome study was designed to assess the efficacy of EFT in improving somatic symptoms in patients with SD and USD. Secondary analyses assessed the efficacy of EFT in improving quality of life, symptoms of comorbid depression and anxiety, and recognition of positive feelings towards one's partner in couples with SD or USD.

Treatment Setting

This clinical trial was conducted in the Department of Psychiatry and Behavioral Medicine at the Wake Forest University School of Medicine. This facility is a teaching hospital where research is conducted and clinical services are provided to patients throughout western North Carolina and southwest Virginia. The Department of Psychiatry and Behavioral Medicine provides a comprehensive range of services to children and adults.

Participants

The researcher received 109 calls of interest by prospective participants and referral sources regarding participation in this study. A total of 34 couples were assessed for participation in this study. Of this group, 24 met the criteria for inclusion/exclusion and were randomized into the treatment or wait-list control group.

Participant Recruitment

For recruitment purposes, this clinical trial was referred to as the SHARE Study that stands for Synthesizing Health and Relationship Enhancement. Participants were recruited for this study from a variety of sources. Potential clinical referral sources in the community and within the medical center were informed about this study. As a recruitment effort, I visited the community Fibromyalgia-Chronic Fatigue Support Group and gave a brief talk about how

relationships are affected by chronic illnesses. I also ran two newspaper advertisements, with IRB approval (See Appendix B), in the Winston-Salem Journal that elicited the greatest response as a recruitment source for this study.

Within the medical center, I attended various faculty meetings and made announcements about the study in the departments of Rheumatology, Gastroenterology, Outpatient Medicine, and Neurology. In addition, I sought out and completed a volunteer rotation in the Internal Medicine Clinic to generate referrals for the study. During this rotation, I observed residents while they saw patients and formulated a plan for their care with the attending physician. I talked with patients about psychosocial issues and made referrals for psychotherapy and this study when possible.

The Pastoral Care Center within the medical center also made referrals to this study after receiving a memo and flyer about the study that were distributed to each primary care clinic and specialty clinic. Finally, other referrals came from residents in the Outpatient Psychiatry Department Clinic, the Marital and Family Therapy Clinic, and faculty and professional staff within the department of Psychiatry.

Project Timeline

Participant recruitment lasted 14 months. The duration of treatment included eight total sessions of EFT spanning 12 weeks. There were four weekly sessions of EFT followed by four biweekly sessions. The treatment cycles began in January of 2001 and continued through March of 2002.

Participant Procedures

Participants either called directly to inquire about the study or were contacted by the researcher after receiving information from referral sources as people who expressed interest in

the study. Once on the phone, the caller was provided with initial information about the inclusion/exclusion criteria and an overview of the protocol of the study and is described below.

Inclusion Criteria

1. Each partner needed to be in agreement with the randomization of treatment conditions and potential of being randomized to the wait-list group.
2. While couples didn't need to be married to participate in this study, they had to be living together and consider themselves to be in a committed relationship as they defined that.
3. Same-sex and couples of all ethnic groups were encouraged to participate in this study.
4. One of the partners had to meet DSM-IV criteria for SD or USD as measured by the Screening for Somatoform Disorders (SOMS; Rief, Hiller, & Fichter, 1995).
5. At least one partner had to have a score of 101 or less on the Dyadic Adjustment Scale, indicating relational distress (DAS; Spanier, 1976).
6. Couples reported no existing affairs in their relationship.

Exclusion Criteria

There are relationship problems for which EFT is not the indicated treatment and these were reasons to exclude couples from this study.

1. Active substance abuse problems in either partner.
2. Physical violence and/or severe verbal abuse in the relationship.
3. The presence of an active affair.
4. Elevated risk of suicide with a plan and intent to carry it out as determined by the structured Hamilton Depression Interview Schedule (HAM-D; Williams, 1988). Partners who indicated elevated risk for suicide as indicated by an active intent to harm him/herself were excluded and referred for treatment within the Department of Psychiatry

and Behavioral Medicine or at CenterPoint Human Services, a local mental health agency.

Pre-Treatment/Baseline Testing

At the screening session, a conjoint interview was held to confirm that there was a relationship complaint and that medically unexplained symptoms existed in one of the partners. At this time couples were assessed for their commitment to couples therapy and were screened for inclusion/exclusion conditions. The researcher explained the study protocol to the couple and answered any questions they had at that time. Written informed consent was obtained.

Each partner was then given an assessment package to complete individually. The participants were asked not to talk to each other while completing the questionnaires so that they would not influence each other's responses. The assessment package (See Appendix A) consisted of the following instruments that are described in detail in the instrumentation section of this dissertation:

- 1) Demographic Information Form
- 2) Relationship Status Questionnaire
- 3) Screening for Somatoform Disorders
- 4) Dyadic Adjustment Scale
- 5) Short Form Health Survey
- 6) Positive Feelings Questionnaire
- 7) Beck Depression Inventory-II
- 8) State-Trait Anxiety Inventory

After the assessment packets were completed, each partner was individually administered the structured HAM-D Interview Schedule (Williams, 1988) to determine elevated suicide risk. Each partner was asked again about domestic violence, verbal abuse, and substance abuse during the individual portion of the screening to identify exclusion criteria that may not have been addressed during the conjoint interview. Couples who met the inclusion criteria were informed

of their treatment group designation as randomly assigned. The couples who received the EFT treatment group designation were then scheduled for their first psychotherapy session.

