DIFFERENTIATION, MARITAL SATISFACTION AND DEPRESSIVE SYMPTOMS: AN APPLICATION OF BOWEN THEORY

DISSERTATION

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ABSTRACT

The price of depression to our society is staggering. When attributable morbidity costs (such as workplace related costs) and mortality are accounted for, it is estimated that depression costs our society \$83.1 billion annually (Greenberg et al., 2003). While the monetary cost of depression is staggering, the relational costs of depression may be even more devastating to families and society. Marital relationships appear to be related to both the causes and the treatment of depression. The findings of the causal direction in the relationship between marital satisfaction and depression/depressive symptoms are mixed, however. Some (Whisman, 2001) have stated that a third variable may contribute to the observed relationship between depression/depressive symptoms and marital satisfaction. This research uses Bowen Family Systems Theory, specifically the theoretical construct of differentiation of self, to better understand the relationship between depressive symptoms and marital satisfaction across three sessions of conjoint therapy.

Participants in the study were recruited through the on campus Marriage and Family Therapy Clinic at The Ohio State University. Participants completed self-report measures regarding differentiation of self, relationship satisfaction and depressive symptoms at intake. At two follow ups, following the second and third therapy sessions, participants completed self-report measures of relationship satisfaction and depressive symptoms. Hierarchical Linear Modeling (HLM) was used to analyze data. HLM is a

multilevel modeling approach which allows researchers to use couple level variables without losing individual differences.

This research both confirms and extends past research comparing depressive symptoms and relationship satisfaction. First, depressive symptoms and relationship satisfaction were significantly correlated over time. Second, aspects of differentiation were found to be associated with couple relationship satisfaction and depressive symptoms in both men and women. Specifically, men's emotional cutoff scores and I position scores and women's emotional reactivity scores and emotional cutoff scores were found to impact the trajectories of relationship satisfaction and depressive symptoms over time. Considering the results of this analysis, systemic therapy, informed by the constructs of Bowen Theory may be an appropriate method of treating depressive symptoms within the context of conjoint marital therapy.

DEDICATED TO CORRIE, EMILINE AND ZOE WHO HAVE GREATLY SACRIFICED ON MY BEHALF. YOU ARE TRULY MY BETTER HALVES.

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CHAPTER 1

INTRODUCTION

The Cost of Depression

The price of depression to our society is staggering. In 2000 the direct costs of treatment for major depressive disorder were estimated to be \$26.1 billion dollars. When attributable morbidity costs (such as workplace related costs) and mortality are accounted for, the figures rise to \$83.1 billion annually (Greenberg et al., 2003). It is estimated by the World Health Organization that by 2020, depression will carry the second highest disease burden of all noninfectious disease, including becoming the highest disease burden for women (Murray & Lopez, 1996).

While the monetary cost of depression is staggering, the relational costs of depression may be even more devastating to families and society. It is estimated that the lifetime prevalence of depression ranges from 10 to 25% for women and 5 to 12% for men (Samra & Koch, 2002). But these numbers seem small when the concept of affected individuals is expanded to those close to the individual such as spouse, partner, children, friends and coworkers. From this perspective, the cumulative effect of depression on humanity seems to grow exponentially. For example, depression in both mothers and fathers has been shown to be positively associated with internalizing and externalizing

psychopathology in children as well as parent/child conflict (Kane & Garber, 2004). Depression and depressive symptoms affect all areas of parent/child relationships, such as attachment, discipline environment, modeling of intimate relationships and overall family environment (Elgar, McGrath, Waschbusch, Stewart, & Curtis, 2004). In any way the cost of depression is considered, the price to our families and society is immense. An important step to mitigating the costs of depression is a better understanding of the relationships of those experiencing depression or, if not diagnosed with depression, those experiencing symptoms of depressive.

Marital Relationships and Depression

Marital relationships appear to be related to both the causes and treatment of depression. In a recent review of the literature on the association between depression and marital satisfaction, Whisman (2001) stated "there has been a growing body of empirical research in the role of marital functioning in the onset, remission, and treatment of depression" (p. 3). The findings of directionality in the relationship between marital satisfaction and depression are mixed, however. While some report marital problems as preceding depression, others report it as following. Despite this, it is clear that depression and marital satisfaction are two important constructs with links to each other (Anderson, Beach, & Kaslow, 1999). In reality, the links between depression and marital satisfaction may be reciprocal and it may be difficult to tease out the causal links between them. Thus, the more important issue may be a greater understanding of the relationship between the two variables and how they co-vary over time.

In fact, it may be that a third variable is related to both marital relationships and depression, impacting how both change over time. Whisman (2001) stated that marital

dissatisfaction might be a mediating variable between other correlates of depression. For example, Whisman (2001) cites dependence, interpersonal sensitivity, and social power as being possible third variables. Coyne (1976) hypothesized a process in which communication patterns maintain depression. Another approach, Self-Verification Theory, hypothesizes that people seek out relationships or interactions which provide self-verifying information (Joiner, 1995).

Depression, Depressive Symptoms, and Dysphoric Mood

It should be noted that depression, which indicates a full diagnostic condition meeting The Diagnostic and Statistical Manual of Mental Disorders-IV-TR (DSM IV-TR; American Psychiatric Association, 2000) criteria, is different than depressive symptoms or dysphoric mood. Indicating that a person is experiencing depressive symptoms or dysphoric mood does not imply diagnostic depression but rather that a person is experiencing symptoms that may or may not fit diagnostic criteria of depression. In research this is typically indicated by self-report measures of depressive symptoms. Because the sample available in this study contained individuals with depressive symptoms, but not necessarily depression, the literature review will indicate for all studies cited whether depression or depressive symptoms were measured in the study, but this study will contain individuals with varying amounts of depressive symptoms.

Bowen Theory

It is apparent through the myriad of research on the topic that many actions and behaviors affect the relationship between marital relationships and depression. It may be that a broader, theoretical understanding is necessary in order to understand how and why they co-vary. Murray Bowen's Family Systems Theory (Bowen, 1978; Kerr & Bowen, 1988) is such a theory. Bowen Theory, stated simply, hypothesizes that individuals and families live within an emotional system that contributes to the dynamics of interpersonal relationships and psychological symptoms. In this project, Bowen Theory is used to better understand the processes and relationship between marital satisfaction and depressive symptoms over time.

Bowen Theory (Bowen, 1978; Kerr & Bowen, 1988) is considered a seminal theory in the field of marriage and family therapy. Central to Bowen Theory is the concept that families live within an emotional system that links individuals in the family together as a system, or whole (Kerr & Bowen, 1988). A second key concept to Bowen Theory is that families transmit their way of life to the next generation (Kerr & Bowen, 1988). Thus, attachment to the emotional field of one's family of origin tends to be transmitted to one's family of procreation.

Bowen hypothesized that family members often have difficulty separating their rational thoughts and emotions when a relationship or particular situation is high in emotional content. These individuals have little ability to act outside the emotional reactions of the moment. In essence, individuals become "fused" to the family's emotional system, not able to figure out where their emotions stop and the others' begin. Bowen believed that this emotional reactivity is at the core of individual, family, and systemic psychological symptoms and dysfunction (in the case of this research, depressive symptoms).

Explanations and treatment for depression and depressive symptoms are numerous, but have failed to fully explain how and why people continue to experience

them. One link to understanding depression appears to be individuals' satisfaction in their intimate marital relationship. Bowen Family Systems Theory states that psychological symptoms (such as depressive symptoms) are most likely to occur when individuals and relationships are characterized by high levels of emotional reactivity (Kerr & Bowen, 1988). This research extends previous research on the links between marital satisfaction and depression by viewing these phenomena through the lens of Bowen Family Systems Theory. This research aims to shed greater light on the relationship between marital satisfaction and depressive symptoms by including the theoretical concepts of Bowen Theory. Specifically, what is the relationship between marital satisfaction and depressive symptoms in the current sample, and do concepts of Bowen Theory affect the trajectory of both marital satisfaction and depressive symptoms over time in therapy?

CHAPTER 2

REVIEW OF LITERATURE

Introduction

In this chapter I review the literature regarding depression/depressive symptoms, marital relationships, and Bowen Theory from several angles. Popular treatment models for depression and conceptualizations of depression are introduced. Bowen Theory is presented as a possible framework which could contribute to the field's understanding of depression and depressive symptoms. Literature regarding the relationship between marital relationships and depression and depressive symptoms is reviewed. The concept of differentiation, central to Bowen Theory, is presented as a possible mediating variable in the relationship between marital satisfaction and depressive symptoms. The chapter then reviews the literature regarding Bowen Theory and the theoretical concept of differentiation. Finally, Hierarchical Linear Modeling is proposed as a statistical methodology that will enable the variables of interest to be studied with couple as the unit of analysis across time.

Models of Treating Depression

Theoretical Underpinnings

Considering the cost of depression to the lives of individuals and families, and the

Approaches to clinical treatment of psychological and emotional distress are varied.

These approaches naturally stem from the most basic assumptions of the theories guiding the interventions. All theoretical approaches carry basic assumptions regarding the etiology of psychological and emotional distress and change (Reinecke, 2002). "These are assumptions that we implicitly accept when we offer a specific form of treatment" (Reinecke, 2002, p.3). Reinecke (2002) identified four possible factors, demonstrated by a consensus of current research, in the etiology of depression: biology and genetics; interpersonal and environmental factors; developmental history; and social-cognitive variables. It is natural that theoretical approaches to the treatment of depression stem from these four factors. Reinecke and Davison (2002) compiled an edited volume demonstrating varied clinical treatments for depression. The following is a brief summary of literature regarding clinical treatment for depression.

Biological and Genetic Sources and Treatment

Genetic. Treatment approaches under the "biological and genetic" cause of depression generally follow the assumption that "depression is a medical illness with a biological substrate. Biological and environmental factors interact to produce a specific clinical scenario" (Kaariainen, 2002, p. 428). In a meta-analysis of research regarding the genetic epidemiology of major depression, Sullivan, Neale and Kendler (2000) reviewed research regarding the familial and genetic aspects of depression. In reviewing the familial aspects they concluded that depression "runs in families" (p. 1554), but also acknowledged that, "Family studies cannot, however, distinguish genetic influences from environmental risk factors" (Sullivan et al., 2000, p. 1554). After reviewing twin and

adoption studies, the authors concluded that genetic factors are the most important influences on the familial nature of depression, while recognizing that environmental influences are important and, likely, specific to each individual.

Neurochemical. The biological theory of depression assumes depression has chemical origins. In short, biology interacts with environment and history to create a medical illness with a biological source. This approach assumes imbalances in brain neurotransmitters. Medications for depression (most commonly Selective Serotonin Reuptake Inhibitors, SSRI) appear to function by correcting these imbalances.

Kaariainen (2002) suggested that antidepressant medication is effective with approximately 65% of cases. Henriksson, Boethius, Hakansson and Isacsson (2003) found that 65% of those taking SSRI antidepressant medication reported significant improvement in depressive symptoms over a three month period. In most cases psychotherapy is recommended in conjunction with antidepressant medication to address significant intrapersonal, relational, and environmental factors that may contribute to the condition.

Individually Oriented Treatment

Depression is often conceived of as an intrapersonal illness experienced by an individual. For example Blatt (2004) described depression as a psychodynamic process stemming from one of two processes, "(a) a depression focused primarily on interpersonal issues such as dependency, helplessness, and feelings of loss and abandonment, and (b) a depression that thrives from a harsh punitive superego that is focused primarily on self-criticism, concerns about self-worth, and feeling of failure and guilt" (p. 22). Most clinical approaches to the treatment of depression are rooted in

individual psychology. These approaches range from psychodynamic approaches (e.g., individual psychology, object relations, self-psychology and supportive-expressive psychodynamic therapy), to behavioral approaches (behavioral therapy), to cognitive approaches (e.g., cognitive therapies, schema-focused therapy), to a combination of cognitive and behavioral approaches (e.g., rational-emotive behavior therapy; Reinecke, 2002). While an in-depth analysis of the theoretical assumptions of the above therapeutic approaches is beyond the scope of this research, it is sufficient to say that most approaches conceptualize and treat depression and depressive symptoms as an individual problem with an individual treatment.

It is interesting to note that even when conjoint treatment for depression is proposed, it is often implemented utilizing the assumptions of individual therapy. For example, Reinecke and Davison (2002) include a chapter in their edited volume describing couple therapy for depression, rooted in cognitive/behavioral therapy (Epstein, 2002). While this therapy was described as a conjoint therapy, it was rooted in the assumptions of an individually-oriented therapy. As an intrapersonal illness, the interpersonal causes and effects are often ignored in research and many treatment models. Individually Oriented, Interpersonal Treatment

One approach to the treatment of depression attempts to bridge the gap between treating depression as an intrapersonal problem with an individual solution (individual psychotherapy and/or drug therapy) and treating depression as an interpersonal problem with an interpersonal/social solution. Interpersonal Psychotherapy (IPT) is a manualized treatment, originally developed in the 1970s, for adults diagnosed with depression (Weissman & Markowitz, 2002). A basic assumption of IPT is that depression is a

medical illness—thus not the fault of the individual—with solutions based in interpersonal interactions—for which the patient can accept responsibility. By solving the interpersonal problems associated with depression, the patient relieves the depressive symptoms (Weissman & Markowitz, 2002). While the interventions focus on interpersonal interactions and relationships, IPT is conceived of as an individual therapy. Evidence suggests that IPT is an effective treatment for depression (Klerman & Weissman, 1991).

Klerman and Weissman (1991) reported that in a pilot study by Swartz et. al provided a brief form of IPT for 16 women who met DSM-IV criteria for major depression and matched that sample with 16 women who received drug therapy for major depressive disorder. Depressive symptoms significantly improved in both groups, but it was found that the IPT group improved faster and had a slightly larger effect size. While the sample size was small, it was evident that IPT may be a viable treatment for depression (Klerman & Weissman, 1991). Klerman and Weissman (1991) reported on several studies conducted to test the effectiveness of IPT. They reported that IPT has been found to be equally or more effective than control treatments or drug therapies. In fact, IPT was tested against a comparison sample who received IPT adapted to a conjoint marital context (IPT-CM). Both groups experienced a significant reduction in symptoms, but the IPT-CM group experienced greater marital improvements than the IPT group (Klerman & Weissman, 1991).

In a recent review of controlled research studies on the efficacy of IPT (13 studies met criteria for inclusion) research from 1974-2002, de Mello, Mari, Bacaltchuk, Verdeli, and Neugebauer (2005) stated that across nine studies comparing IPT to placebo

medication, IPT proved more effective than placebo in reducing depressive symptoms and had lower treatment dropout rates. In fact, according to their review of controlled research studies, they stated that IPT had greater efficacy than cognitive behavioral therapy in treating depression. De Mello, et. al (2005) suggested that combination IPT and antidepressant medication may be most effective in long term reduction of depressive symptoms as well as the most cost effective.

According to Weissman and Markowitz (2002), IPT is among the recommended therapies for adults with major depression by the American Psychiatric Association. In fact, it is recognized internationally by the National Health and Medical Research Council of Australian and New Zealand as a recommended, evidence based treatment for depression (Ellis, Hickie, & Smith, 2003). Considering the focus on the interpersonal aspects of the alleviation of depressive symptoms, and findings that suggest conjoint IPT may be useful for improving the marital relationship, it may be that other, systemic and relational approaches to therapy would be efficacious as well.

Conjoint Treatment

Over the past 10 to 15 years, research and theory regarding depression has increasingly considered interpersonal issues in the development and treatment of depression (Beach, 2001). Despite this fact, there appears to be very few published research studies on treatments for depression involving couple or family therapy rooted in systemic and intergenerational conceptualizations of psychological distress and treatment. What is apparent is that the majority of literature is rooted in a behavioral or cognitive-behavioral model. For example, Jacobsen, Dobsen, Fruzzetti, Schmaling and Salusky (1991) compared Behavioral Marital Therapy (BMT), Cognitive Therapy (CT)

and a combination of BMT and CT in a conjoint context in the treatment of depression in women. They found CT was effective at relieving symptoms for all subjects, but that BMT was only effective for those reporting marital distress. Others (Beach & O'Leary, 1992; Emanuels-Zuurveen & Emmelkamp, 1996) obtained similar results. Beach and O'Leary (1992) and Emanuels-Zuurveen and Emmelkamp (1996) both found that individual CT and marital therapy appear to reduce level of depressed mood or depressive symptoms, but that couples in MT groups also experienced a significant increase in marital adjustment or satisfaction.