EFT Treatment Group

Fifteen couples were randomized to the EFT treatment group and received eight sessions of couples therapy. The couples therapy consisted of 8 sessions of EFT spanning 12 weeks. Couples met weekly for four sessions and then every other week for four sessions. Eight total hours of EFT was provided for each couple as each session lasted one hour. Each couple had to reschedule an appointment at least once primarily due to illness related their somatic complaint(s). Other couples had to reschedule sessions due to unexpected surgery, medical or psychiatric hospitalization. A few couples rescheduled missed appointments due to vacation or deaths in the family. All couples completed the study protocol within 20 weeks.

Description of Treatment Intervention

EFT was used in this study as the treatment intervention for SD's and relational distress. EFT emphasizes the role of affect as the primary change agent in creating connection in adult love relationships. According to EFT,

“Emotion is conceptualized within an information processing framework and therefore as a primary signaling and communication system and source of adaptive behaviors. Emotional experience in intimate relationships structures the perception of one's spouse, facilitates access to key appraisals of the self in relations to the other, and motivates affective responses. The sharing of heightened emotional experience facilitates bonding and the growth of intimacy.” (Dessaulles, 1991, p. 40)

The nine steps of EFT provided the basis for the therapeutic intervention in this study (Greenberg & Johnson, 1988). These steps were not rigidly followed, but were used recursively throughout the therapy process to foster the sharing of emotional experiences to create change in affect and interaction:

- 1) Delineate the conflict issues between the partners
- 2) Identify the negative interaction cycle
- 3) Access unacknowledged feelings underlying interactional positions
- 4) Reframe the problem(s) in terms of underlying feelings
- 5) Promote identification with disowned needs and aspects of self
- 6) Promote acceptance by each partner of the other partner's experience
- 7) Facilitate the expression of needs and wants to restructure the interaction based on the new understandings
- 9) Establish the emergence of new solutions
- 10) Consolidate new positions in the couple relationship

Wait-List Control Group

Ten couples were randomly assigned to the wait-list control group. These couples completed the assessment package 12 weeks after the baseline assessment. This assessment package consisted of the same instruments that were completed during the baseline testing with the exception of the Demographic Information Form and Relationship Status Questionnaire. Couples were given the option to make an appointment to come to the department to complete the questionnaires, or the assessments could be mailed to their home address with paid return postage. Following this, couples completed eight sessions of EFT and then concluded final post-therapy testing one week after their last couples therapy session.

Wait-List Control Group Rationale

The use of a wait-list control group has become an ethical issue in research design. Generally, psychotherapy research indicates that receiving the treatment intervention is almost always better than no treatment (Miller, Duncan, & Hubble, 1997; Bergin & Garfield, 1994). The use of a wait-list control group is especially controversial when a proven treatment has been established for specific condition and this treatment is withheld from research participants. For the purpose of this study, a wait-list control group was selected because, at present, no proven, effective treatment of SD's exists. Therefore, a wait-list did not deprive participants of a proven

treatment. Further, each couple in the wait-list control group was provided the treatment after waiting 12 weeks and treatment was not withheld from any of the couples.

It was decided that a wait-list control group design would most clearly demonstrate the differences between the two groups and would lend itself to greater statistical estimation of change effects compared to the use of another type of treatment. For instance, if another type of treatment were provided, such as an active listening or supportive psychotherapy intervention, it would be more difficult to tease apart which variables contributed to statistical change in the data.

Among the 15 couples assigned to the EFT treatment group, 9 couples completed the treatment and 6 couples dropped out of the study. Of the 10 couples in the wait-list group, 4 dropped out and 6 went on to complete eight sessions of EFT.

Therapists and Training

Volunteer therapists in the Marriage & Family Therapy Clinic of the Department of Psychiatry & Behavioral Medicine provided the therapy for this study. The therapists included three master's level MFT interns and one psychiatric resident, along with myself. The master's level MFT interns were in their second year of training in a COAMFTE-accredited program and the resident was in her third year of residency in psychiatry. Each therapist received 12 hours of theoretical training in EFT in the Marital and Family Therapy Clinic prior to working with the couples. This training involved studying the Johnson (1996) text and the treatment manual (Denton, 2001, See Appendix D).

The training specifically focused on the EFT theoretical model, basic therapist skills, the nine steps of EFT, and techniques used to practice the model with couples. Sue Johnson's training tape was also shown to the therapists along with videotapes of EFT that were conducted

by Wayne Denton from his randomized trial of EFT for couples in a training clinic (Denton, Burleson, Clark, Rodriguez, & Hobbs, 2000).

Supervision

The therapists who provided treatment in this study received weekly or bi-weekly supervision from Wayne Denton. Dr. Denton has conducted an outcome study on EFT in the treatment of marital distress (Denton et al., 2000), is an AAMFT Approved Supervisor, and is Director of the Marital & Family Therapy Program in the Department of Psychiatry & Behavioral Medicine of the Wake Forest University School of Medicine. The mode of supervision practiced in this study was primarily weekly group videotape supervision. Individual videotape supervision was used as needed when scheduling challenges arose for the supervisor and therapists.

Therapists' Adherence and Fidelity to the Model

Supervision was used as a means to monitor therapists adherence and fidelity to the EFT model. During supervision each therapist described the couple's pattern of interaction and initiate-avoid process issues, paying particular attention to the somatic symptoms that were present in the relationship. Then the therapist showed videotape of the session and received feedback from the supervisor. To try and assure that the therapists in this study were practicing EFT consistently an initial session form and progress note form was created for the therapists to use to track patterns of interaction, initiate-avoid status, steps of EFT used, process issues, and homework assignments (See Appendix E for the SHARE Initial Session Form and SHARE Progress Note, respectively).

Instrumentation and Outcome Measures

Demographic Information Form

The demographic information form was administered during the pre-treatment screening to obtain basic demographic information from each couple such as economic status, current employment, and age (See Appendix A for complete assessment package).

The Relationship Status Questionnaire (RSQ)

The Relationship Status Questionnaire (Denton, 1998) is a checklist used for individuals to designate the type of relationship they are currently in. The RSQ was also completed during the pre-treatment screening session.

The Screening for Somatoform Disorders (SOMS)

The SOMS (Rief, Hiller, & Fichter, 1995) is a 68 item self-rating scale. Fifty-three items describe all somatoform symptoms as listed in the DSM-IV and ICD-10. Items assess for Conversion Disorder, Pain Disorder, Hypochondriasis, Body Dysmorphic Disorder and Somatoform Disorder Not Otherwise Specified in addition to SD and USD. The SOMS was developed to identify patients with SD's. Examples of symptoms include chest pain, headaches, nausea, painful breathing, loss of appetite, and abdominal pain. The other 15 items on the SOMS ask about inclusion and exclusion criteria such as "How often did you visit a physician because of your complaints?" and "Was the doctor able to find the specific cause for your complaints?"

The response options for the SOMS include "yes" or "no" while two questions have a Likert scale indicating frequencies. In order to respond "yes", the symptom must be present for two years, a medical explanation for the symptom has not been received, and the patient must feel distressed by the symptom. A physical examination is needed to determine whether or not symptoms can be medically explained in order to evaluate and interpret the SOMS scores fairly

and accurately (Hiller, et al., 1995). Each “IP” discussed his or her symptoms and diagnosis given by a physician who treated him/her for these symptoms. Symptoms on the SOMS are counted positively if there is no evidence of organic cause for them (including alcohol and drug use) and if they do not occur during panic attacks (Hiller, et al., 1995). An initial validation study supported the diagnostic scores on the SOMS as compared to the SCID (Spitzer, Williams, Gibbon, & First, 1992). Previous analyses have demonstrated satisfactory test-retest reliability ($r = 0.87$) (Reif & Hiller, 1999) and good internal consistency was found with Cronbach’s alpha = 0.87 (Hiller et al., 1995).

The Short-Form Health Survey (SF-36)

The SF-36 (Ware & Sherbourne, 1992) is a 36 item scale designed to assess one’s level of functioning and quality of life variables including physical functioning, role limitations due to physical health problems, pain, social functioning, general mental health including distress and well-being, role limitations due to emotional problems, vitality (energy/fatigue), and general health perceptions. This scale is a shorter version of the original that was developed for use in the Medical Outcomes Study (MOS) which was a quasi-experimental study of physician practice styles and patient outcome variations. The SF-36 was designed for use in research, clinical practice, and health policy evaluations (Ware & Sherbourne, 1992) and is a sensitive measure of intervention outcomes (Ware, 1996). The SF-36 was designed to be a generic instrument that can be used with multiple populations of varying ages and diseases (Ware, 1996).

Internal consistency and test-retest methods have been used to estimate the eight scales of the SF-36 and statistics on reliability have demonstrated at least 0.70 in group comparison studies (McHorney, Ware, & Raczek, 1993). Other studies have shown a 0.80 reliability statistic among group comparisons (Ware et al., 1993). Content validity has been demonstrated and

comparison studies have identified the SF-36 as an accurate representation of health concepts that correlate with the intensity and rate of recurrence of many specific symptoms ($r=0.40$ or greater). Further, studies using physical and mental health criteria have demonstrated that the SF-36 has 80-90% empirical validity (McHorney et al., 1993). The response options for the items on the SF-36 vary depending on the question. Some responses have a Likert scale format while other responses consist of checking yes or no. Examples of items are as follows:

- a) Does your current health limit you in bathing or dressing yourself, walking several blocks, or climbing several flights of stairs?
- b) During the past four weeks, have you accomplished less than you would like at work or other daily activities as a result of your physical health?
- c) I seem to get sick a little easier than other people.
- d) I expect my health to get worse.

Dyadic Adjustment Scale (DAS)

The assessment of relational distress was made with the DAS (Spanier, 1976). The DAS is a 32-item self-report inventory and was selected to for this study because of its demonstrated reliability (coefficient alpha = .96). Further, validity has been demonstrated by the ability of the DAS to discriminate married from divorced couples and its high correlation with other measures of marital adjustment (Spanier & Filsinger, 1983). This scale has four subscales including dyadic consensus, satisfaction, cohesion and affective expression (Spanier, 1976). The score range for the DAS is 0-151 and a cut-off score of 101 is indicative of relational distress. Original mean scale scores for Spanier's divorced samples were 70.7 and 114.8 for married samples. Couples in this study met inclusion criteria if one or both scored below the 101 cut-off score on the DAS.

Positive Feelings Questionnaire (PFQ)

The PFQ (O’Leary, Fincham, & Turkewitz, 1983) is a 17-item self-response inventory and responses are made on a 7-point scale. The PFQ measures the amount of positive affect toward a spouse. Each of the 17 items have discriminated between clinic and nonclinic couples and has been found to have internal consistency ($r = 0.94$) (O’Leary et al., 1983). Further, the PFQ has been found to be responsive to changes occurring from marital therapy (O’Leary & Arias, 1983; Turkewitz & O’Leary, 1981).