More recently, Emotion Focused Therapy (EFT), rooted in attachment theory, was proposed as a conjoint treatment model for depression. Dessaulles, Johnson, and Denton (2003), found that EFT was at least as effective as psychopharmacology (medication) alone. Unfortunately, their study is difficult to generalize because it reported on a very small sample. Further research, with a larger sample size, may find significant differences between the two approaches. The above mentioned studies do not demonstrate the superiority of any model—individual or systemic—in the treatment of depression and depressive symptoms. What they do is establish that conjoint marital therapy may be a viable model for treating depression and/or reducing depressive symptoms.

Significance of Systemic Treatment for Psychological Distress

It is important that the field of marriage and family therapy demonstrate efficacy in treating psychological disorders such as depression by demonstrating effective reduction of depressive symptoms. With the exception of a very few people who live relatively solitary lives, human beings live in a relational context, yet most theoretical

and clinical approaches to treating depression or reducing depressive symptoms are individually oriented (Jacobson et al., 1991). This is true despite research indicating that depression and intimate relationships are related in some fashion (see Beach, 2001).

Depression and depressive symptoms appear to be influenced by both the individual manifesting the symptoms and their entire relational network. Similarly, the relational network appears to be influenced by the presence of the depressive symptoms. Even those who implicate genetic and biological factors as the major causes of depression acknowledge that biology alone is inadequate to fully explain the phenomena. If we are to understand depression (specifically) and overall psychological symptoms (as a whole), we must cease to ignore the relational context of individuals and, rather, include relationally oriented approaches in our overall understanding of depression and the symptoms of depression. Doing so will not only expand our options, as clinicians, for treatment, but better serve those seeking help. In the end, better treatment and prevention of depression and the symptoms of depression and other psychological distress will result in benefits to society.

Significance of Theory Development in Marriage and Family Therapy

Marriage and family therapists have many interests in developing a systemic understanding of depression and depressive symptoms. Marriage and family therapy theory has suffered in the social science and clinical fields due to sounding logical, but lacking evidence based support. One factor preventing systematic, controlled clinical trials of systemic therapies is that few theoretical approaches have been articulated to the point of testability. Thus, while individual clinicians adapt the different theories to meet their own clinical needs, more readily tested theoretical and clinical approaches have

been the focus of grant monies, clinical research, and, in the end, acceptable practice.

Theory Development in Marriage and Family Therapy

With a few notable exceptions, evidence based theoretical and clinical approaches of Marriage and Family Therapy (MFT) are nearly nonexistent (Johnson, 2002). While many subscribe to the theoretical and clinical approaches of the founders of our field, such as Murray Bowen, Carl Whitaker, Jay Haley, and Virginia Satir (among many others), we have not done an adequate job of demonstrating the theoretical efficacy of their ideas (much less the clinical efficacy). To advance clinical efficacy and create research based, systemic models of treatment, we must begin by demonstrating theoretical efficacy. In doing so, specific treatment protocol and treatment models can be established, which will then lead to the possibility of obtaining research grants for large scale clinical trials of systemic therapy for psychological disorders such as depression.

Marital Satisfaction, Depression and Depressive Symptoms

<u>Overview</u>

The following section examines the research on the relationship between depression and marital satisfaction, and depressive symptoms and marital satisfaction.

As noted in the introduction, a clinical diagnosis of depression is different from depressive symptoms. Portions of the research in this area include samples diagnosed with depression. Another portion of the research specifically focuses in the symptoms of depression. This is noted in the review that follows. When the term "depression" is used, the authors of the study specifically referred to a diagnosis of clinical depression. If a clinical diagnosis of depression was not a part of the study, the term "depressive

symptoms" was used to describe the variable—whether the author referred to the phenomena as "depression" or not.

In the review that follows, attention was paid to salient literature, including the edited works of Beach (2001) and Joiner and Coyne (1999). Several different aspects of this relationship will be presented. First, the direction of the relationship will be discussed. It is apparent that research suggests the relationship may go in both directions (Davila, 2001). The strength of the relationship between marital satisfaction and depression will also be discussed. Finally, literature regarding couple-based treatment for depression will be reviewed.

In a recent review of the literature on the association between depression and marital satisfaction Whisman (2001) stated, "there has been a growing body of empirical research in the role of marital functioning in the onset, remission, and treatment of depression" (p. 3). In fact, in recent years, several edited works have been compiled and dedicated to describing and understanding the relationship between depression and intimate relationships (Beach, 2001; Joiner & Coyne, 1999). Beach (2001) compiled a book dedicated to "melding the basic and clinical science that has occurred over the last decade in the area of marital and family processes in depression" (p. ix; see Beach, 2001 for complete work). Most significant to this research, Whisman (2001) conducted a meta-analysis of research regarding depressive symptoms and marital dissatisfaction that covered 26 studies, 3,700 women and 2,700 men, and found that marital dissatisfaction was shown to account for approximately 18% of the variance in wives' depressive symptoms and 14% of the variance in husbands' depressive symptoms (this relationship was significantly greater for women than for men).

Depression and Depressive Symptoms as Factors in Marital Satisfaction

Whisman (2001) considered the entirety of the research, but specific, individual studies have indicated a relationship between the two phenomena, with differing views regarding the directionality of the relationship. One set of literature (Basco, Prager, Pita, Tamir, & Stephens, 1992; Davila, Bradbury, Cohan, & Tochluk, 1997; Davila, Karney, Hall, & Bradbury, 2003; Fincham, Beach, Harold, & Osborne, 1997; Gotlib & Whiffen, 1989; Kurdek, 2003; Schmaling & Jacobson, 1990; Uebelacker, Courtnage, & Whisman, 2003) indicates that depression or depressive symptoms precede marital dissatisfaction and/or causes dysfunctional marital interaction. Uebelacker, Courtnage and Whisman (2003) examined marital satisfaction as a function of depressive symptoms, communication and "self-silencing" in women. They found that depressive symptoms were associated with self-silencing and a pattern of communication characterized as wifedemand and husband-withdraw. The negative correlation between depressive symptoms and marital satisfaction was significant for women, but not for men. Kurdek (2003) similarly stated that marital distress could be accounted for by negative concepts of self (a possible indicator of depressive symptoms) and negative concepts of partner.

It is interesting to note that in a small group of the above mentioned studies, the research was conducted with depressed individuals to explore their marital functioning (Basco et al., 1992; Gotlib & Whiffen, 1989; Schmaling & Jacobson, 1990). For example, Basco et. al. (1992) reported that depressed couples communicated less skillfully. They concluded that while depressed, couples demonstrated weakness in their ability to solve problems. Similarly, Gotlib and Whiffen (1989) found depression affected marital functioning of not only the depressed individual, but the spouse as well.

Others found that depressed couples did not differ from other couples in the amount of conflict, but that wives tended to demonstrate "depressive behavior" during conflict (Schmaling & Jacobson, 1990). The implication in this approach to research is that depression alters couple communication processes in a negative way such that relationship satisfaction decreases. This approach, though, may be faulty in that this is a retrospective approach to understanding the causes of the symptoms. In reality, there is no way to know whether the symptoms of depression preceded the faulty communications or vice versa.

One theory regarding depressive symptoms and marital functioning is the stress generation model proposed by Davila and colleagues (1997). They found that for women, "Depressive symptoms are not only associated with subsequent marital stress, but also lead to changes in marital stress" (Davila et al., 1997, p. 857). In essence, depressive symptoms create marital stress, which, in turn, increases depressive symptomology. It is interesting that they did not find a similar process for men. In fact, for the husbands in their study, the initial levels of depressive symptoms were not associated with follow-up chronic stress. They did find that, for husbands, marital stress was associated with later depressive symptoms (Davila et al., 1997). This raises the question of whether the direction of causality may, in fact be different for men and women.

Marital Satisfaction as a Factor in Depression and Depressive Symptoms

Another body of research also exists using marital satisfaction as the independent variable and depression or depressive symptoms as the dependent variable (Beach, Katz, Kim, & Brody, 2003; Beach & O'Leary, 1993; Whisman, 2001; Whisman & Bruce,

1999). In a longitudinal study, Beach and O'Leary (1993) found that pre-marital relationship satisfaction was able to predict level of depressive symptoms after 18 months of marriage. In fact, they found that nearly 20% of the variance in depressive symptoms at 18 months of marriage could be attributed to marital satisfaction. Whisman and Bruce (1999) found that the presence of marital dissatisfaction doubled the one year risk for major depression. They found that dissatisfied spouses were nearly three times more likely than nondissatisfied spouses to develop a major depressive episode. In fact, they estimated that if marital dissatisfaction could be eliminated, 20-30% of new occurrences of depression could be eliminated.

Strength of the Relationship

While most published literature indicates a relationship between marital satisfaction and depression/depressive symptoms, not all believe this relationship is strong. Burns, Sayers and Moras (1994) did find a significant negative correlation between depressive symptom severity and relationship satisfaction, but they stated that the relationship may be over-estimated by some researchers. They cite a difference in the causes of clinical depression and conflict as evidence. Rather, the authors believed that the long term, low level of depressive symptoms typical of dysthymia may be more related to marital dissatisfaction than clinical depression. The authors of this study did not account for clinical diagnosis of dysthymia, but rather measured depressive symptoms by self report from the sample. From the point of view of the authors, the incidence of depressive symptoms and marital dissatisfaction may often co-occur, but they do not necessarily have a causal relationship.

Reciprocal Nature of Marital Satisfaction and Depression/Depressive Symptoms

Davila (2001) reviewed the literature regarding marital satisfaction and depression with the purpose of understanding the causal links between the two phenomena. According to that review, there is evidence supporting bidirectional causal effects. Because of this, Davila (2001) suggests, "It is time to abandon the idea of determining whether marital dysfunction is a better predictor of depression or vice versa and to focus instead on the ongoing association of the two over time and on the mechanisms of this association," (p. 72-73). Rather, Davila (2001) and Davila, Karney, Hall and Bradbury (2003) suggest a reciprocal model in which the spouse exhibiting depressive symptoms contributes to stressful marital interactions, which, in turn, contributes to increases in depressive symptoms. Additionally, it was proposed that the developmental history of the individual is important in understanding the course of depression and depressive symptoms. Indeed, searching for causality or etiology of depression or depressive symptoms may not be a useful question due to the multivariate nature of the phenomena. Rather, understanding the processes and factors that contribute to the course of symptoms may be more helpful for guiding intervention. In considering these processes and factors, one must remember that "theory" and basic assumptions of "theory" guide one's conceptualizations.

Depression, Dysthymia, Depressive Symptoms and Dysphoric Mood Related Constructs, Specific Definitions

It is important to understand the similarities and differences between depression, dysthymia, depressive symptoms, and dysphoric mood. While they are often used interchangeably in the lay literature, they have very different, and precise, meanings in

the scientific literature.

Dysphoric mood. The DSM-IV-TR (2000) defines "mood" as:

A pervasive and sustained emotion that colors the perception of the world.

Common examples of mood include depression, elation, anger, and anxiety. In contrast to *affect*, which refers to more fluctuating changes in emotional "weather," mood refers to a more pervasive and sustained emotional climate (p. 825).

Mood, then implies a general emotional trait for a longer period than merely the minute to minute or hour to hour changes in how a person feels. Rather, mood implies a longer sustained emotional state. The length identified by the *DSM-IV-TR* (2000) for a mood disorder with depression as the main component is at least 2-weeks. Thus, at 14 days, the "emotional weather" has shifted from a changeable state, to a pervasive trait. A dysphoric mood implies, "An unpleasant mood, such as sadness, anxiety, or irritability" (*DSM-IV-TR*, 2000, p. 825). This description of unpleasant mood, though, still does not imply a diagnosis of "depression."

Major depressive disorder (MDD). The DSM-IV-TR (2000) states, "The essential feature of a Major Depressive Episode is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities" (p. 349). While this is a very broad description of the concept of depression, a diagnosis of MDD, requires a specific set of symptoms. A diagnosis of MDD requires at least five (or more) of the following symptoms to be present during the same time period for at least 2-weeks:

(1) depressed mood most of the day, nearly every day, as indicated by either

- subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful);
- (2) markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others);
- (3) significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or a decrease or increase in appetite nearly every day (as indicated by either subjective account or observation made by others);
- (4) insomnia or hypersomnia nearly every day;
- (5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings or restlessness or being slowed down);
- (6) fatigue or loss of energy nearly every day;
- (7) feelings of worthlessness or excessive inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick);
- (8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others);
- (9) recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide (*DSM-IV-TR*, 2000, p. 356).

<u>Dysthymic disorder</u>. Dysthymic Disorder is a mood disorder characterized by depressed mood, for more days than not, for at least two years. While experiencing

depressed mood, the person must also exhibit at least 2 of the following symptoms: poor appetite or over eating; insomnia or hypersomnia; low energy or fatigue; low self-esteem; poor concentration or difficulty making decisions; and feelings of hopelessness (*DSM-IV-TR*, 2000). Persons diagnosed with Dysthymic Disorder may later develop a Major Depressive Episode, may improve, or may continue to display chronic, low levels of depression.

<u>Depressive symptoms</u>. Individuals may exhibit varying numbers of depressive symptoms that can also vary in their severity. They may or may not qualify for MDD or dysthymic disorder, as described above.

Importance of Label Clarity

While individuals may casually use the term "depression" to describe dysphoric mood, depressive symptoms, dysthymia, or a major depressive episode in a lay setting, in a professional setting, these terms have different connotations and different meanings. At times, research regarding depressive symptoms incorrectly identifies individuals indicating higher levels of depressive symptoms on self report measures as "being depressed" or "having depression." For example, Haaga and Solomon (1993) found that in their review of 48 articles that used the Beck Depression Inventory (BDI) as the sole inventory of depressive symptoms, 22 identified participants with high BDI scores as "depressed." This is not appropriate, as the BDI and other self-report measures are not intended to replace a diagnostic interview, but rather describe levels of depressive symptoms or dysphoria. This does not mean that self-report measures are inappropriate for use in research, only that the terminology should be correctly used (Fristad, Emery, & Beck, 1997). The current review of literature reviews studies where the authors cited

"depression" as well as studies where the authors cited "depressive symptoms." At times the terminology was used correctly, at times it was not. When reported above, care was taken in order to accurately describe which phenomena was actually studied—depression or depressive symptoms—in order to analyze and describe it accurately.

Theoretical Conceptualizations of Marital Satisfaction and Depression Cognitive Conceptualizations

Several theoretical perspectives have been employed to frame the understanding of depression and marital satisfaction. Joiner (2001) identified six theories of depression that have interpersonal or relationship based explanations. They are Coyne's (1976) interactional theory, self-verification theory, hopelessness theory of depression, stress generation, social support theory, and shyness research (Joiner, 2001). While many of these theories conceptualize depression as occurring in a relational context, the theories identified by Joiner (2001) all have strong cognitive explanations for the process of depression. The field of Marriage and Family Therapy and marriage and family therapy theory may offer alternative, systemic conceptualizations of depression and depressive symptoms within a relational context.

Bowen Theory

History. Bowen Theory (Bowen, 1978; Kerr & Bowen, 1988) is considered a seminal theory in the field of marriage and family therapy. Murray Bowen began his medical career as a psychiatrist treating psychiatric inpatients, mainly in the area of schizophrenia (as did many founders of marriage and family therapy). He recognized that individual patients behaved differently when interacting with their family system than when in isolation from their family. Essentially, patients reached a "cure" when

hospitalized, but became symptomatic when they returned to their family system. Bowen began to conceive of individuals as a part of a larger family emotional system rather than as individuals in isolation. While Bowen Theory has roots in biology, the scope of this work does not allow for an exhaustive analysis of the theory. Rather, the basic tenets of Bowen theory will be reviewed as will the theoretical and empirical literature on the subject. (For a more in depth description of the etiology of the theory and its concepts see: Bowen, 1978 and Kerr & Bowen, 1988)

Three systems. At the core of his theory, Bowen theorized that each individual contains three basic systems (beyond our basic biology)—the emotional system, the feeling system, and the intellectual system. The emotional system refers to the automatic reactions we have to stimuli or events. This is our most primitive system. We have no control over our emotional system and it is usually out of our awareness. The feeling system is essentially our subjective response or evaluation of our emotional system. The intellectual system is our thinking system. This is where the rational ability to decide how to act occurs.