Relationship Discussion Questionnaire (RDQ)

The RDQ (Denton & Burlison, 1999) was used as a pretreatment assessment. The RDQ is a 44-item questionnaire intended to identify initiator and avoider roles within the relationship. Participants respond to 10 items related to their own behavior and 10 items related to their partner’s behavior. Sample items include the following:

- a) When I become aware of a problem in my relationship, I usually try to initiate a discussion of that problem.
- b) When my partner becomes aware of a problem in our relationship, my partner usually tries to initiate a discussion of that problem.
- c) When my partner becomes aware of a problem in our relationship, my partner usually does not say anything about it.

Response options include a 9 point Likert scale ranging from strongly agree to strongly disagree. This instrument developed out of Christensen’s Communication Pattern Questionnaire (CPQ) that was designed for the couple to be the measurement unit. The RDQ was modeled after the CPQ, but is designed for the individual to be the unit of analysis. The RDQ was

selected over the CPQ because the individual unit of analysis may more clearly identify the somatic partner's tendency to initiate or avoid communication.

In a study of 100 individuals, a factor analysis was conducted on the RDQ and yielded an internal reliability of .91 for the 'self' subscale (participant rates her own behaviors) and 'other' subscale (participant rates her partner's behaviors). In a separate study, a clinician assessment interview was conducted with 58 couples to identify initiate-avoid patterns of communication. These videotaped interviews were then coded into initiators and avoiders by two coders. The participants who were identified as initiators had significantly higher RDQ scores that indicated greater amounts of initiating compared to the avoiders. Identified initiators also had higher RDQ 'other' subscale ratings from their partners than those identified by the raters as avoiders. A study to test the validity and test-retest reliability of the RDQ is underway (Denton, in progress).

State-Trait Anxiety Inventory (STAI)

The STAI (Spielberger, 1977) has been described as a definitive measure of anxiety in adults and has been used in psychological and health research and as an assessment of clinical anxiety in psychosomatic, psychiatric, medical, and surgical patients. Further, the STAI has been used to assess changes in anxiety in research of psychiatric disorders (Spielberger, 1983) and in patients with asthma, headaches, insomnia, and colitis (Alexander, 1972; Andraski & Holroyd, 1980; Carr-Kaffashan & Woolfolk, 1979; & Brooks & Richardson, 1980). The STAI has been used as a measure of outcome in psychotherapy research (Spielberger, 1983). There are two scales that comprise the STAI. The S-Anxiety scale measures state anxiety while the T-Anxiety scale measures trait anxiety. There are 40 total items that utilize a four point Likert scale. Items on the S-Anxiety scale include a) I feel at ease, and b) I feel upset, and responses for this scale include 1) Not at all, 2) Somewhat, 3) Moderately so, and 4) Very much so.

Examples of the T-Anxiety scale items include a) I am a steady person, and b) I lack self confidence. Responses for the T-anxiety scale are also on a four point Likert scale and include 1) Almost never, 2) Sometimes, 3) Often, 4) Almost always. Concurrent, convergent, divergent and construct validity of the STAI scales have been demonstrated along with reliability (Speilberger, 1983).

Beck Depression Inventory-II

The BDI-II is a 21-item self-report inventory and is one of the most frequently used instruments for the assessment of depression severity (Beck, Steer, & Brown, 1996). This scale reflects indicators of depression including pessimism, social withdrawal and dissatisfaction and identifies symptom severity. The BDI-II has demonstrated an internal consistency of 0.92-.93 in samples of 500 outpatients and in 120 college students, respectively (Beck, et al., 1996). Test-retest correlation over one week was 0.93 for a sample of 26 outpatients (Beck, et al., 1996). Patients who have been diagnosed with mood disorders obtain higher average BDI-II scores than those with other types of diagnoses (Beck, et al., 1996).

Hamilton Depression Rating Scale (HDRS)

A structured interview guide for the HDRS was used as measure for the depression in this study (Williams, 1988). It measures the severity of symptoms of depression, including suicidal ideation (Hamilton, 1960). The HDRS has demonstrated reliability and concurrent and differential validity (Carroll, Fielding, & Blashki, 1973). The main use of the HDRS in this study was to screen for elevated suicide risk in the couples for exclusion purposes.

The administration schedule of instruments and outcome measures that were used in this study are indicated below in Table 3.

Table 3: Administration of Measurements Schedule

Measure	Pretreatment/ Baseline	Posttreatment I (Post Wait-List)	Posttreatment II (for people on Wait-List)
Demographics	X		
RSQ	X		
SOMS	X	X	X
DAS	X	X	X
RDQ	X	X	X
SF-36	X	X	X
BDI-II	X	X	X
HAM-D	X	X	
PFQ	X	X	X
STAI	X	X	X
Time Estimates	1.5 Hours	1 Hour	1 Hour

CHAPTER IV: RESULTS

The primary dependent variables for this study were the SOMS and the DAS. Both treatment groups (EFT group and wait-list) were tested at baseline. The EFT group was tested one week after session 8 and the wait-list group was re-tested 12 weeks after baseline testing. The wait-list group was then tested a third time at one week post-treatment. Other outcomes that were measured include relationship satisfaction, quality of life, recognition of positive feelings toward partner, and symptoms of anxiety and depression.

Preliminary Analysis

One-way analyses of covariance (ANCOVA) were performed with each outcome measure with the SPSS statistical software package. The ANCOVA was used to compare for differences in scores between the two treatment groups (Tabachnick & Fidell, 1989). This analysis estimated mean changes in somatic symptoms, quality of life variables, relationship satisfaction, positive feelings toward partner, and depressive and anxiety symptoms over the 12 week course of treatment (8 total sessions) and at the one week post-treatment session for the two treatment groups. Wait-list and posttest scores on the SOMS, DAS, SF-36, PFQ, BDI-II and STAI were compared with pretreatment scores to assess for statistically significant change.

Participant Characteristics

The researcher received 109 calls of interest by prospective participants and referral sources regarding participation in this study. Of 109 calls, a total of 34 couples agreed to attend a pre-screening assessment for participation in this study. Of this group, 25 met the criteria for

inclusion/exclusion and were randomized into the treatment or wait-list control group. Ten couples were excluded from the study for reasons including exceeding the cut-off score for the DAS, active substance use problems, current violence, or active separation (couple was not living together and had made efforts to separate). Dropouts were excluded from the outcome analyses.

Suicidality

There were four participants who presented with elevated suicidal ideation as screened by the HAM-D Interview Schedule. Elevated suicidal ideation was determined by a rating of 3-4 on the HAM-D item that screened for suicidality. Four participants (3 = Female, 1 = male) indicated upon screening that they had made one suicide attempt prior to participation in the study. These participants assured the researcher that they were not feeling suicidal during the interview and agreed to a safety contract that is described further below. One female attempter and her spouse dropped out of the study after 2 sessions of EFT. The remaining female attempters underwent continued psychiatric treatment for medication management while they participated in the study.

The male attempter indicated that he had seen a psychiatrist for medication management, and was also hospitalized for suicidal ideation in the past. All participants who indicated elevated risk for suicide were asked a series of follow-up questions including 1) What kind of suicidal thoughts have you been having? 2) Do you have a plan for carrying out such thoughts? 3) If so, how close have you been to carrying out such a plan? 4) What has prevented you from following through with a plan to hurt yourself? Upon questioning, these participants indicated that they would keep themselves safe throughout the duration of the study and contracted for safety. Each participant who reported suicidal ideation agreed to a safety plan which included:

1) contacting the researcher, 2) contacting their psychiatrist and 3) coming to the emergency room if the safety contract could not be maintained.

Two female participants required psychiatric hospitalization during the study. One of these participants was being treated by a psychiatric resident in the department of psychiatry and behavioral medicine for depression and borderline personality disorder. She began having self-harm behavior after the third couples therapy session. She followed the safety plan and contacted her psychiatrist, who knew of her participation in the study, and admitted her to the inpatient unit. While undergoing inpatient treatment, she and her spouse agreed to continue in the study and finished out the treatment without any other attempts at self-harm. In addition, she continued to meet with the resident for individual supportive psychotherapy and medication management throughout the study.

Her psychiatrist, whom she had been seeing for several years for recurrent depression, admitted the other female participant to the inpatient psychiatric unit during her participation in the study. This participant stated that she'd been feeling hopeless about her future after her spouse had been transferred to another city to work and they were making plans to move away from their friends and family in the community. The couple agreed to continue their participation in the study and this particular issue was addressed in the treatment and the patient continued to work with her psychiatrist in conjunction with the study.

Demographics

The total number of couples who completed the study is 16. Demographic characteristics of the patients are presented for both groups in Table 4.

Variable	Frequencies/Means
Diagnosis	
SD	8
USD	8
Gender	
Female	12
Male	4
Age (mean)	51 years
Income	
\$1-9,999	2
\$10,000-19,999	1
\$20,000-39,999	6
\$40,000-74,999	3
\$75,000 or above	4
Receiving Disability	12
Not Disabled	4
Married and Living Together	13
Never Married	3
Number of Marriages	
0	1
1	9
2	5
5 or more	1
Number of Divorces	
0	9
1	6
5 or more	1
Widowed	0
Ethnicity	
White	14
African American	2

Table 4: Frequencies and Means of Patient Completers

The age range for the identified patients is 32 to 68 years. The mean age for SD and USD patients in this study is 51. There were more female identified patients than male in this study, which is consistent with the SD literature indicating that women report more somatic symptoms than men (Nakao, Fricchione, Zuttermeister, Myers, Barsky, & Benson, 2001). Another description of this patient sample that is consistent with the literature is the high utilization of healthcare services as indicated by disability status (Smith, 1994). Specifically, 75% of the patients in this study were receiving disability for their somatic symptoms. While in treatment, many of these patients described experiencing a loss after leaving their jobs because their symptoms interfered with their abilities to continue working.

Participant Referral Sources

Several targeted strategies were used to recruit participants for this study from within and outside of the medical center. Participants were referred from a variety of sources and are shown below in Table 5.

Table 5: Sources of Referrals

Referral Source	Total = 109
Newspaper Advertisements	32
Infinity Advertisements*	7
Word of Mouth	8
CFS/FMS Support Group	5
Community Practitioners	6
Inpatient Psychiatric Adult Unit*	4
Dermatology*	1

Neurology*	5
Internal Medicine*	17
Psychiatry*	19
Pastoral Counseling*	5

*Denotes publications, departments, or clinics within the Medical Center

The majority of participants who participated in this study responded to the newspaper advertisement that ran twice in the Winston-Salem Journal classified section (See Appendix B). The bulk of the other referrals came from the department of psychiatry and behavioral medicine and from residents in the internal medicine clinic.

Tests of Hypotheses

Assessing the Effects of EFT on Somatic Symptoms

Eight individuals met the criteria for SD, and 8 met criteria for USD. One of the primary hypotheses of this study was that 8 sessions of EFT spanning 12 weeks would reduce somatic symptom reporting compared to a wait-list condition. It was found that there was a significant difference in pretest SOMS scores between the two groups. These differences are reflected in Table below. It was found that posttest scores were significantly higher for the EFT treatment group (mean = 26.1) than the wait-list group (mean = 11.3)(See Table 6). This takes into account that the treatment group had a higher baseline (see discussion below).