Family emotional system. Bowen recognized that individuals do not develop in a vacuum. Rather, individuals group in family units, and these families develop and comprise a whole that, in many ways, is greater in power than the sum of the individuals from which it is comprised. In essence, families develop an "emotional system" or "emotional field" in which they operate. This emotional field is the core of what makes a family system. Bowen later explained that while the "family system" may not be causal in nature (regarding individual actions), it provides a way of understanding the roots of family and individual behavior and problems (Kerr & Bowen, 1988).

The emotional system can be conceptualized as a sort of emotional energy field that surrounds and connects family members. Families interact as a system, or a whole. A family system develops prescribed ways for individuals to relate in order to create the most comfort for family members. This emotional system (emotional energy) can be "heavy" or "light". When an emotional system is heavy, family members have little freedom in how they can act in relation to each other. When it is lighter, they have much more freedom to act for themselves as an individual.

Differentiation of self. The degree from which each person can be separate from this emotional field is called differentiation of self. The concept of differentiation is a core concept in Bowen Theory. Differentiation refers to the degree to which each person is able to be separate from the emotional field of the family. If a person has a lower level of differentiation, much of their energy is bound in the relationship processes of the family. They have little ability to act outside of the emotional reactions of the family emotional system. A person low in differentiation is emotionally reactive to the emotions of a situation. Another term used to describe low differentiation is "fusion." In essence, individuals become "fused" with the family's emotional system, unable to figure out where their emotions stop and the others' begin, thus losing control of their own reactions and behavior.

In contrast, high levels of differentiation refer to having greater separation from the emotional field of the family system. When the emotional field is "light" persons have more freedom to act according to how they desire to act in a given situation, rather than being a slave to their immediate emotional response. Persons with higher levels of differentiation are able to use their intellectual system to decide how to react to a given

situation. Kerr and Bowen (1988) further explained, "Autonomy does not mean selfishly following one's own directives; it means the ability to be self-determined. Self-determination could result in the choice to be guided by the best interests of the group" (p. 70).

Measuring differentiation of self. A small body of research on the concept of differentiation has focused on developing reliable scales for measuring levels of differentiation. The Personal Authority in the Family System Questionnaire (PAFS-Q; Bray, Harvey, & Williamson, 1987) has been used to measure differentiation. The PAFS-Q was based on several intergenerational theories, though it was not developed specifically as a measure of differentiation (Miller, Anderson, & Keala, 2004). Other commonly used scales are the Differentiation of Self Inventory (Skowron & Friedlander, 1998), and Haber's (1993) Level of Differentiation of Self Scale (LDSS). Another, less commonly used scale, the Behavioral and Emotional Reactivity Index (Bartle & Sabatelli, 1995) measures emotional reactivity to family of origin. It is important to note that Bowen did not believe that differentiation could be measured through a brief questionnaire or survey. Instead, Bowen believed that differentiation could only be understood after lengthy clinical assessment by a trained clinician.

Distance regulation. At the core of Bowen Theory is the concept that a system is in a constant process of regulating the interpersonal distance between its members in order to obtain a comfort level. This process of distance regulation is another key aspect of Bowen Theory. This distance refers to the physical, psychological, and emotional distance and freedom individuals have in relation to others in the system. Kerr and Bowen (1988) cited a German fable as a metaphor from the animal kingdom to describe

the process of distance regulation:

One very cold night a group of porcupines were huddled together for warmth. However, their spines made proximity uncomfortable, so they moved apart again and got cold. After shuffling repeatedly in and out, they eventually found a distance at which they could still be comfortably warm without getting pricked. This distance they henceforth called decency and good manners (p. 52).

In the human world, families engage in similar emotional and physical processes. Families engage in creating and maintaining emotional boundaries between members at a comfort level that the emotional system can maintain. The level of emotional distance between family members is neither good nor bad—well functioning families can be viewed across the spectrum from very close to less emotionally close. The important issue is the forces that govern the distance and the freedom of family members to act as individuals. Kerr and Bowen (1988) state:

While all relationships ranging from poorly to well differentiated ones are in a state of dynamic equilibrium or balance, the flexibility inherent in that balance decreases as differentiation decreases. The higher the degree of differentiation, the more capable the relationship is of responding to or conforming with changing situations. The lower the degree of differentiation, the greater the instability of the relationship balance and the less its capacity to adapt to change. This decrease in flexibility results primarily from the fact that, as differentiation decreases, people's functioning and sense of well-being increasingly depend on and are influenced by the relationship (p. 71).

In a poorly differentiated family system, this lack of differentiation can be

manifest in many ways. In one family, too much intimacy can feel threatening, and the lack of differentiation could be manifest by distance, withdrawal, or even cutoff of family members. In another family, distance may be viewed as a threat, so the automatic emotional reaction is for more togetherness and more fusion. Bowen believed that lack of differentiation is at the core of individual, family, and systemic symptoms and dysfunction (Kerr & Bowen, 1988). Emotional reactivity is what drives behavior in poorly differentiated individuals and families.

Differentiation, Marital Satisfaction and Psychological Symptoms

For the purposes of this work, this section of the review will focus on research that considers the relationship between differentiation, marital satisfaction or adjustment and psychological symptoms including depression and depressive symptoms. As discussed above, ample evidence exists to demonstrate a negative relationship between marital satisfaction and depression or depressive symptoms. In contrast, relatively few studies have directly tested the relationship between differentiation and marital satisfaction (Skowron, 2000), and none have included depression as a third variable. While little research has been done, the available findings indicate that differentiation of self and differentiation in the couple relationship are related to marital satisfaction. Evidence also exists that demonstrates differentiation is related to psychological symptoms.

Differentiation and Marital Satisfaction

The literature testing the efficacy of Bowen Theory and, specifically, the concept of differentiation, includes research testing the associations between level of differentiation and marital satisfaction. Bowen Theory proposes lower levels of

differentiation as the cause of psychological and interpersonal difficulties. Thus, according to the theory, low levels of differentiation, as indicated by emotional reactivity and emotional cut-off, would likely result in relationship difficulties.

Griffin and Apostal (1993) used the LDSS and the Family Relationship

Questionnaire (FRQ; developed specifically for their study) to assess differentiation both before and after a relationship enhancement experience. The LDSS was used to assess basic level of differentiation of self. The FRQ was designed to assess what the authors referred to as functional differentiation which, "varies from day to day due to external influences" (Griffin & Apostal, 1993, p. 267). Repeated measures ANOVA scores demonstrated a significant rise in both relationship satisfaction and FRQ scores, or the functional differentiation. It should be noted that basic level of differentiation (LDSS score) did not change significantly. At a one year follow-up, relationship satisfaction, basic differentiation, and functional differentiation all increased significantly. While these variables all rose together, it should not be assumed that they have a causal relationship.

Skowron (2000) implicated differentiation as a cause of marital adjustment in a study of 39 married couples. In that study, the author summed husband and wife scores on the Differentiation of Self Inventory (DSI) as an indicator of couple differentiation. In that sample, the results of a regression analysis demonstrated that differentiation scores accounted for 74% of the variance in husband marital adjustment scores, and 61% of the variance in wife marital adjustment scores. Specifically, husbands' emotional cutoff score predicted marital satisfaction for both husbands and wives. Skowron (2000) concluded that, "results confirmed that couples who were less reactive, cutoff, or fused

with others, and better able to take I-positions in relationships, taken together, experienced the greatest levels of marital satisfaction, whereas those with less differentiated marriages indicated greater marital distress" (p. 233). In fact, couple differentiation scores accounted for two-thirds of the variability in wife marital adjustment scores.

One problematic aspect of the Skowron (2000) study was the manner in which the "couple differentiation score" was obtained. In the sample, there was no significant difference between marital partners' differentiation scores and randomly matched pairs. This, then, does not support Bowen's proposition that marital partners tend to have similar levels of differentiation. By combining differentiation scores, individual differences between marital partners become muted and possible nuances of individual and couple phenomena may be lost. One alternative to this problem could be to use husband and wife differentiation of self scores individually to understand how they each contribute to the marital adjustment. Another alternative would have been to use the Differentiation in the Family System Scale (Anderson & Sabatelli), a scale that measures differentiation in the marital relationship.

<u>Differentiation and Psychological Symptoms</u>

Bowen and Kerr (1988) hypothesized that differentiation was at the core of all symptoms from relational symptoms to psychological and physical symptoms. While this broad application of the concept may be a stretch, there is a small body of research that has explored the relationship between differentiation and psychological symptoms. For example, Elieson and Rubin (2001) used DSI scores to compare the differentiation and depressive symptoms of a clinical group diagnosed with clinical depression, a non-

clinical group (a convenience sample of university students who completed paper-andpencil research instruments) and a non-clinical group recruited through the Internet (who
completed instruments online). The clinical population's differentiation scores differed
significantly from non-clinical participants recruited in traditional methods and
participants recruited through the internet. There was a significant inverse correlation
between the degree of depressive symptoms and level of differentiation.

The Behavioral and Emotional Reactivity Index (BERI) is an assessment instrument designed to measure emotional reactivity to family of origin, an indicator of level of differentiation (Bartle & Sabatelli, 1995). While the BERI is less commonly used than other assessments of differentiation, three published studies used the BERI to assess the relationship between emotional reactivity to family of origin and psychological symptoms. Rosen, Bartle-Haring and Stith (2001) and Bartle-Haring & Probst (2004) demonstrated a relationship between emotional reactivity toward parents, stress and psychological symptoms. They found that the higher the emotional reactivity (a negative indicator of differentiation), the higher the psychological symptoms. In addition, Bartle-Haring, Glade, and Vira (2005) demonstrated that differentiation of self at baseline (pretreatment) was predictive of psychological symptoms at baseline. It was interesting, though, that in that sample, differentiation was not predictive of change in psychological symptoms across nine sessions of therapy.

Two other studies examined the concept of overall psychological well-being as an indicator of mental health. Skowron, Holmes, and Sabatelli (2003) found that higher levels of differentiation on two different scales (PAFS-Q and DSI) were associated with higher levels of psychological well-being. Bohlander (1999), found that differentiation

of self (measured by the LDSS) made significant contributions to explaining married men's psychological well-being and concluded that differentiation of self is moderately correlated with overall psychological well-being.

Expressed Emotion, Psychological Symptoms and Bowen Theory

Another avenue to research regarding the concept of differentiation is the concept of Expressed Emotion (EE). As described in a recent meta-analysis on the subject by Butzlaff and Hooley (1998), EE is a measure of the family environment, specifically referring to how family members speak to and about each other regarding critical comments, hostility, and emotional overinvolvement. High EE has typically been implicated as a cause of relapse of schizophrenia and other psychiatric disorders. EE has never been directly equated with differentiation and the two concepts originate from different theoretical orientations. Despite this, the two concepts are strikingly similar. A highly critical, emotionally overinvolved environment is an environment where the emotional system rules over the thinking system. EE, as described above, is a fitting description of emotional reactivity, a negative indicator of differentiation. While the two concepts are not completely interchangeable, a brief review of literature regarding EE may be helpful for understanding the links between emotional reactivity (differentiation) and psychological symptoms.

EE in families has been extensively studied (Butzlaff & Hooley, 1998). In their meta-analysis of literature regarding EE and the relapse of psychiatric disorders Butzlaff and Hooley, (1998) found more than 20 studies that focused research on persons with schizophrenia and 6 that focused their analysis on relapse in mood disorders. Regarding schizophrenia, they stated that EE "is a well-validated predictor of poor clinical outcome

for this disorder as well as for other psychiatric conditions" (Barrowclough & Hooley, 2003, p. 850). Specific to depression, Hooley, Orley and Teasdale (1986) found that high EE by a spouse was strongly associated with relapse of depression. According to the analysis by Butzlaff and Hooley (1998), a person suffering from depression with high-EE relatives (more than 2 negative comments during observation) could expect a 69.5% relapse rate as compared to a 30.5% rate for a person with low EE relatives.

Barrowclough and Hooley (2003) provide a description of the systemic processes that occur in families with high EE. They said, "stated simply, relatives who are high EE by virtue of being critical or hostile make attributions that are different from relatives who are low EE" (p. 856). Translated to the language of Bowen theory, when family members are high in emotional reactivity, they attribute more negative qualities to the actions of persons with schizophrenia. Papero (1990), a Bowen theorist, believed that poorly differentiated individuals and family systems behaved in a manner similar to the high EE families described above. He stated, "Such processes are characterized by narrow perspective, an overassessment of the importance of self, and the tendency to place the locus of a problem outside of self. Dichotomies or a kind of either-or statement of a problem tend simplistically to reduce inherent complexity and many-sidedness" (Papero, 1990, p. 47). When equated with emotional reactivity, the research regarding EE lends credibility to the theoretical concept of differentiation and the association between differentiation and depressive symptoms.

Differentiation as a "Third Variable"

Whisman (2001) proposed that the relationship between marital satisfaction and depression may not be a direct causal relationship, but rather mediated by a third variable

such as dependence or interpersonal sensitivity. These indicate a focus on behavioral level variables. Also implicated was the concept of social power which is evidenced in the concept of self-silencing in women. Self-silencing occurs as women, having less power socially and in their relationship, silence their own needs in deference to their partner's needs. In contrast, differentiation of self is a personal characteristic that is played out in a relational context. Differentiation is a meta-level theoretical concept that attempts to explain (among other things) the forces that drive an individual's depressive symptoms as well as their functioning in interpersonal relationships. Rather than a mediating relationship with marital satisfaction, differentiation could be considered as a variable that impacts both phenomena, and how they change over time.

What is Lacking in the Research?

Theoretical Conceptualization of the Relationship

The research presented above detailed the relationship between depression/depressive symptoms and marital relationships, as well as the relationships between differentiation and marital adjustment and differentiation and psychological symptoms. It is likely that psychological symptoms and, more specifically, depressive symptoms have many factors contributing to onset, course and remission. It appears that biology and genetics, behaviors, life experiences, thought processes, and relational processes all affect the level of depressive symptoms and overall psychological well-being of human beings. While these factors are associated with depressive symptoms, specific causes are not likely to be conclusively identified. It may be that a different question may be more useful in understanding and reducing depressive symptoms. For example, it may be possible to identify other variables, such as differentiation of self, that

contribute to the course, and possibly to the remission of symptoms.

This field of research lacks the literature that demonstrates a theoretical understanding of what processes occur in the association between marital satisfaction and depressive symptoms. While there is little published literature to date, the available literature regarding Bowen's concept of differentiation clearly demonstrates a positive association with marital satisfaction and negative relationship with depressive and other psychological symptoms. Bowen Family Systems Theory (Bowen, 1978; Kerr & Bowen, 1988), specifically the concept of differentiation, may offer a more clear understanding of how these variables co-occur.

A recent unpublished pilot study conducted by the author and colleagues demonstrated a link between the three variables (Glade, Bartle-Haring, & Lal, 2003). We found that aspects of an individual's level of emotional reactivity to parents (i.e. family of origin) were related to their own depressive symptoms and marital satisfaction as well as their spouse's. We concluded that in order to understand how level of depressive symptoms and marital satisfaction were related, family of origin relationships must be considered. This research was notable in that Hierarchical Linear Modeling (Raudenbush & Bryk, 2002), which allows researchers to use couple-level variables without losing individual differences, was used in the data analysis. HLM was used to create a dyadic-level variable regarding marital satisfaction which could then be understood according to how it related to more individual variables such as differentiation and depressive symptoms. While this study helped to begin the process of understanding the relationship between family of origin and depressive symptoms, it had several shortcomings. First, the data set was relatively small (N=40). Second, it was a clinical population of couples at

the first session of therapy. It did not track the relationship between concepts over time to better understand whether they changed together. Third, it was apparent that men, in general, scored low on the instrument used to measure depressive symptoms, the depressive symptom subscale of the Hopkins Symptom Checklist (Derogatis, Lipman, Rickles, Uhlenhuth, & Covi, 1974). This is not entirely surprising considering that the lifetime prevalence of Major Depressive Disorder for women is nearly twice that of men (Kessler, McGonagle, Swartz, Heath, & Eaves, 1993).