A one-way analysis of covariance (ANCOVA) was used to analyze this result. The between group factor was treatment status (treatment group or wait-list control group). The covariate was the pretest SOMS score and the dependent variable (DV) was the posttest SOMS

score. Results indicated that EFT significantly effected the increase in somatic symptoms at posttest ($p = .023$).

Symptom presentation for the 12 female identified patients included fibromyalgia, irritable bowel syndrome, chronic fatigue syndrome, and somatic depression. The four male identified patients presented with symptoms of chronic fatigue syndrome, unexplained problems with liver functioning, and environmental-induced hypochondriacal symptoms.

Table 6: Means and Standard Deviations of Pretest and Posttest Scores by Group Assignment

Variable	Wait-list		EFT Treatment	
	Pretest Mean (SD)	Posttest Mean (SD)	Pretest Mean (SD)	Posttest Mean (SD)
SOMS	16.7 (5.2)	11.3 (5.6)	25.2 (8.7)	26.1 (8.8)
DAS	93.3 (10.2)	94.1 (8.8)	97.4 (12.1)	92.9 (8.3)
PFQ	89.4 (14.6)	98.8 (8.5)	87.3 (19.9)	95.1 (16.7)
BDI-II	23.3 (15.5)	19.7 (10.4)	21.7 (11.7)	13.9 (12.6)
STAI-State	45.1 (9.5)	41.1 (12.5)	46.0 (13.3)	38.6 (12.3)
STAI-Trait	50.8 (15.5)	47.0 (10.6)	47.9 (10.8)	38.8 (11.9)
SF-36 Role-Emotional	38.1 (48.8)	38.1 (48.8)	22.2 (37.3)	51.9 (50.3)
SF-36 Role-Physical	39.3 (45.3)	32.1 (42.6)	11.1 (25.3)	25.0 (28.0)
SF-36 Vitality	31.4 (24.3)	37.1 (28.1)	18.3 (18.2)	31.1 (24.2)
SF-36 Social Functioning	60.7 (28.3)	60.7 (19.7)	45.8 (14.0)	50.0 (21.7)
SF-36 Physical Functioning	46.4 (33.5)	44.3 (35.5)	36.1 (26.9)	34.4 (24.8)

SF-36 Bodily Pain	37.4 (23.7)	39.0 (20.3)	26.7 (19.8)	26.7 (17.1)
SF-36 Mental Health	45.1 (19.8)	60.0 (16.2)	46.2 (22.2)	60.0 (22.4)
SF-36 General Health	33.6 (20.1)	39.3 (23.2)	25.0 (13.7)	35.6 (24.4)

Assessing the Effects of EFT on Relationship Satisfaction

The other primary outcome of this study was to test if EFT is an efficacious treatment in improving relationship satisfaction. A one-way ANCOVA was conducted with the between group factor as the treatment condition and the covariate was the pretest DAS score and the DV was the posttest score on the DAS. There was no significance difference between the wait-list and treatment group (mean = 94.1 vs. 92.9, ns).

Assessing the Effects of EFT on Quality of Life

It was hypothesized that 8 sessions of EFT spanning 12 weeks would improve quality of life compared to a wait-list condition. A one-way ANCOVA was conducted to test if EFT was efficacious in improving quality of life according to the eight subscales on the SF-36 (See Table 6). The between group factor was the treatment condition and the covariate was the pretest score on the SF-36. The DV was the SF-36 score at posttest. Results indicated that there was no difference between the groups.

Assessing the Effects of EFT on Depressive Symptoms

It was hypothesized that depressive symptoms would decrease after 8 sessions of EFT compared to a wait-list condition. A one-way ANCOVA was used to test the efficacy of EFT in the reduction of symptoms of depression in individuals with SD or USD. The between group factor in this analysis was treatment condition and the covariate was the pretest of the BDI-II

score and the DV was the BDI-II score at posttest. The treatment status variable indicated that participants receiving EFT had lower depression ratings than those in the treatment condition (19.7 vs. 13.9) but this difference was not significant.

Assessing the Effects of EFT on Anxiety Symptoms

It was hypothesized that anxiety symptoms would decrease after 8 sessions of EFT compared to a wait-list condition. A one-way ANCOVA was used to test the efficacy of EFT as a treatment in the reduction of anxiety symptoms in individuals with SD and USD. The between group factor in this analysis was the treatment condition and the covariate was the pretest of the STAI-State and STAI-Trait scores and the DV's were the scores at posttest. The results found that there was no difference between the groups. Results indicated that participants in the treatment condition had lower state (41.1 vs. 38.6) and trait anxiety scores (47.0 vs. 38.8) than those in the wait-list condition. (Lower scores on the STAI indicate less anxiety.)

Assessing the Effects of EFT on Recognition of Positive Feelings

It was hypothesized that recognition of positive feelings toward one's partner would increase after 8 sessions of EFT compared to a wait-list condition. A one-way ANCOVA was used to test if EFT is an efficacious treatment of increasing the recognition of positive feelings in individuals with SD and USD. The between group factor in this analysis was the treatment condition. The covariate was the pretest of the PFQ score and the DV was the PFQ score at posttest. The treatment status variable indicated that EFT was no difference between the treatment and waiting list group (98.8 vs. 95.1).