Options of Relational Data Analysis

Ignore lack of independence. Though many have encouraged family researchers to use the relational dyad as the unit of analysis, one of the shortcomings of family and relational literature is that the couple has rarely been used (Maguire, 1999). Marital and other relational research is inherently difficult. While the dyad is the unit of analysis, most statistical approaches only allow family researchers to analyze at the individual response level. According to Luke (2004), this leads to at least two problems. First, when the individual is the unit of analysis, using partner data violates basic statistical assumptions—because individuals in a marital dyad will presumably have correlated errors, violating the assumption of independence. Second, when context is ignored, it assumes that processes work the same across relationships, which cannot be assumed. Thus, we are faced with several options, none of which solve the problem sufficiently. If we include partner data in the analysis and pretend as if the individuals have no relation to each other, we violate the assumption of independence. Also problematic to this approach is that it becomes impossible to understand how husband and wife scores interact in different situations.

Combined "couple score." Another option is to combine (either sum or average) husband and wife scores. For example, partners' marital satisfaction scores would be averaged in order to create a couple score. This creates a "marital score" on the construct of interest, but negates individual differences between partners. This approach is especially problematic when the concept of depression or depressive symptoms is considered, as this is likely an individual variable which both affects and is affected by the marital relationship.

Split sample by gender. A third approach involves splitting couples by gender to obtain results that do not violate the assumption of independent data. Of the three options presented, this appears to be the best because it maintains individual differences while meeting criteria for independent observations. Unfortunately when couples are split, we are not able to understand how dynamics of the individual and couple relationship interact to create certain circumstances or outcomes. In essence, we obtain only a small portion of the larger picture. Thus, we are limited in our understanding of couples because of the inadequacies of traditionally used linear approaches such as multiple regression and analysis of variance.

Multilevel Models as a Solution

Multilevel statistical approaches can overcome the problems inherent when using couple-level data. "The goal of a multilevel model is to predict values of some dependent variable based on a function of predictor variables at more than one level" (Luke, 2004, p. 9). For instance, in the case of this research, I am interested in how a couple's relationship satisfaction is influenced by its members' level of differentiation and depressive symptoms. Similarly, I am interested in how an individual's level of

depressive symptoms is influenced by his or her level of differentiation as well as the couple-level variable of relationship satisfaction. As discussed above, relationship satisfaction among partners in a relationship cannot be considered independent; rather, it is a group level variable (the couple) in which responses by members of the group are related. So in this situation, the individual characteristics of depressive symptoms and differentiation would be considered level two variables, and the couple variable of relationship satisfaction would be considered a level one variable. According to Luke (2004), "Multilevel modeling relaxes the independence assumption, and allows for correlated error structures" (p. 22) among members of a couple. Hierarchical Linear Modeling (HLM) is a multilevel modeling approach which allows researchers to use couple level variables without losing individual differences.

Research Question and Hypotheses

Research Question

Considering the research regarding the relationships between differentiation of self, marital satisfaction, and depression/depressive symptoms, the following question guides the research: Taking the couple as the unit of analysis, but also allowing for "individual" differences between partners and across time, does the differentiation of self of both individuals in a couple at intake explain the course of depressive symptoms and level of marital satisfaction over three sessions of therapy? Considering the research discussed above, and the assumptions of Bowen Theory, I hypothesize several relationships. They are detailed below according to each of the two levels of the analysis and the three models which comprise each level.

Research Hypotheses

Level 1. The purpose of the first level of the analysis is to demonstrate the "group" nature of the couples in regards to relationship satisfaction. That is, relationship satisfaction among relationship partners is not independent and will be highly correlated due to the systemic nature of couples. The first level of the analysis establishes the amount of "groupness" among couples as well as the individuality each partner also contributes. The first level also establishes whether significant change occurs in the dependent variable (relationship satisfaction) in the sample.

Hypotheses for Level 1 are as follows:

- 1) Partners' relationship satisfaction scores will be significantly correlated.
- 2) The slope of relationship satisfaction due to time will be significant and positive. In other words, relationship satisfaction will significantly improve for the entire sample across three therapy sessions.
- 3) The slope of relationship satisfaction due to spouse, across all three time points, will be significant and positive. In other words, in addition to the "couple nature" of relationship satisfaction, there will also be significant differences between male and female partner's relationship satisfaction scores, demonstrating individual differences within the couple group.

Level 2. At Level 2 of the analysis, additional variables are introduced to explain the variances in relationship satisfaction at intake (the intercept, in HLM language) of each partner, the significant differences between male and female partners reported relationship satisfaction, and the observed significant changes in relationship satisfaction.

Hypotheses for Level 2 are as follows:

- 4) Differentiation of self of both partners, as indicated by the DSI subscales will predict the variance of the intercepts of relationship satisfaction scores. Specifically, higher levels of differentiation will be predictive of higher relationship satisfaction at intake. Additionally, male and female depressive symptoms, as indicated by the ABS and CES-D will also be significant predictors of relationship satisfaction at intake, such that lower levels of depressive symptoms will predict higher relationship satisfaction at intake.
- 5) Differentiation of self, as indicated by the DSI subscales, will be significant predictors of the slope due to spouse, or the differences between male and female partner's relationship satisfaction scores.
- 6) Differentiation of self, as indicated by the DSI subscales will be a predictor of the variances in the slope of relationship satisfaction due to time. Specifically, higher differentiation will be associated with greater positive change in relationship satisfaction, while lower differentiation will be associated with less positive change in relationship satisfaction.
 Additionally, significant, decreases in depressive symptoms, by both men and women, will also be predictors of increases in relationship satisfaction.

Additional Analysis. In addition to the multi-level model testing predictors of the change in relationship satisfaction over time, an additional analysis will be performed, modeling the change in depressive symptoms over time. This analysis is significant in that research has demonstrated that depression and the symptoms of depression tend to be

highly correlated with marital and relationship satisfaction. In the first analysis, the change in depressive symptoms is included as it is believed to be predictive of change in relationship satisfaction. The additional analysis attempts to explain the variance of individual's level of depressive symptoms at intake as well as the variance in the change in depressive symptoms over time. This tests whether differentiation of self and change in relationship satisfaction are predictive of the change in depressive symptoms over the course of three sessions of therapy. Depressive symptoms are conceived of as an individual variable in this analysis rather than a couple-level variable (as is relationship satisfaction).

The hypotheses for the additional analysis are as follows:

- 7) For men and women, differentiation of self will be a negative predictor of the intercept of their own depressive symptoms, such that higher differentiation will be predictive of lower levels of depressive symptoms at intake. Similarly, individual differentiation of self and initial depressive symptoms will be a predictor of partner's intercept for depressive symptoms (at intake).
- 8) For men and women, differentiation of self will be a positive predictor of the variability in the slope of depressive symptoms, such that higher differentiation of self will be predictor of greater decreases in their depressive symptoms over time. Also, higher levels of differentiation of self will be a predictor of the variability in the slope of partner's depressive symptoms over time.
- 9) Significant increases in relationship satisfaction will be a negative

predictor of variability in the slopes of depressive symptoms over time for both the individual and their partner.

CHAPTER 3

METHODOLOGY

Introduction

The purpose of this study is to gain greater understanding of the relationships between three variables (differentiation of self, relationship satisfaction and depressive symptoms) as they interact across the span of three sessions of marriage and family therapy. It is important that couple level data be used in order to better understand the role of the couple relationship in the course of depressive symptoms.

Participants

Qualifying Criteria

Participants in the study were recruited through the on-campus Marriage and Family Therapy Clinic at The Ohio State University (OSU MFT Clinic). On average, the clinic serves about 75 new cases each year, including individuals, couples and families. The clinic serves the greater Columbus, Ohio area and, while some OSU students do seek services through the OSU MFT Clinic, it does not cater to a student population. The data were collected over the course of several years as part of an ongoing research study at the clinic. The full data set contains individual, couple and family level data on multiple topics. Participants self-referred to the MFT clinic with a variety of presenting problems.

A diagnosis of depression or indicators of depressive symptoms were not required for inclusion in the study. For study inclusion, participants had to be in either conjoint couple or family therapy with both members of the couple participating in the therapy and completing pretreatment assessment and after-session, follow-up questionnaires. Couples did not need to be married or cohabiting in order to be included. The data set included five same-sex couples. The decision was made to include only heterosexual couples due to the small number of same-sex couples. At intake 97 couples met criteria for inclusion.

Demographic Characteristics

Men ranged in age from 20 to 58 years ($\underline{M} = 32.00$; $\underline{SD} = 8.69$). Women ranged in age from 18 to 54 years ($\underline{M} = 29.97$; $\underline{SD} = 7.91$). Participants identified across many racial/ethnic groups, consistent with local demographics. The majority of the sample identified as Caucasian (Caucasian 71.1%; African American 12.4%; Hispanic 5.2%; Asian 3.6%; Native American 1%; Other 6.7%). The majority of participants were either married for the first time or in remarriages (68%). A smaller proportion indicated that they were currently cohabiting with their partner (19.5%). The remaining participants either declined to answer or indicated being in a committed relationship, but living separately.

Household income was measured by asking participants to indicate a range in which their annual household income fell. The ranges began at "less than \$10,000" and increased in \$10,000 annual increments, with the top category \$100,000 per year or more. A majority had a household income of less than \$30,000 per year (59.2%). Three-quarters of participants earned less than \$50,000 annually (76.1%). The remaining

participants earned more than \$50,000 per household per year. Thus, the sample is skewed toward lower income households. This is expected due the sliding fee at the clinic based on household income.

Highest level of education completed was measured by selecting from a list. A small portion indicated not graduating from high school (6.3%), and 14% indicated either graduating from high school or obtaining a GED. Approximately one-third (35.5%) indicated having completed some college/associates degree and 27.6% graduated from college with a bachelor's degree and 16.7% had graduate/professional degrees.

Procedure

Clients who agreed to participate completed the intake questionnaire before their first appointment in the clinic waiting room or a private therapy room. After sessions two through six, clients were asked to complete a one page follow-up questionnaire, place it in an envelope provided by the therapist, and deposit it in a locked box on their way out of the clinic. Clients who agreed to participate received a \$10 reduction in fee for their first session.

The initial intake questionnaire contained several instruments not pertinent to this study. Specific to this study, participants (male and female partners) completed four questionnaires at intake regarding differentiation, relationship satisfaction, and depressed mood. In a past study with a similar population from the same clinic (Glade et al., 2003) men tended to score low on overall measures of depressive symptoms. This may be due to gender differences in symptom presentation. In an attempt to better measure level of depressed mood, two scales were used at intake—the Center for Epidemiologic Studies: Depressed Mood Scale (Radloff, 1977) and the Affect Balance Scale

Table 3.1. Administration schedule of research instruments

Measure	<u>Intake</u>	2 nd session	3 rd session
Differentiation of Self Inventory	X		
Center for Epidemiologic Studies:	X		
Depressed Mood Scale			
Affect Balance Scale	X	X	X
Relationship Satisfaction	X	X	X

(Bradburn, 1969). At each follow-up, relationship satisfaction and depressive symptoms, as indicated by the ABS, were measured. See Table 3.1 for a description of the research schedule for which scales were administered at each stage. All scales may be viewed in their entirety in Appendix A. A description of each of the scales follows.

Operationalization of Variables and Instrumentation

Differentiation of Self

Differentiation of Self Inventory (DSI). At intake, clients completed the DSI (Skowron & Friedlander, 1998). This is a 43-item scale with items rated on a 6-point Likert type scale ranging from "not at all true of me" at the low end, and "very true of me" at the high end. The authors used Bowen theory to create the items. The scale contains four subscales: Emotional Reactivity (ER), I-Position (IP), Emotional Cut-off (cutoff) and Fusion with Others (fusion). All subscales reflect an aspect of differentiation of self or the lack thereof. Higher scores on the DSI reflect a higher level of differentiation. Skowron and Friedlander (1998) report internal consistency reliabilities ranging from .74 to .84, with the full scale's reliability at .88. In this sample reliabilities were relatively high for the full scale (alpha = .81). Reliabilities for the individual subscales tended to be lower (ER: alpha = .81; IP: alpha = .69; cutoff: alpha = .65; fusion: alpha = .60). Skowron and Friedlander indicated that the fusion subscale was not a reliable indicator of differentiation because they believed that it did not accurately measure the concept of fusion in its current form and advocated not using the subscale. Thus, it was not used in this study.

The questions for the subscales are varied and directed toward the specific aspects of differentiation. Sample questions for ER include, "People have remarked that I am

overly emotional," "I wish that I weren't so emotional," and "At times my feelings get the best of me and I have trouble thinking clearly." Sample questions for cutoff include, "I have difficulty expressing my feelings," "I tend to distance myself when people get too close to me," and "I would never consider turning to any family members for emotional support." Sample questions for IP include, "I tend to remain pretty calm under stress," "No matter what happens in my life, I know that I'll never lose myself of who I am," and "My self-esteem really depends of how others think of me."

Relationship Satisfaction

Couple relationship satisfaction was measured by one item. The item uses a 10-point Likert scale from "completely satisfied" to "not at all satisfied." The one item measure of couple satisfaction was used in order to create a single page follow-up questionnaire so as not to overburden participants at follow-up. This question was used with a similar population in previous data collection at the same clinic and correlated highly with the Kansas Marital Satisfaction scale (r = .821), a commonly used measure of relationship satisfaction. Clients answered this item at all data collection points.

Depressive Symptoms

Center for Epidemiologic Studies: Depressed Mood Scale (CES-D). Clients completed the CES-D (Radloff, 1977) at intake. The CES-D is a 20-item, 4-point Likert-type scale with endorsement items ranging from zero to three. Participants are asked to indicate the number which best describes how often they have felt or behaved in certain ways over the past week (0=Rarely or none of the time; 1=Some or a little of the time; 2=Occasionally or a moderate amount of the time; 3=Most or all of the time). The CES-D indicates current level of depressive symptomatology. The accepted cutoff score

indicating depressed mood is a total score ≥ 16 . Internal consistency reliabilities have been reported to range between .85 and .90 (Fischer & Corcoran, 1994). Internal reliabilities for this sample were found to be higher (alpha = .92).

Affect Balance Scale. In addition to the CES-D, clients completed the ABS (Bradburn, 1969) at intake and sessions two through six as an indicator of depressive symptoms. This 10-item scale assesses positive and negative affect. Respondents are asked to consider how they have been feeling lately by answering "yes" or "no" to questions. Higher scores indicate greater psychological well-being, or lower depressive symptoms. Lower scores would indicate lower psychological well-being, or more depressive symptoms. Internal consistency reliabilities for the positive affect subscale have been reported at .75, while reliabilities for the negative affect subscale have been reported at .72 (Robinson, Shaver, & Wrightsman, 1991). In this sample internal reliabilities for the positive affect subscale were similar to those reported above (alpha = .76). Internal reliabilities for the negative affect subscale were slightly lower (alpha = .66). The overall internal reliability was .71.

The ABS total score correlated highly at intake with the CES-D, a scale measuring depressive symptomatology (r = -.730; p< .01). This indicates that higher scores on the ABS (which indicates more positive affect) are negatively correlated with depressive symptoms in this sample. Thus, a lower score on the ABS would indicate higher levels of depressive symptoms. Table 3.2 demonstrates how items on both the CES-D and the ABS relate to depressive symptomatology as indicated in the *DSM IV-TR* (2000).

Table 3.2. Depressive symptom criteria and corresponding CES-D and ABS items

Table 3.2. Depressive symptom criter		
DSM IV Diagnostic Criteria	CES-D	Affect Balance Scale
Depressed mood most of the day,	■I was bothered by things that	■Did you ever feel on top of the
nearly every day, as indicated by	usually don't bother me.	world? (-)
either subjective report (e.g., feels	■ I felt I could not shake off the	■Did you ever feel depressed or
sad or empty) or observation made	blues even with the help of	unhappy?
by others (e.g., appears tearful)	my family or friends.	Did you ever feel that things were
	■I felt depressed.	going your way? (-)
	■I was happy. (-)	
	■I felt lonely.	
	■I had crying spells.	
	■I felt sad.	
Markedly diminished interest or	■I enjoyed life. (-)	■Particularly excited or interested
pleasure in all, or almost all,		in something? (-)
activities most of the day, nearly		■Did you ever feel bored?
every day (as indicated by either		Did you ever feel lonely or
subjective account or observation		remote from other people?
made by others)		r sopre.
Significant weight loss when not	■I did not feel like eating; my	
dieting or weight gain (e.g., a	appetite was poor.	
change of more than 5% of body	appeare was poor.	
weight in a month), or a decrease or		
increase in appetite nearly every day		
(as indicated by either subjective		
account or observation made by		
others)		
Insomnia or hypersomnia nearly	■My sleep was restless.	
every day	was restress.	
Psychomotor agitation or retardation	■I talked less than usual.	■Did you ever feel so restless that
nearly every day (observable by	Turked ress than asaar.	you couldn't sit long in a chair?
others, not merely subjective		you couldn't sit long in a chair:
feelings or restlessness or being		
slowed down)		
Fatigue or loss of energy nearly	■I felt everything I did was an	
every day	effort.	
every day	I could not get going.	
Feelings of worthlessness or	■I felt I was just as good as	Did you ever feel proud because
excessive inappropriate guilt (which	other people. (-)	someone complimented you on
may be delusional) nearly every day	■I thought my life had been a	something you had done? (-)
(not merely self-reproach or guilt	failure.	Did you ever feel pleased about
about being sick)	I felt that people disliked me.	having accomplished something?
acout come sick)	- 1 Ich mat people distiked ille.	(-)
		Did you ever feel upset because
		someone criticized you?
Diminished shility to think or	■I had trouble keeping my	Someone chucized you?
Diminished ability to think or concentrate, or indecisiveness,	■I had trouble keeping my mind on what I was doing.	
	inniu on what I was doing.	
nearly every day (either by subjective account or as observed by		
3		
others)		
Recurrent thoughts of death (not just		
fear of dying), recurrent suicidal		
ideation without a specific plan, or a		
suicide attempt or a specific plan for committing suicide		

The ABS and CES-D both appear to contain items that match with diagnostic criteria for MDD as indicated in the *DSM IV-TR* (2000). The CES-D contains items that cover eight of the nine diagnostic criteria. The only criteria not covered by the CES-D is the item regarding "recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide." In contrast, the ABS covers four of the nine diagnostic criteria for MDD. The two measures converge on four criteria. The areas of convergence are: depressed mood; diminished interest or pleasure in all, or almost all, activities; psychomotor agitation or retardation; and feelings of worthlessness or excessive inappropriate guilt. Two items from the CES-D ("I felt hopeful about the future" and "People were unfriendly") did not match any of the nine diagnostic criteria.

Research indicates that the CES-D is effective in ruling out those who would not qualify for a diagnosis of MDD (Haringsma, Engels, Beekman, & Spinhoven, 2004; Jones et al., 2005; Thomas, Jones, Scarinci, Mehan, & Brantley, 2001). Some suggest that the cutoff score of ≥16 on the CES-D may over predict the presence of MDD (Jones et al., 2005). It may be that a higher score of ≥25 may be more accurate at detecting the presence of a current Major Depressive Episode (Haringsma et al., 2004).

Data Analysis

Level 1

The analyses of these data, using HLM, consisted of two levels, with each level consisting of three models, each building upon the last. Level 1 of the multilevel model was male partners' and female partners' scores on RS across time. The first model of Level 1 tested for the correlation between partner RS scores. The second model revealed

the mean RS scores for the entire sample at intake (the intercept) and the average change in RS over time (slope due to time) for the sample. The third model of Level 1 tested for the individual nature of partners' scores by indicating the average differences between male and female RS scores (slope due to partner).

Level 2

Level 2 also consisted of three separate models. The first model of Level 2 examined the initial level of RS, or the variability in intercept of each individual and couple using level two variables (DSI subscales and ABS change score). The second model of Level 2 focused on explaining the variability of slope due to partner, or difference between partner scores, using DSI subscales and the "ABS change" variable. Model six focused on explaining the variability of slopes of RS due to time, or the change in RS over the three sessions of therapy.

The "ABS change" score is a statistic evaluating whether significant reliable change is meaningful and reliable. Jacobson and colleagues (Jacobson, Follette, & Revenstorf, 1984; Jacobson et al., 1984) have suggested two criteria for determining if change is meaningful and reliable. First, established cut-off scores should be used to determine whether clients drop below the distressed category. Second, they suggested using an index for measuring the reliability of the change. To calculate the Reliability of Change Index (Anderson et al.; Jacobson et al., 1984), the post-test score is subtracted from the pre-test and divided by the standard error of the difference between the two test scores. An RC above 1.96 is considered significant (p < .05). This allows the researcher to determine the proportion of cases within a group who changed reliably and

meaningfully. Using the RC, a change score was created for each partner using the ABS score at intake and the ABS score at the final follow-up.

Additional Analysis

An additional analysis was tested, focusing on testing the contributors of ABS change over the three sessions of therapy. This analysis was similar to the third model of the second level in the previous analysis. Depressive symptoms were conceived of as an individual variable, so the multilevel model was not necessary. The additional analysis focused on explaining the variability in slopes of ABS scores due to time using the DSI subscales and the RC score for change in RS for each individual from intake through the final follow-up. This change score was calculated in the same manner as the "ABS change" score in the previous analysis.

HLM Analysis

It would have been most appropriate to include depressive symptoms and relationship satisfaction at Level 1 of the analysis in order to assess how they change together over time. This was not possible because HLM allows for only one dependent variable. Latent Growth Curve Analysis allows for more than one dependent variable, but the sample size in this project prohibited the use of this technique. I selected depressive symptoms to be at Level 2, because in a previous project (Glade et al., 2003) when we modeled depressive symptoms as a couple level variable, the model produced a poor fit to the data. In other words, with the measure we used in that project, depressive symptoms could not be considered a couple level variable, at least not in the same way as relationship satisfaction. Thus, partners' depressive symptoms may impact each other but there does not appear to be sufficient evidence to make this a couple level variable, as

in "couple depressive symptoms." Thus, depressive symptoms were considered an individual level variable in this analysis.

The Level 1 formula is as follows:

$$Y_{it} = \beta_0 + \beta_I(Partner) + \beta_2(time) + R$$

Here Y_{it} is the marital satisfaction score for both male partner and female partner, taking into account who the partner is and time. Once the formula is solved, then we get a score for women at each time point, and a score for men at each time point. This would be the fixed effects of the model, however, the model also allows for random effects (R).

At Level 2 the formula is as follows:

Model for Intercept:

$$\beta_0 = \pi_{00} + \pi_{0i}$$
(DSI SUBSCALES or CHANGE IN ABS) + u_0

Model for Slopes:

$$\beta_I = \pi_{10} + \pi_{1i}$$
 (DSI SUBSCALES or CHANGE IN ABS) + u_1

$$\beta_2 = \pi_{20} + \pi_{2i}$$
 (DSI SUBSCALES or CHANGE IN ABS) + u_2

Here the β 's are the same β 's in the Level 1 formula, the π_{i0} refer to the intercepts, and the π_{0i} , π_{1i} , π_{2i} refer to the coefficients for each of the independent variables used to explain the intercept and the slope similar to a multiple regression.

The results of these analyses provided the average intercept of relationship satisfaction at time one between male partner and female partner, the average slope due to who the partner is, and the average slope due to time. They also provided the random or individual variability in the intercept, and the two slopes. At Level 2, the independent variables were then used to predict or explain the individual, or in this instance, couple level variability. This method provided some knowledge of what variables predicted the

slope or change in relationship satisfaction over time accounting for partner, as well as the variables that predicted differences between male partner and female partner accounting for change over time.

CHAPTER 4

RESULTS

Introduction

The purpose of this study was to understand the relationship between relationship satisfaction and depressive symptoms through the theoretical lens of Bowen Theory. Previous research indicated that the theoretical concept of differentiation of self is associated with depressive and other psychological symptoms. Previous research also indicated that differentiation is associated with marital satisfaction. Participants in this research were not diagnosed with MDD. Rather, they completed self-report instruments regarding their depressive symptoms. The aim of this research is to understand how differentiation of self is related to both relationship satisfaction and depressive symptoms and how it affects the trajectory of both phenomena across three sessions of therapy for couples in conjoint therapy.

Sample Characterization

Attrition

Due to attrition, the original sample of 97 couples meeting criteria for inclusion in the study fell to 36 couples by the third session follow-up. It is likely that several factors contributed to attrition of participants. First, many clients do not return to therapy after

the first session. We do not know the specific number of clients that dropped out of therapy after the first session. Second, it is likely that a significant number of clients either declined to complete after-session questionnaires or forgot. In the clinic where the research was completed, the therapist had the responsibility to distribute after-session questionnaires to clients and often neglected to do so. Again, we cannot distinguish between whether clients declined or whether the follow-up instruments were not offered.

Missing Data

To maximize sample size, several strategies were employed to replace missing data. The DSI, administered at the first session tended to have few missing values. Those that were missing were replaced by the series mean. Missing values on the ABS and the marital satisfaction rating were replaced by average of the participant's other scores for the measure. The value was replaced only when the second session was missing. If the third session was missing, the case was not included in the analysis. Relationship and Living Status of Participants

Relationship status of the sample (n=36) used in the analysis consisted of married couples (75%), cohabiting couples (19.4%), and couples in a committed relationship, but neither married or cohabiting (5.6%). Because 25% of the sample was not married, participants are referred to as male and female partners or men and women rather than husbands and wives or spouses.

Differences Between Participants and Study Dropouts

The original sample at the intake session consisted of 194 individuals, or 97 couples. After attrition, the sample size decreased to 36 couples with usable data for three sessions. An analysis of variance (ANOVA) was completed, comparing the 36

couples who completed three sessions with the 61 couples who did not complete three sessions. No significant differences were found between the two groups on the variables of interest, the DSI subscales (ER, cutoff, and IP), RS, CES-D, or ABS scores.

The groups did not differ significantly on most demographic variables (age, race, relationship status, education, and income), with the exception of two. A t-test indicated that the mean number of children for couples who dropped out of the study was significantly greater (M=1.32) than those included in the analysis (M = .96, t = -1.974, p<.05). Additionally, an ANOVA indicated that participants who identified a history of any violence in the couple relationship were significantly different from those who did not indicate violence when compared on the variable of those included in the analysis and those who dropped out of the study (F=7.07, p<.001). A subsequent correlational analysis demonstrated that violence was negatively correlated with study drop-out (r = -.197, p < .01). While the magnitude of the correlation was relatively small, it did indicate that a history of violence in the couple relationship was correlated with remaining in the study. In fact, of the six couples in which at least one member indicated a history of at least some violence in their relationship, five were among the 36 couples included in the overall analysis. Further analysis of individuals who indicated violence in their relationship indicated that their average CES-D scores, an indicator of depressive symptoms, were significantly higher ($\underline{M} = 28.75$) than those who did not indicate violence in their relationship (M =19.81, t=-2.36, p<.05).

In summary, participants included in the analysis and those who dropped out of the study did not differ significantly on such demographic variables such as age, race, relationship status, education, and income. Participants included in the analysis did differ on two demographic variables, number of children and violence in the couple relationship. Study drop-outs averaged more children than those included in the analysis. Participants who indicated a history of violence in their relationship were significantly more likely to remain in the study. Further analysis indicated that those who indicated violence also scored significantly higher on the CES-D than those who did not indicate violence.

Descriptive Statistics

The descriptive statistics for the variables of interest offer insight into the relationships between the variables (see Table 4.1). For example it is apparent that mean RS increased for both men and women, but that women reported lower RS scores in general. A similar dynamic occurred for ABS scores. Both male and female partners increased over the three sessions, but men, reported higher mean scores at all data points. Most interesting is the mean scores for the CES-D. As stated in the previous chapter, the generally accepted cutoff score for depressed mood on the CES-D is \geq 16. This is important because both men (\underline{M} =19.03) and women (\underline{M} =25.24) averaged much higher than the cutoff point. In fact, 52% of the men in the study scored greater than 16 on the CES-D. For women in the study, 79% scored greater than 16 on the CES-D. Some have asserted that a total score of 25 on the CES-D is a more appropriate cutoff point for screening for depression (Haringsma et al., 2004). In this sample, 37% of men and 54% of women scored above 25 on the CES-D.

Correlations

Intake

Correlations among the data were analyzed using SPSS statistical software. Correlations

Table 4.1. Descriptive statistics

	N T	Potential	D			Ct I D	G1	
	<u>N</u>	Range	<u>Range</u>		Mean	Std. Dev.	Skewness	
			Min	Max			Stat.	<u>Std.</u> Error
Male Partner	36							
Relationship Satisfaction-Intake		1-10	2	10	5.93	2.30	275	.388
Relationship Satisfaction-2 nd		1-10	2	10	6.99	1.75	667	.388
Relationship Satisfaction-3 rd		1-10	3	10	7.00	1.81	623	.388
Affect Balance Scale-Intake		0-10	1	10	5.95	2.41	155	.388
Affect Balance Scale -2 nd		0-10	3	10	6.29	1.78	.110	.388
Affect Balance Scale -3 rd		0-10	1	10	6.57	2.05	524	.388
Emotional Reactivity		11-66	17	54	35.78	9.30	198	.388
I-Position		8-48	17	48	33.97	6.53	423	.388
Cutoff		12-72	30	65	49.33	7.50	164	.388
Center for Epidemiologic Studies: Depressed Mood Scale		0-60	2	43	19.03	13.17	.274	.398
Female Partner	36							
Relationship Satisfaction-Intake		1-10	1	10	4.84	2.49	.298	.388
Relationship Satisfaction-2 nd		1-10	2	10	5.97	2.28	.194	.388
Relationship Satisfaction-3 rd		1-10	1	10	6.11	2.47	447	.388
Affect Balance Scale-Intake		0-10	0	10	4.93	2.02	.119	.388
Affect Balance Scale -2 nd		0-10	1	10	5.51	1.74	.507	.388
Affect Balance Scale -3 rd		0-10	1	9	5.54	2.33	229	.388
Emotional Reactivity		11-66	14	44	29.72	8.33	058	.388
I-Position		8-48	20	46	33.05	6.03	.003	.388
Cutoff		12-72	29	65	48.17	9.47	306	.388
Center for Epidemiologic Studies: Depressed Mood Scale		0-60	2	47	25.24	11.64	250	.388

among variables of interest at intake yielded interesting results (see Table 4.2). First, DSI subscales between men and women were not significantly correlated, indicating no significant relationship between partners' levels of differentiation. At intake DSI scores for men and women were significantly correlated with their ABS score as well as RS. The DSI subscales for men revealed several significant correlations at intake. First, the ER subscale was significantly positively correlated with their ABS (r=.373; p<.05) and negatively correlated with their CES-D score (r=-464; p<.01). These relationships are in the expected directions as a positive score on the DSI subscales indicates higher levels of differentiation and higher scores on the ABS indicate more positive affect. Higher scores on the CES-D indicate higher level of depressive symptoms.

Male IP was negatively correlated with their CES-D score (r=-.390; p<.05) and their partner's CES-D score (r=-.329; p<.05), indicating that lower differentiation was correlated with higher levels of depressive symptoms. Male cutoff was positively correlated with their ABS score (r=.509; p<.01) and negatively correlated with CES-D (r=-.331; p<.05). Again, when men are more differentiated, thus cutoff less, they tend to have fewer depressive symptoms. Men's cutoff subscale was positively correlated with their partner's RS (r=.396; p<.05) indicating that less cutoff was positively associated with their partner's RS.

Men's ABS was significantly correlated with their own relationship satisfaction (r=.541; p<.01) as well as their partner's (r=.622; p<.01). Similarly, their CES-D scores were negatively correlated with their own relationship satisfaction (r=-.682; p<.01) and their partner's (r=-.467; p<.01). These relationships are in the expected directions and demonstrate correlation between depressive symptoms and relationship satisfaction.