Supplementary Analyses

Independent sample t-tests were used to compare the pretest scores of the completers with those who dropped out of the study and to compare the treatment and wait-list group at

baseline testing. Supplementary analyses were conducted to assess for differences between those participants who completed the study compared to those who dropped out. Differences between the groups at baseline assessment were also assessed. Finally, initiate-avoid status was examined among the patient data.

Combining all Posttreatment Scores

Due to the small sample size, all of the posttreatment SOMS data was combined for analysis. The combined posttreatment data was compared to the pretest scores using a paired samples t-test. Results found that SOMS scores decreased from 21.5 to 19.6 but that this difference was not significant.

Comparing Dropouts and Completers

A few demographic differences exist between the patients who completed the study and those who dropped out. One demographic difference is the duration of marriage. The participants who dropped out of the study were married for a shorter length of time compared to the completers. In addition to length of marital relationship, there was a trend for an age difference between the dropouts and completers. Specifically, the dropouts tended to be younger compared to the study completers.

Differences at Baseline between the EFT Group and Wait-list Group

The number of marriages differed between the EFT and wait-list groups. Patients who were randomized to the treatment group had more marriages compared to patients randomized to the wait-list. Another interesting difference between the groups at baseline is that the SOMS pretest showed higher numbers of symptoms for patients in the treatment group (mean = 25.2, sd = 8.7) compared to the wait-list group (mean = 16.7, sd = 5.2) despite randomization.

Initiate-Avoid Status

With regard to initiate-avoid status, the data showed a tendency for patients to be avoiders (mean RDQ score of 38.4) and non-patients (mean RDQ score of 45.9) tended to be initiators (difference not significant, higher scores represent higher levels of initiation). This trend fits with the hypothesis that the symptom carrier is conflict avoidant and that the somatic symptom(s) may be helpful in creating connection. This is discussed further in the discussion of results.

Summary of Results

EFT was tested as an intervention in the treatment of SD and USD. One-way ANCOVA's were used to test treatment effects. Results suggest that somatic symptom reporting increased significantly at posttest (.023). No significant results or trends were detected upon examination of EFT on patient's relationship satisfaction, quality of life, positive feelings toward partner, or symptoms of anxiety and depression.

CHAPTER V: DISCUSSION

This study addressed the need for treatment for patients who suffer from SD's. The purpose of this study was to examine the treatment effect of EFT on somatic symptoms, or symptoms that are not medically explainable. This study also examined the treatment effect of EFT on relationship satisfaction, positive feelings toward partner, quality of life, co-morbid depression and anxiety. The couples who received treatment in this study faced many challenges and shared many complexities in terms of relational and physical health.

Treatment Effects

This study tested EFT in the treatment of couples where one partner had a DSM-IV diagnosis of SD or USD and indicated relational distress by a cut-off score of 101 on the DAS. Initially, it was hypothesized that couples therapy would result in fewer somatoform symptoms at posttest. This hypothesis derived from the belief that if couples brought their problems and emotions out in the open and received validation from their partner, their symptoms would dissipate. Although this particular hypothesis was not supported by the data collected in this study, it was found that the EFT intervention had a significant effect on somatic symptoms. Unexpectedly, the effect of the intervention increased the report of somatic symptoms at posttest. Surprisingly, this was a significant effect (.023) given a relatively small sample size (N = 16).

This pattern of results is consistent with other outcome research with stress-related health conditions where psychological interventions result in increased symptom reporting at posttest (Esterling, L'Abate, Murray, & Pennebaker, 1999; Murray & Segal, 1994). In retrospect, a

major limitation of this study design was neglecting a follow-up interval beyond posttest. As the body of research on health outcome of psychological intervention indicates, the symptoms that were treated decreased at follow-up intervals over time (Esterling, et al., 1999, Rime, 1995; Murray & Segal, 1994; Clark, 1993). Further, a separate area of scientific literature supports that the effects of EFT continue to build after therapy has been completed (Dessaulles, 1991). Therefore, it will be important in future research to build follow-up intervals into the study design, especially in the treatment of SD's.

It was primarily hypothesized that couples in the EFT treatment group would report fewer symptoms at posttest compared to a wait-list group. It was believed that when couples had a safe context in which to express feelings related to relational conflict that they would no longer need somatic symptoms to create connection within the relationship and that these symptoms would dissipate. The belief that the role of emotional expression can improve mental health and physical health outcomes and that the inhibition of emotional expression has deleterious consequences dates back to Freud's psychoanalytic theory (e.g., Breuer & Freud, 1895). More recently, it has been documented that the inhibition of emotion has detrimental effects on one's mental and physical health (Esterling, et al.; Larson, 1990; Jamner, Schwartz, & Leigh, 1988; Jensen, 1987). The mechanism that was proposed for emotional expression in this study was emotion focused couples therapy.

EFT asserts that the therapy provide a safe environment for couples to experience and express feelings. During the therapy, cycles of interaction are identified and tracked while the underlying emotional experiences of each partner are recognized during each step of the cycle (Denton, et al., 2000). Through the sharing of these underlying feelings, couples validate one another's experiences and make new requests of each other, which generates new solutions for

old problems. The crux of the intervention is to change the pattern of interaction that once prevented emotional connection and maintained the problem(s) in the relationship and a new, more adaptive cycle of interaction emerges. The aim of the intervention in this study was to change the initiate-avoid pattern of interaction and to create an environment for the couple to validate each other's feelings. What was specifically unique to this study is the validation of the patients' somatic symptoms and underlying feelings related to experiencing these symptoms.