Table 4.2. Correlations of variables at intake

	Male Partner				Female Partner							
	Emotional			Relationship			Emotional			Relationship		
	Reactivity	I-Position	<u>Cutoff</u>	<u>Satisfaction</u>	\underline{ABS}	CES-D	Reactivity	<u>I-Position</u>	<u>Cutoff</u>	<u>Satisfaction</u>	<u>ABS</u>	CES-D
Male Partner												
Emotional		2 () 1		404	2=24	4 6 4 4 4	40.5	4.04	404			
Reactivity	-	.369*	.253	.184	.373*	464**	.135	101	.194	.152	.016	.032
I-Position		-	.302	.246	.237	390*	.259	189	.180	.080	.217	329*
Cutoff			-	.294	.509**	331*	.191	.295	.009	.396*	.233	298
Relationship Satisfaction				-	.541**	682**	.331*	.286	.131	.452**	.120	269
ABS					-	658**	.432**	.150	004	.622**	.065	200
CES-D						-	285	195	260	467**	088	.248
Female Partner Emotional												
Reactivity							-	.472**	104	.245	.387*	560**
I-Position								-	.088	.222	.354*	362*
Cutoff Relationship									-	.238	.349*	192
Satisfaction										-	.266	360*
ABS											-	650**
CES-D												-

^{*} Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

The DSI subscales for women did not reveal as many significant positive correlations at intake. Women's ER was significantly positively correlated with their own ABS scores (r=.387; p<.05) and negatively correlated with their CES-D score (r=.560; p<.01). Women's ER was also positively correlated with their partner's relationship satisfaction (r=.331; p<.05) and ABS score (r=.432; p<.01), suggesting possible relationships between women's differentiation and their partner's satisfaction and depressive symptoms. Women's IP was significantly positively correlated with their own ABS score (r=.354; p<.05) and negatively correlated with the CES-D score (r=.362; p<.05). Women's cutoff was positively correlated with their own ABS score (r=.349; p<.05). Again these relationships suggest that higher differentiation is negatively associated with depressive symptoms in women.

The correlations discussed above demonstrate the association between an individual's differentiation and their own depressive symptoms. While causality cannot be demonstrated, men's IP is correlated with their partner's CES-D score and their cutoff is correlated with their partner's RS. For women, the pattern of correlation is different in that her ER is the only form of differentiation that is significantly correlated with her partner's depressive symptoms and RS. According to Cohen (1988) correlation coefficients in the range of .10 should be considered "small," .30 "medium," and .50 "large" in terms of magnitude. By these standards, the magnitude of the correlation coefficients should be considered medium, while a few would be considered large.

The correlations also demonstrated significant relationships between relationship satisfaction and depressive symptoms. For men, their own relationship satisfaction was significantly correlated with their depressive symptoms as well as the relationship

satisfaction of his partner and her depressive symptoms. Men's depressive symptoms were also significantly correlated with his partner's relationship satisfaction. For women, the correlations looked a bit different. Women's relationship satisfaction was associated with her depressive symptoms, but was also associated with her partner's satisfaction and depressive symptoms.

2nd and 3rd Session Follow-ups

DSI and Relationship Satisfaction. When the correlations are extended beyond initial intake to the two follow-up sessions, different relationships emerge. Table 4.3 demonstrates the correlations for DSI subscales and RS across three sessions of therapy. First, men's DSI scores were related to his RS, but only the cutoff subscale. So men's cutoff is significantly positively correlated with his RS at the second and third session follow-up (second follow-up, r=.362; third follow-up, r=.455; p<.05). Also interesting is that his cutoff is significantly positively correlated with his partner's RS over all three sessions (intake, r=.396; second follow-up, r=.607; third follow-up, r=.607; p<.01). At the second and third session follow-up the correlation was very high. Women's DSI scores were not significantly correlated with either her or her partner's RS over time.

DSI and ABS. Slightly different relationships emerge when DSI and ABS scores were compared (see Table 4.4). Men's ER was positively correlated with their own ABS scores at second session follow-up (r=.322; p<.05) and their cutoff score was significantly positively correlated with their ABS score at third session follow-up (r=.327; p<.05). It appears that over time, aspects of men's differentiation continue to be associated with their own ABS score, though his DSI scores were not significantly correlated with his female partner's ABS score over time. DSI subscales for women

Table 4.3. Correlations of Differentiation of Self Inventory (DSI) subscales and relationship satisfaction across time

-	Male	Relationship Satist	faction	Female Relationship Satisfaction			
	<u>Intake</u>	2 nd Session	3 rd Session	<u>Intake</u>	2 nd Session	3 rd Session	
Male DSI							
Emotional	.184	.215	.207	.152	.140	.192	
Reactivity							
I-Position	.246	.169	.151	.080	.233	.214	
Cutoff	.294	.362*	.455*	.396*	.607**	.607**	
Female DSI							
Emotional	.331*	.018	.087	.245	.120	.107	
Reactivity							
I-Position	.286	031	.076	.222	.088	.012	
Cutoff	.131	008	.268	.238	.083	.167	

^{**} Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 4.4. Correlations of Differentiation of Self Inventory (DSI) subscales and Affect Balance Scale scores across time

	Ma	le Affect Balance S	Scale	Female Affect Balance Scale				
	<u>Intake</u>	2 nd Session	3 rd Session	<u>Intake</u>	2 nd Session	3 rd Session		
Male DSI								
Emotional	.373*	.322*	.205	.016	.064	194		
Reactivity								
I-Position	.237	.056	.252	.217	.249	.157		
Cutoff	.509**	.236	.327*	.233	.202	.242		
Female DSI								
Emotional	.432**	.343*	.460**	.387*	.197	.307		
Reactivity								
I-Position	.150	.233	.194	.345*	.042	.252		
Cutoff	004	.174	.047	.349*	.120	.028		

^{**} Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

were not significantly correlated with their own ABS scores or RS at either session two or session three follow-up. Similarly, their ABS scores at intake and second session follow-up were not significantly correlated with their RS at either follow-up.

ABS and Relationship Satisfaction. Table 4.5 provides correlations between ABS scores and male and female relationship satisfaction. Men's ABS score was significantly positively correlated with their own relationship satisfaction at all three data points (intake, r=.541; second follow-up, r=.428; third follow-up, r=.412; p<.05) indicating an ongoing relationship between his own depressive symptoms and relationship satisfaction. Similarly, men's ABS scores were positively correlated with their partner's relationship satisfaction across all three sessions (intake, r=.622; second follow-up, r=.362; third follow-up, r=.392; p<.05). Women's ABS score at third session follow-up was significantly (though moderately) correlated with their relationship satisfaction at third session follow-up (r=.392; p<.05). Women's DSI scores were not significantly correlated with their own ABS scores over time, but women's ER was significantly correlated with their partner's ABS scores at all three assessment points (intake; r=.432, second follow-up r=.343; third follow-up, r=.460; p<.05). This suggests that male and female partners scores are associated, but in different ways.

These correlations suggest several possible relationships for further analysis.

First, it appears that not all of the subscales of the DSI have significant relationships with depressive symptoms (either the individual's or their partner's). What may be likely is that there are gender specific ways, or at least tendencies based on gender, that people express a lack of differentiation. It is also interesting that men's scores are associated with their partner's, while women's scores do not appear to be as associated over time.

Table 4.5. Correlations of relationship satisfaction and Affect Balance Scale (ABS) scores across time

	Male 1	Relationship Satis	faction	Female Relationship Satisfaction			
	<u>Intake</u>	2 nd Session	3 rd Session	<u>Intake</u>	2 nd Session	3 rd Session	
Male ABS							
Intake	.541**	.415**	.385*	.622**	.389*	.311	
2 nd Session	.542**	.428**	.490**	.554**	.362*	.210	
3 rd Session	.514**	.247	.412*	.439**	.339*	.392*	
Female ABS							
Intake	.120	113	.183	.266	.108	.242	
2 nd Session	.011	031	050	.206	.235	.099	
3 rd Session	130	282	.103	010	.129	.392*	

^{**} Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The HLM analyses helped better understand the intricacies of the relationships between differentiation and both relationship satisfaction and depressive symptoms.

HLM Model Tests

Hierarchical Linear Modeling

To test whether differentiation could predict change in relationship satisfaction, HLM was used. HLM allows for the study of individuals over time with some advantages over more traditional regression or repeated measures analysis of variance. In the case of this research, HLM allows the researcher to calculate both the average intercept (mean of relationship satisfaction at intake) and average slope (change in relationship satisfaction over the course of three sessions of therapy) for the sample, as well as the individual intercepts and slopes of each individual and couple in the sample. In addition, this analysis allowed for using the couple, or dyad, as the unit of analysis without losing individual differences.

In using the couple as the unit of analysis, an average slope (different from the slope mentioned above), or the difference between partner scores over time, was computed, as well as individual couple variability. With these results, the researcher can check the variance in intercepts and slopes, and use other variables to try to explain the variance in intercepts and slopes. In other words, for this project, HLM modeled the variance in the starting point of relationship satisfaction across couples, the variance in the change in relationship satisfaction over 3 sessions of therapy across couples, and the variance in differences in satisfaction between partners across couples. Then, differentiation (DSI) and depressive symptoms (ABS) over time were used to predict these variances among the couples in the sample.

Level 1

Hypothesis 1. The hypothesis for Level 1 of the analysis stated that: partners' relationship satisfaction scores will be significantly correlated. This was analyzed by examining the variance in relationship satisfaction of individuals. Table 4.6 provides the results of model tests 1, 2, and 3. The average marital satisfaction across couples and time was 5.97 (t=20.13; p<.001) on a 10 point scale. The first model also provided the intraclass correlation of partners' relationship satisfaction (Δ =.500). The intraclass correlation provides the amount of an individual's relationship satisfaction which can be accounted for by their partner's level of relationship satisfaction. The initial model demonstrated that 50% of the variance in relationship satisfaction can be accounted for by the "couple," or according to who their partner is and what level of satisfaction their partner expressed. This demonstrates the high level of correlation between partners' relationship satisfaction and the lack of independence of the relationship satisfaction variable. The hypothesis was supported, demonstrating that significant amounts of the variance on relationship satisfaction can be accounted for by the relationship satisfaction of their partner.

Hypothesis 2. The second hypothesis of Level 1 stated: the slope of relationship satisfaction due to time will be significant and positive. In other words, relationship satisfaction will significantly improve for the entire sample across three therapy sessions. Model 2 (see Table 4.6) provides estimates for the average level of initial relationship satisfaction (the intercept) and the change of relationship satisfaction (slope) over time. The initial intercept of relationship satisfaction for all individuals in couples was 4.93 (t=12.54; p<.001). The slope due to time was .519 (t=3.82; p<.01). This suggests that

Table 4.6 HLM results for models 1, 2, and 3: Couple relationship satisfaction across time

				Model			
	<u>1</u>			<u>2</u>		<u>3</u>	
·	Coefficient (SE)	<u>t</u>	_	Coefficient (SE)	<u>T</u>	Coefficient (SE)	T
Intercept	5.97 (.29)	20.13**		4.93 (.39)	12.55**	4.93 (.39)	12.55**
Slope Due to Time				.519 (.14)	3.82**	.519 (.14)	3.82**
Slope Due to Spouse						.417 (.13)	3.29**
Deviance Score	964	1.53		95	3.88	929.2	21
Parameters	2	2			4	7	

^{***} Significant at the 0.001 level ** Significant at the 0.01 level *Significant at the 0.05 level.

initial relationship satisfaction increased about half of a point on the 10-point scale per session. Time effects accounted for 8% of the variance in relationship satisfaction between couples. That is, of the 50% explained above, 8% of the variance in relationship satisfaction can be accounted for by the passage of time from intake through session three. The slope of relationship satisfaction was significant and positive, but did not vary significantly across the couples. The deviance of the model decreased between model 1 and 2, suggesting an increase in model fit ($\chi^2_{\text{difference (2)}} = 10.65$; p < .005). The hypothesis, again, was supported, in that, on average relationship satisfaction increased for the sample across the three sessions.

Hypothesis 3. The third hypothesis of Level 1 stated: the slope of relationship satisfaction due to spouse, across all three time points, will be significant and positive. In other words, in addition to the "couple nature" of relationship satisfaction, there will also be significant differences between male and female partner's relationship satisfaction scores, demonstrating individual differences within the couple group. Model 3 provided an estimate of the difference in relationship satisfaction between male and female partners (see Table 4.6). Male partners were given the value of +1 and female partners the value of -1 for the analysis. These values were meaningful only in understanding the slope of the relationship between male and female partners' level of relationship satisfaction. For example, if the slope was negative it would indicate that females average higher levels of relationship satisfaction than their male partners. In this sample, the slope was significant and positive (slope=.417; t=3.28 p<.01), indicating that men report a higher level of relationship satisfaction than their female partner. Of the 50% of the variance explained by "couple," 25% can be accounted for by spouse, or whether the

participant was the male or female partner. The deviance decreased, suggesting an increase in model fit ($\chi^2_{\text{difference (3)}}$ =24.66; p<.001). This hypothesis was supported. There was a significant difference, on average, between male and female partners, despite high correlation between partner scores. This demonstrates individuality within couples. Level 2

Level 1 of the analysis demonstrated the correlations between partner scores as well as the necessity to account for differences among partners within a couple. Level 2 of the analysis adds complexity as more variables of interest are included to explain the variability in the intercepts and slopes.

Hypothesis 4. The first hypothesis of Level 2 stated:

Differentiation of self of both partners, as indicated by the DSI subscales will predict the variance of the intercepts of relationship satisfaction scores. Specifically, higher levels of differentiation will be predictive of higher relationship satisfaction at intake. Additionally, male and female depressive symptoms, as indicated by the ABS and CES-D will also be significant predictors of relationship satisfaction at intake, such that lower levels of depressive symptoms will predict higher relationship satisfaction at intake.

In model 4, (see Table 4.7) relationship satisfaction was considered a couple level variable, thus both partners' data are considered to create a couple intercept (or relationship satisfaction at intake). The first task was explaining the variance of the intercepts at intake—that is, what variables explain initial level of relationship satisfaction. Men's cutoff (t=5.34; p<.001), men's CES-D score (t=-4.15; p<.001), women's emotional reactivity (t=2.71; p<.05), women's I position (t=-3.25; p<.005), and

Table 4.7 HLM results for models 4 and 5: Couple relationship satisfaction across time

		N	Iodel	
	<u>4</u>		<u>5</u>	
	Coefficient (SE)	<u>T</u>	Coefficient (SE)	<u>T</u>
Intercept	4.93 (.25)	20.124***	4.93 (.25)	19.41***
Male Emotional	013 (.02)	516		
Reactivity				
Male I-Position	042 (.03)	-1.26		
Male Cutoff	.131 (.02)	5.34***	.132 (.02)	6.012***
Male CES-D	067 (.02)	-4.15***	052 (.02)	3.22**
Female Emotional	086 (.03)	2.71*	.074 (.03)	2.38*
Reactivity	· /			
Female I-Position	146 (.04)	-3.25**	105 (.04)	-2.75*
Female Cutoff	.011 (.02)	.57		
Female CES-D	016 (.01)	-1.12		
Male ABS	.057 (.03)	1.72		
Change	, ()			
Female ABS	072 (.03)	-2.34*	046 (.03)	-1.36
Change	.072 (.00)	2.5 .	.0.0 (.05)	1.50
Change				
Slope Due to	.418 (.13)	3.29**	.418 (.10)	3.82**
Spouse	,		()	
Male Emotional			018 (.01)	-1.46
Reactivity				
Male I-Position			.010 (.02)	.52
Male Cutoff			036 (.02)	-1.92
Male CES-D			024 (.01)	-2.31*
Female Emotional			005 (.02)	26
Reactivity			.003 (.02)	.20
Female I-Position			.009 (.03)	.36
Female Cutoff			017 (.01)	-1.76
Female CES-D			.012 (.01)	1.16
Male ABS			.012 (.01)	1.05
Change			.017 (.02)	1.03
Female ABS			045 (.02)	-2.38*
Change			043 (.02)	-2.36
Change				
Deviance Score	916.	65	966.	83
Parameters	710.		700.7	0.5
1 didiliciois			1	

^{***} Significant at the 0.001 level ** Significant at the 0.01 level *Significant at the 0.05 level

women's change in their ABS score (t=-2.34; p<.05) were significant predictors of the variance in relationship satisfaction across couples. The non-significant variables were then removed and the model was tested again using only significant predictors. The significant predictor variables accounted for 93% of the variance in the intercepts of marital satisfaction between couples. The deviance also decreased, suggesting an increase in model fit.

The hypothesis was partially supported in this case. First, aspects of both men's and women's differentiation of self were predictive of initial levels of the couple relationship satisfaction. Men's depressive symptoms, as indicated by the CES-D were also predictive of initial relationship satisfaction. In contrast, women's depressive symptoms were not predictive of initial levels of couple relationship satisfaction. This was not in accordance with the predicted relationship.

Hypothesis 5. The second hypothesis of Level 2 stated:

Differentiation of self, as indicated by the DSI subscales, will be significant predictors of the slope due to spouse, or the differences between male and female partner's relationship satisfaction scores.

In model 5, Level 2, (see Table 4.7) the variance in the slopes of relationship satisfaction due to partner—or the difference between male and female partner relationship satisfaction scores—was modeled. Men's score on the CES-D and women's change in ABS score were significant predictors of the variability in slope. When these two items were analyzed without other variables, they were not statistically significant. This is likely due to multicolinearity, high correlation between the independent variables. This hypothesis was not supported. In the end, the difference in men's and women's

relationship satisfaction could not be explained within this model.

Hypothesis 6. Hypothesis six, Level 2, stated:

Differentiation of self, as indicated by the DSI subscales will be a predictor of the variances in the slope of relationship satisfaction due to time. Specifically, higher differentiation will be associated with greater positive change in relationship satisfaction, while lower differentiation will be associated with less positive change in relationship satisfaction. Additionally, significant, decreases in depressive symptoms, by both men and women, will also be predictors of increases in relationship satisfaction.

Model 6, the final model, analyzed the variability in the slopes of relationship satisfaction due to time—that is, what contributes to the change in relationship satisfaction (a couple level variable) over the course of three sessions of therapy (see Table 4.8). When all variables were entered, several variables were either significant or approached significance. They were: male IP (t=-1.82; p=.08), male cutoff (t=2.91; p=.008), male CES-D (t=1.87; p=.073), and male change in ABS score (t=2.359; p=.026). When these variables were entered alone male cutoff, male change in ABS and male CES-D were significant predictors of the variance of the slopes of relationship satisfaction due to time across the couples. Combined, these variables accounted for 60% of the variance in the slopes due to time across couples.

These results partially support the hypotheses stated above. First, it is apparent in this sample that aspects of men's differentiation of self (IP and cutoff) affect the change in relationship satisfaction over time. Also, men's ABS or level of depressive symptoms, also affects the amount of change in couple relationship satisfaction. When discussing

Table 4.8 HLM Model results for model 6: Couple relationship satisfaction across time

	Mode	el 6
	Coefficient (SE)	<u>T</u>
Intercept	4.933 (.23)	21.54***
Male Cutoff	.071(.03)	2.42*
Male CES-D	092 (.02)	-4.22***
Female Emotional Reactivity	.107 (.04)	2.91**
Female I-Position	082 (.05)	-1.68
Female ABS Change	088 (.04)	-2.13*
Slope Due to Spouse	.418 (.12)	3.45**
Male CES-D	.418 (.12)	3.45**
Female ABS Change	035 (.02	-1.63
Slope Due to Time	.520 (.10)	5.20***
Male Emotional Reactivity	005 (.01)	40
Male I-Position	029 (.02)	-1.82
Male Cutoff	.048 (.02)	2.91**
Male CES-D	.020 (.010)	1.87
Female Emotional Reactivity	007 (.02)	34
Female I-Position	041 (.03)	-1.54
Female Cutoff	.015 (.01)	1.57
Female CES-D	.006 (.01)	.86
Male ABS Change	.035 (.02)	2.36*
Female ABS Change	.030 (.02)	1.39
Deviance Score	970.0	04
Parameters	7	

^{***} Significant at the 0.001 level ** Significant at the 0.01 level *Significant at the 0.05 level

depressive symptoms, in the case of this data, higher scores indicate lower depressive symptoms (because the ABS was designed as a well-being scale with higher scores indicating higher psychological well-being). When men's depressive symptoms decrease, it is associated with greater positive change in relationship satisfaction. In this sample, women's level of differentiation (on any of the three subscales), and women's decrease in depressive symptoms were not significantly related to increases in relationship satisfaction over time.

Additional Analysis

In addition to the multi-level model testing predictors of the change in relationship satisfaction over time, an additional analysis was performed, modeling the change in depressive symptoms over time (see Table 4.9 for results). This analysis attempts to explain the variance of individual's level of depressive symptoms at intake as well as the variance in the change in depressive symptoms over time. This tests whether differentiation of self and change in relationship satisfaction are predictive of the change in individual depressive symptoms over the course of three sessions of therapy.

Depressive symptoms were conceived of as an individual variable in this analysis rather than a couple-level variable (as relationship satisfaction was). For this analysis a "change in RS" score was calculated in the same manner as the change statistic for depressed mood was calculated in the previous analysis.

Hypothesis 7. The first hypothesis for the additional analysis stated:

For men and women, differentiation of self will be a negative predictor of the intercept of their own depressive symptoms, such that higher differentiation will be predictive of lower levels of depressive symptoms at intake. Similarly,

Table 4.9 HLM model results for individual depressive symptoms across time

	Male M	odel	<u>Female Model</u>		
	Coefficient (SE)	T	Coefficient (SE)	T	
Intercept	5.72 (.26)	21.72***	4.77 (.29)	16.25***	
Male Emotional	.034 (.04)	.76	.028 (.04)	.80	
Reactivity	.00 . (.0 .)	., 0	.020 (.0.)	.00	
Male I-Position	120 (.07)	-1.71	007 (.06)	103	
Male Cutoff	.252 (.04)	6.20***	.030 (.05)	.57	
Male CES-D	045 (.03)	-1.67	.031 (.04)	.81	
Female Emotional	.193 (.04)	4.50***	.011 (.05)	.24	
Reactivity	.175 (.04)	4.50	.011 (.03)	.24	
Female I-Position	215 (.05)	-3.92**	.016 (.05)	.31	
Female Cutoff	.040 (.03)	1.20	.082 (.04)	2.18*	
Female CES-D	.073 (.03)	2.27*	069 (.03)	-2.42*	
Male Relationship	033 (.05)	61	010 (.06)	-2.42	
Satisfaction	055 (.05)	01	010 (.00)	1 /	
Change Fem. Relationship	107 (05)	2.50**	125 (07)	1.00	
Satisfaction	187 (.05)	-3.50**	135 (.07)	-1.99	
Change					
Slope Due to Time	.278 (.13)	2.12*	.308 (13)	2.29*	
Male Emotional	020 (.02)	-1.09	020 (.02)	-1.16	
Reactivity					
Male I-Position	.031 (.03)	.92	.014 (.04)	.40	
Male Cutoff	076 (.02)	-3.46**	015 (.03)	58	
Male CES-D	014 (.02)	95	010 (.02)	62	
Female Emotional	045 (.02)	-1.85	012 (.03)	46	
Reactivity	.0.0 (.02)	1.00	.012 (.03)		
Female I-Position	.068 (.03)	2.68*	.011 (.02)	.50	
Female Cutoff	011 (.013)	89	038 (.02)	-2.09*	
Female CES-D	021 (.01)	-1.61	018 (.01)	-1.31	
Male Relationship	.003 (.02)	.11	.029(.03)	.96	
Satisfaction	.003 (.02)	.11	.027(.03)	.70	
Change					
Fem. Relationship	.065 (.03)	2.56*	.081 (.03)	2.92**	
Satisfaction	.003 (.03)	2.30	.001 (.03)	2.92	
Change					
Change					
Deviance Score	480.	25	496.6	50	
	480.	43	490.0	JO	
Parameters	4		4		

^{***} Significant at the 0.001 level ** Significant at the 0.01 level ** Significant at the 0.05 level

individual differentiation of self and initial depressive symptoms will be a predictor of partner's intercept for depressive symptoms (at intake).

For male partners the variability in the intercepts for ABS (or where men began at intake) was predicted by male cutoff (t=6.20; p<.001), female emotional reactivity (t=4.5; p<.001), female IP (-3.92; p<.01), female CES-D (t=2.27; p<.05) and female change in relationship satisfaction (t=-3.50; p<.01). For female partners, variability in the intercepts for ABS scores for women in the sample also had significant predictors. They were female cutoff (t=2.18; p<.05) and female CES-D (t=-2.42; p<.05).

The hypotheses discussed above were supported in part. Men's initial level of depressive symptoms was significantly predicted by aspects of his own differentiation (cutoff), as well as his partner's differentiation (ER, IP). Men's initial level of depressive symptoms was also predicted by his partner's depressive symptoms, as indicated by the CES-D, indicating that his depressive symptoms are significantly tied to his partner's depressive symptoms. For women, the relationship was different and did not fully support the hypothesis. One specific aspect of their own differentiation does predict initial levels in their depressive symptoms (cutoff), but the differentiation of self and initial depressive symptoms of women's partner was not a significant predictor.

Hypothesis 8. The second hypothesis of the additional analysis stated:

For men and women, differentiation of self will be a positive predictor of the variability in the slope of depressive symptoms, such that higher differentiation of self will be a predictor of greater decreases in their depressive symptoms over time. Also, higher levels of differentiation of self will be a predictor of the variability in the slope of partner's depressive symptoms over time.

Over the course of three sessions of therapy, two differentiation of self variables were significant predictors of the variability in the slopes of men's ABS score due to time: male cutoff (t=-3.46; p<.01), and female IP (t=2.683; p<.05). The slope of men's change in ABS score was significant and positive (slope=.278; t=.12; p<.05). Over the course of three sessions of therapy, the change in men's depressive symptoms was predicted by aspects of both his and his partner's differentiation (male cutoff, female IP). The above stated hypothesis was supported in regards to male partners. The variability in the slopes (or how they change over time) of men's depressive symptoms was predicted by aspects of both men's and women's differentiation.

In analyzing female change in ABS score over time—the variability of the slopes—one differentiation of self variable was found to be a significant predictor: female cutoff (t=-2.09; p<.05). The slope of change in ABS score for women was significant and positive (slope=.307; t=2.29; p<.05). While one aspect of women's own differentiation of self did predict positive change in ABS scores, partially supporting the hypothesis, the results of this analysis do not support the hypothesis that men's differentiation of self is a predictor of the change in women's depressive symptoms.

Hypothesis 9. The third hypothesis of the additional analysis stated: Significant, increases in relationship satisfaction will be a negative predictor of the variability in the slopes of depressive symptoms over time for both the individual and their partner. For men, their own change in relationship satisfaction was not a predictor of their own change in depressive symptoms (t=.11; p>.05). This finding was not in accordance with the predicted relationship. Conversely, his female partner's change in relationship

satisfaction (t=2.56; p<.05) was a predictor of his change in depressive symptoms. The hypothesis was partially supported in regards to male partners.

For women, the relationship between depressive symptoms and relationship satisfaction was different than for their male partners. In addition to her own differentiation, the female partner's own significant positive change in her relationship satisfaction predicted decrease in her depressive symptoms (t=2.92; p<.01). The hypotheses regarding change in depressive symptoms do not appear to be fully supported when describing women's change in that their partner's RS change is not a significant predictor of change.

CHAPTER 5

DISCUSSION

Introduction

The costs of depression have been great. In order to better serve those who seek treatment for depression and depressive symptoms, and even those who seek services for other reasons, our field needs a better understanding of the processes that develop in close intimate relationships. Prior research has demonstrated a link between depression, depressive symptoms and marital relationships. While they have been shown to co-vary, researchers have demonstrated the causal relationship to go in both directions. That is, there is research demonstrating that marital satisfaction and depressive symptoms are causes of each other. Some believe that the question of causality between the two phenomena is not a useful question as it is likely that they have a reciprocal relationship. Others have proposed a model in which a third variable is included in the relationship.

Couples as "Group" and as Individuals

This research both confirms and extends past research in the areas of relationship satisfaction, depressive symptoms and Bowen Theory. First, and foremost, couples experienced significant positive change in their relationship satisfaction over only three sessions of couple and/or family therapy. In addition, among this sample, relationship

satisfaction was significantly and positively correlated with depressive symptoms. As noted in the review of literature, many have demonstrated significant relationships between relationship satisfaction and depressive symptoms. In the three models of the first level of the analysis several relationships took shape. First, there was a high correlation between partners' relationship satisfaction, suggesting that it is appropriate to consider this a couple variable rather than an individual variable. Second, relationship satisfaction increased by about half of a point at each follow-up. Third, it was also apparent that women, in general, report lower relationship satisfaction than do their male partners. This is consistent with past studies with similar populations (Bartle-Haring et al., 2005; Glade et al., 2003). Essentially, the first level supported the idea that marital satisfaction (though in this circumstance we referred to it as relationship satisfaction) should be considered a "group" variable, taking into account both partner scores, as well as accounting for differences between partners.

Differentiation, Depressive Symptoms and Relationship Satisfaction

<u>Complex Relationship</u>

Davila and colleagues (Davila, 2001; Davila et al., 1997) argued that the causal direction of the relationship between relationship satisfaction and depressive symptoms was not important because it was more likely that the two phenomena have a reciprocal process. Others (Whisman, 2001) have argued that depressive symptoms are multifaceted and stem from many causes. The second level of the analysis added more complexity by considering a third variable in the relationship between depressive symptoms, the ABS score, and relationship satisfaction.

At Level 2 (model 4) differentiation was considered as a predictor of the change in relationship satisfaction. Differentiation was also considered a predictor of depressive symptoms in the final, additional analysis. When both analyses are taken into account (considering the trajectories of relationship satisfaction and depressive symptoms) it is impossible to tease out causes of couple relationship satisfaction and depressive symptoms if these two are the only variables considered. The relationship between the two variables changes when differentiation of self is included as an independent variable. What appears is a complex system where differentiation of self affects both the initial levels of relationship satisfaction and depressive symptoms and the trajectory of the change in those phenomena over time. Additionally, the patterns of relationships between these variables are different for male and female partners. That is, it appears that men's characteristics have greater impact on the couple relationship than do women's. Also, men appear to be more affected by their partner's characteristics than do women. In this regard, this research used the concept of differentiation from Bowen Theory, a seminal theory in the field of marriage and family therapy, to better understand this relationship.

Extending Past Research

The findings of this research extend past research by demonstrating the role of differentiation of self in relationship satisfaction and depressive symptoms and the ongoing relationship between them. These findings are different from previous research with a similar population that found that women were significantly affected by their partner's characteristics while men were not (Glade et al., 2003). This may be due to several reasons. First, this research represents data collected over time. This may better

demonstrate how differentiation affects partners and their change in satisfaction and depressive symptoms over time. Additionally, in this research the variable of depressive symptoms was measured using the ABS, a measure of overall psychological well-being. In the research cited above (Glade et al., 2003) men scored low on depressive symptoms, as can be expected given the gender differences reported in previous research on depressive symptoms. The ABS measures positive affect as well as negative affect. The absence of positive affect may be an indicator of depressive symptoms previously unmeasured.

Managing Emotions, Relationship Satisfaction and Depressive Symptoms

To further illustrate this, one must consider how all of these results relate. Two separate analyses were examined, one considering predictors of the change in relationship satisfaction (the initial, two level analysis) and one considering the predictors of the change in depressive symptoms across time (the additional analysis). In these analyses, aspects of differentiation were found to contribute to the change in both phenomena across time. While relationship satisfaction may co-vary with depressive symptoms, they may not necessarily have a direct causal relationship. Rather, differentiation may drive the trajectory of both phenomena. It may be that they co-vary over time due to their concurrent associations with differentiation. Stated in more general terms, this model supposes that the way in which people manage emotions, intimacy, and distance from others—especially significant others—affects both relationship satisfaction and depressive symptoms in similar ways.

Men's Emotional Cutoff

Among this sample, the relationships between these phenomena are complex. First, level of differentiation is an important factor in understanding the relationship satisfaction of couples and their individual depressive symptoms. It is apparent that men's cutoff is important to how the couple level of relationship satisfaction changes over time. That is, as the male partner disengages from relationships or interactions which may be emotionally charged, the level of relationship satisfaction changed less; it did not improve as much as those couples where the husband did not cutoff as much.