It should be noted that the EFT treatment provided in this study was conducted under demanding conditions. The majority of therapists who conducted the therapy were novice therapists in the beginning of their training. Further, only eight sessions of EFT were provided and each session lasted one hour. Other outcome studies testing the effectiveness of EFT have used between 10-12 sessions that last 75 minutes in length (e.g., Johnson & Greenberg, 1985a, 1985b).

Assessing the efficacy of EFT on relationship satisfaction, quality of life, positive feelings toward partner, and co-morbid depression and anxiety did not produce any results of significance in this study. This could, in part, be due to the limited statistical power resulting from a small sample size. However, in a small randomized clinical trial ($n = 18$) of testing EFT with severely clinically depressed female patients, EFT was effective in increasing relationship satisfaction and in reducing depression (Dessaulles, 1991). In light of this finding, it is surprising that EFT did not have an effect on relationship satisfaction or depression in this study. It could be that patients with SD's have more complexities than depressed populations or maritally distressed populations which effect treatment outcome. This thought could be supported by the trauma and gender correlates that were described in the review of the literature,

along with the high rate of personality disorders that are often present in somatic patients. These complexities warrant future study in the treatment of SD's.

Implications for EFT and MFT

The findings from this study have implications for EFT and the practice of marital therapy with somatic patients. While EFT is a couples therapy approach that encourages the identification and expression of emotions, it is important to recognize that 2 of 16 participants required psychiatric hospitalization during the course of EFT treatment. This suggests that talking about underlying emotions related to somatic symptoms can trigger one to feel “out of control” and vulnerable and should be attended to throughout the process of therapy. The comorbidity literature has established that personality disorders, depression, and anxiety are common in individuals who have SD's and influence treatment outcome (Leibbrand, Hiller, Fichter, 1999a; 1999b). Therefore, it is crucial to have safety contracts in place and to monitor suicidal ideation consistently throughout the treatment. It is equally as important to monitor the emotional intensity of the sessions, attend to the processing of strong emotions, and to help couples soothe and comfort one another. While therapists who work with couples may commonly use these therapeutic interventions, it seems especially important to attend to these issues when working with somatic patients.

In addition, therapists need to be prepared to handle the severity of emotional intensity and symptoms that may occur during treatment. During my graduate training as an MFT, I learned a reframe from a supervisor: “Sometimes things get worse before they get better”. This reframe may offer one hypothesis of why symptoms increased at posttest. Another caveat for MFT's who work with somatic patients in the context of couples therapy is to develop

collaborative relationships with other mental health professionals, especially psychiatrists, who can help with patient care and re-stabilization as needed.

Limitations of the Study

There are several limitations of this study that should be addressed. First, there was no long-term follow-up of the participants. Previous studies have assessed treatment effects of EFT at follow-up periods ranging from 2-4 months (Goldman & Greenberg, 1992, James, 1991; Johnson & Greenberg, 1985a, 1985b). Because this study did not include scheduled follow-up assessment in its design, it is not possible to determine whether a building effect has occurred in the couples who received EFT.

Another limitation of this study is the small sample size that limited the statistical power of this study and prevents the generalizability of the findings from this research. Because couples were screened and excluded from participating in this study if there were active substance abuse problems and domestic violence, the findings from this study are not generalizable to these populations. Further, the sample was fairly homogeneous with little diversity in regard to culture, ethnicity, and sexual orientation.

Another limitation of this study is reflective of the difficulty in researching somatoform disorders in general and includes the explanations of symptoms. This clinical trial relied upon the patients' ratings and self-report of symptoms which may not necessarily match with the physician's account of symptom explanation. Rief, Hessel, & Braehler (2001) have discussed this issue in their research and state that there may be discrepancies between what the physician finds upon examination and how this information is discussed with and interpreted by the patient. Patients may not accept or recall the doctor's explanation of symptoms, or even

understand these explanations if they were given one to begin with. As a result, patient self-ratings of symptoms typically indicate lower base rates of symptoms because patients tend to interpret them as physically founded (Rief, et al., 2001). This suggests that symptom reporting in this study may have been lower at baseline and posttest, than actually indicated.

Another study limitation is that there were no therapist adherence or competency checks to assure the fidelity of the treatment delivery. However, there was some consistency in the supervision as one supervisor worked with each therapist. Further, each therapist followed a specific format in case presentation and in showing videotape of her work with the couples during supervision.

Implications for Future Research

Future study in this area requires larger sample sizes with more diverse couples. In addition, an attachment measure and personality inventory could be included in the study of the relationships of somatoform patients. Perhaps a psychometrically sound instrument of attachment in conjunction with somatic symptom measurement could significantly enhance the picture of what SD's look like in the context of couple relationships. A measure of emotional expression and intensity could also be used at each treatment session to determine its correlation to somatic symptoms. Along these same lines, a repeated measures analysis design assessing emotional expression at various test intervals may identify trends in the couples treatment that effect symptom increase or decrease. Mixed method designs integrating both quantitative and qualitative inquiry may also be a useful way to explore somatic symptoms in couple experiences to inform instrument selection and treatment intervention for future clinical trials.

Conclusion

While EFT is one of the most empirically effective treatments of relational distress, this finding was not replicated in this study of patients with SD's. However, it was found that EFT had a significant treatment effect (.023) on the symptom reporting of somatic patients at posttest compared to at wait-list condition. Instead of reporting fewer symptoms at the end of couples therapy as predicted, somatic patients reported increased somatic symptoms upon completion of treatment. While more research needs to be conducted in this area, this data may help MFT's in their work with somatic patients and their partners, and in refining EFT to be more helpful to the specific needs of this complex population.

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