Previously, Skowron (2000) demonstrated that husband cutoff score predicted the marital satisfaction scores for both husbands and wives. This was demonstrated in this sample. Cutoff was also implicated in the trajectory of depressive symptoms. Kerr and Bowen (1988) described emotional cutoff as a way that some "people manage undifferentiation (and the emotional intensity associated with it) that exists between the generations" (p. 271). Emotional cutoff, though, is not manifested exclusively in family of origin relationships between the generations. Kerr and Bowen (1988) stated that:

if people are still vulnerable to getting into such positions [emotional cutoff] with their parents and other members of their family of origin, they are vulnerable to doing a version of the same thing in their current relationships. If people are using emotional cutoff to deal with the past, then they are using emotional distance to deal with the present (p. 276).

Cutoff, as an aspect of differentiation, implies a discomfort with intense emotions. In order to manage these emotions, the individual must view themselves as separate from the other person and the system as a whole. In doing this, the person can place blame

elsewhere and cutoff from the object identified as the problem. As a result, the person avoids intense interactions or ceases interacting with others when the relationship becomes emotionally charged.

The problematic nature of emotional cutoff is evidenced in the work of Gottman and colleagues (Gottman, Coan, Carrere, & Swanson, 1998). They identified stonewalling—or stubbornness and withdrawal from interaction—as a behavior predictive of divorce among married couples. Gottman et al. (1998) stated that men often become flooded with emotions and become physically agitated during conflict. This creates a situation where they wish to remove themselves from the situation. From the perspective of Bowen Theory, this is demonstrative of a lack of differentiation, exhibited in cutoff. When people view the problem as outside themselves—the emotional content in the interaction with their partner, for example—they seek to withdraw from the interaction as a way to manage the discomfort.

Cutoff may be especially devastating to both relationship satisfaction and the depressive symptoms of self and partner because it creates a situation where people must guess and make assumptions about the emotions and thoughts of their partner. The outward demonstration of cutoff is incongruent with the inner emotional experience. A person cuts off due the inability to manage a flood of emotions, while the outward expression is an image of calm, cold, distance. At times one partner may sense problems in a relationship only to have their partner deny the problem when asked. What appears like anger and/or dismissal of a partner is actually self preservation due to an inability to manage emotions. This is especially poignant when confronted by feelings of loneliness

and isolation (due to the emotional distance from partner) while in the physical presence of a partner.

Partner Characteristics and Male and Female Differences

When considering the change in depressive symptoms in this sample (concurrent to the change in relationship satisfaction), the picture becomes more complex. Men appear to be affected by both their level of differentiation as well as their partner's level of differentiation. Men's level of cutoff is associated with less positive change in their depressive symptoms. Also, their ability to take an I-Position, or have confidence in their own beliefs and opinions, affects the trajectory of their depressive symptoms over time. Men's depressive symptoms is also affected by their partner's differentiation—their partner's emotional reactivity and ability to take an I-Position.

Women, on the other hand, do not appear to be affected by their partner in the same way that men are affected. While women are affected by their partner's differentiation by virtue of the couple relationship satisfaction, their individual depressive symptoms appears to be directly affected by their own individual differentiation, but not the differentiation of their partner. Women's depressive symptoms over the three sessions was predicted by her level of cutoff—or whether she remained emotionally involved and engaged in emotional relationships and situations. It is also important to recognize that a woman's cutoff also predicts the slope of her change as well as whether she changes over time. What this means is that if a woman is cutting off emotionally from her partner or others, she is less likely to improve or at the very least to have a less dramatic improvement.

Answering the Research Question

The question asked at the beginning of the research was whether differentiation of self of both members of a couple at the beginning of therapy can explain the course and relationship between depressive symptoms and level of relationship satisfaction over three sessions of therapy. The answer to this question is a qualified yes. In the end, differentiation was demonstrated to impact both couple relationship satisfaction and the depressive symptoms of men and women in these relationships. In addition, it appears that men and women impact the relationship and each other's depressive symptoms in gender specific ways. The analysis also demonstrated that couple relationship satisfaction and individual depressive symptoms co-varied over three sessions of therapy in specific ways. First, when men experienced reliable positive change in their depressive symptoms —meaning their depressive symptoms improved— the couple experienced more positive changes in their couple relationship satisfaction. It also appears that the female partner's relationship satisfaction is important in the trajectory of both partners' depressive symptoms over time. When a change score was calculated for relationship satisfaction between intake and third session, it was apparent that reliable positive change in her relationship satisfaction was also a predictor of how much both partners' depressive symptoms improved.

Using Theory as a Guide

The use of a theoretical construct in understanding how depressive symptoms and relationship satisfaction relate is significant for several reasons. According to Bowen Theory, differentiation is an individual and systemic quality that affects all aspects of an individual and system's organization. Poor differentiation is implicated in everything

from psychological symptoms to relationship and interpersonal difficulties. Whisman (2001) proposed that a third variable may be involved in the ongoing relationship between relationship satisfaction and depressive symptoms such as dependence or interpersonal sensitivity. A focus on specific behavioral level variables, though, is bound to create difficulties in research. It is likely that many behaviors are associated with depressive symptoms and intimate relationships. Rather than name specific behaviors, differentiation of self is a personal characteristic that manifests in many ways.

Differentiation refers to how individuals manage intimacy and emotions in relationships. This allows clinicians to use level of differentiation as an area of clinical assessment and focus rather than a myriad of specific behaviors.

This research extends past research by demonstrating associations between relationship satisfaction and depressive symptoms, but using the theoretical concept of differentiation to understand this association. It is not useful to continue to argue over whether marital satisfaction causes depressive symptoms or whether the causal relationship is reversed. It is more important that the two concepts have been demonstrated to co-vary and be driven by a third variable. It is likely that the associations stem from many factors. First, genetic and biological factors must be considered. After genetics, we must consider the context of the couple as well as the abilities of individuals to manage emotions and remain in close relationships with others when situations are emotionally charged.

Limitations

This research is limited in several ways. First, the sample was a clinical sample at a university based clinic. The clients at the clinic may be different from clients in other

contexts. As a clinical sample, the participants may be different than nonclinical populations, thus it cannot be generalized to general, nonclinical populations. Second, there was no control or comparison group with whom to compare the sample. We do not know whether the changes and relationships demonstrated among the sample are due to the treatment received or other factors. Further research, using comparison groups, is necessary to understand the impact of conjoint treatment on both relationship satisfaction and depressive symptoms. Third, the original sample of 97 couples at intake reduced to 36 couples, a reduction of nearly two thirds. This is a major limitation as it is not known how this affected the results. It is possible that those who either dropped out of therapy or dropped out of the study would score differently that those who completed the study. Another problem related to attrition of subjects, is that the final sample size was small. As such, it was not possible to conduct the most appropriate data analysis, Latent Growth Curve Modeling. Latent Growth Curve Modeling would have provided an analysis with two dependent variables, allowing the modeling of differentiation of self as a predictor of both depressive symptoms and relationship satisfaction. HLM is an appropriate statistical method, but allows for only one dependent variable. It was necessary to complete two separate analyses to test the relationships between the variables of interest. Thus, the multiple analyses provided a more complex picture than a more simple method.

Another limitation was that some of the instruments used may reflect bias. For example the CES-D, a widely used measure of depressive symptoms, was not used at follow-up due to space and brevity for clients participating. It may have been useful to compare ABS scores over time with the scores of depressive symptoms from the CES-D. Though the ABS appeared to be a sufficient indicator of depressive symptoms, it may

have been more appropriate to measure depressive symptoms over time as indicated by a more widely used indicator of depressive symptoms, the CES-D. Also, the measure of relationship satisfaction was a one-item rating by participants. While it correlated highly with established marital satisfaction measures in previous studies, it may reflect bias as participants may not wish to rate themselves as having a "bad" relationship. For example, a measure of marital adjustment may capture a different picture of how the phenomena in question relate.

Clinical Implications

Systemic Approach to Depressive Symptoms and Managing Emotions

The findings of this research have several implications for the clinical practice of marriage and family therapy. This sample was not diagnosed with MDD. For this reason, the CES-D and ABS scales were used in order to assess for overall depressive symptoms. In past research with a similar population, men scored very low on measures of depressive symptoms and, as a result, significant relationships between men's depressive symptoms, relationship satisfaction and differentiation were not found (Bartle-Haring et al., 2005). This research used the ABS as an indicator of depressive symptoms and found that, among this sample, depressive symptoms and differentiation related to men's relationship satisfaction and the relationship satisfaction of the couple.

As marriage and family therapists, the task is to maintain a systemic perspective whether clients espouse individual or systemic explanations of their situations.

Depressive symptoms and relationship satisfaction are intertwined with both partners' abilities to manage emotions and relationships. Clinical focus on managing emotions in

intimate relationships—marital, family of origin or other close relationships—may aid in the relief of both depressive symptoms and marital dissatisfaction.

An Intergenerational Perspective

Bowen Theory, as the basis of this research, offers insight as to possible treatments for concurrent depressive symptoms and couple relational problems. Bowen Theory is an intergenerational approach to evaluating and understanding individual and systemic dysfunction. Treatment from this perspective focuses on past and current functioning between individuals and their family of origin (both parents and siblings). It is assumed, according to Bowen Theory, that relationships with the family of origin are recreated in current intimate relationships, including marital partners and relationships between parents and children.

Treatment, then, must involve evaluation of past and current family of origin relationships as well as the current couple relationship. The task is to challenge the client to create or maintain contact with the family of origin while attempting to change the manner in which they relate to them. Simple knowledge or insight about the issue is not sufficient to enact meaningful change. Carl Whitaker stated that "Nothing worth knowing can be taught" (Whitaker & Bumberry, 1988, p. 85). Within Whitaker's theory and even, to some extent, in Bowen Theory, the individual must experience a new relationship with others in order to foster actual change.

Challenging Emotional Cutoff

Problematic nature of cutoff. Emotional cutoff, again, is a strategy used to lower anxiety by separating from others either physically and/or emotionally. This strategy, though, is counterproductive because rather than freeing one from the relationship, it

binds one to the method of managing uncomfortable emotions. Whitaker stated, "the more you dare to belong, the greater freedom you have to be more independent. The greater your capacity to individuate, the more free you are to belong." (Whitaker & Bumberry, 1988, p. 86).

Bowen encouraged continued involvement with one's family of origin. Bowen promoted a therapy process, though, that was very cognitive in nature. Process was encouraged between therapist and one member of a couple rather than exchange between partners or family members. While this may offer insight, it is not sufficient for change. Two factors are likely necessary for change in this regard. The first was proposed as being a catalyst for change by Whitaker, the second by Bowen.

Experiential intervention. First, experiential intervention aimed at highlighting the couple and individual emotional processes is necessary. Bowen and Kerr (1988) referred to undifferentiated interaction, such as emotional cutoff, as an immature and child-like emotional behavior. Whitaker often confronted this sort of interaction by "playing" with family roles, such as defining or labeling a pursuing/cutoff interaction among spouses as a "mother/child" relationship rather than a mature marital relationship. Whitaker (Whitaker & Bumberry, 1988) stated, "My intent is to expose some of the areas where the roles or functions they serve are dysfunctional. Doing it in this quasi-ridiculous manner often has the effect of allowing families to clearly see the absurdity" (p. 106). The family or couple then has the opportunity in the moment to begin new ways of interacting and managing emotions.

Family of origin relationships. The second step necessary for positive change in individual depressive symptoms and relationship difficulties is addressing family of

origin relationships directly, outside of the therapy process. This requires contact and effort to reconnect with parents and other family of origin members in an effort to open opportunities for increased intimacy. Kerr and Bowen (1988) stated:

If a person gains more emotional objectivity about his family of origin and remains in contact with the family rather than cut off from it, the amount of anxiety and emotional distance in the relationships with his spouse, children, and important others will decrease. Seeing oneself as part of the system in one's original family enhances one's ability to see oneself as part of the system in one's nuclear family... if one can see self as part of one's nuclear family system (and the problems that arise in it), it becomes possible to be more of an individual without disrupting any relationships. This results in a calmer system, one in which people are better able to stay in comfortable emotional contact, even during difficult times (p. 273).

Future Clinical and Research Directions

It is likely impossible to implicate only a few causes of depressive symptoms. Biology and genetics clearly play a role in susceptibility to the symptoms of depression. As such, drug therapy is often a useful and necessary part of treatment. Drug therapy alone, though, is not as effective as when it is combined with psychotherapy (Kaariainen, 2002). As discussed in the review of literature, most clinical approaches to the treatment of depression are rooted in individual psychology (Reinecke, 2002). Most approaches conceptualize and treat depression and depressive symptoms as an individual problem with an individual treatment. Even when conjoint treatments for depression are proposed, they often utilize the assumptions and methods of individual therapy (Reinecke

& Davidson, 2002). Research has demonstrated that individual models of therapy are effective at relieving symptoms of depression and increasing marital adjustment when conducted in a conjoint context (Beach & O'Leary, 1992; Emanuels-Zuurveen & Emmelkamp, 1996). Other, more systemic models of therapy have also been shown to be effective, at least in preliminary studies (Dessaulles et al., 2003; Klerman & Weissman, 1991; Weissman & Markowitz, 2002).

Clinicians should attend to specific aspects of differentiation when completing clinical assessments with couples. For example, behavior during conflict or other intense emotion lends insight into whether individuals cutoff or become emotionally reactive. Clinicians can also use existing differentiation assessment tools so as to understand an individual's level of differentiation overall as well as the specific way it is demonstrated—be it through cutoff, emotional reactivity or lack of self (I-Position). It is imperative that clinicians work to maintain emotional engagement with men in therapy. When men cutoff from emotional relationships their own well-being suffers as does their relationship. Women, on the other hand, appear to affect their partner as well as themselves. In this sample, women and their partners did not experience as much reliable, positive change in depressive symptoms when women were emotionally reactive in anxiety provoking or intense emotional situations.

The reciprocal nature of these relationships is demonstrated by the relationships between women's depressive symptoms and their own relationship satisfaction. The change in women's depressive symptoms is predicted by the level of her cutoff and how much her relationship satisfaction changes. As stated above, relationship satisfaction for the couple is predicted by the level of cutoff of the male partner. It is clear that the

interdependent nature of couple relationships necessitates couple solutions to relationship difficulties and individual depressive symptoms.

Considering the findings of this research, it is clear that individual differentiation contributes to the systemic processes within the couple and their individual depressive symptoms. The field of marriage and family therapy is advanced by this research through demonstration of the efficacy of the theoretical construct of differentiation of self. Further research must be done to investigate the relationships between differentiation and ongoing relationship between relationship satisfaction and depressive symptoms. Specifically, systemic models of marital and family therapy must be tested as to their efficacy in treating both relationship adjustment and depressive symptoms.

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		APPENDIX	A		
OSU MARRIAGE	AND FAMILY	ΓHERAPY (CLINIC INTA	AKE OUEST	TIONNAIRE

Dear Client(s):

Welcome to the Ohio State Family Therapy Clinic. Our primary goal is to provide you with high quality therapeutic services in order to help you meet the needs that have brought you here. The following questionnaire is used by the clinic staff to make assessments of you and your family and is part of your treatment here. You will also be asked to complete these same questions at the end of your treatment here so that we can chart your progress. The staff of the Marriage and Family Therapy Clinic is also interested in documenting the effectiveness of the treatment you receive at the clinic for research purposes. We would like you to participate in an ongoing study being conducted here at the Clinic. For the study you will be asked to complete this initial and final session questionnaires as usual. Then, you will be asked to complete a short questionnaire after sessions 1 through 6. We are also requesting to be able to keep the video of your first session for 3 years, so that it can be coded for particular therapist-client interactions. The coding will be done by research assistants who will not know your name or situation, they will also be asked to sign a confidentiality agreement so that your confidentiality will be protected in the same way it is protected here in the clinic. These first session videotapes will never leave the clinic and will not be viewed by anyone other than your therapist, your therapist's supervisor, and research assistants. We encourage you to participate in this study. You have the option of completing the after session questionnaires only, or allowing us to use your first session videotape for research purposes or both. We hope that you will choose both, but the consent form for research allows you to choose which options you would like. All adults in your family over the age of 18 will be asked to participate in this study and consent to it. If you or any family member decides to participate you will get a \$10 reduction to your first session fee if you elect to do the after session questionnaire or allow us to save your first session videotape for three years. If you elect both options you will receive a \$15 reduction in your first session fee. If your fee is less than \$15 your second session fee with be reduced by the remainder. You or your family members will not be identified in anyway in any of the reports that are written from this project. The only identifier we will be using for the data is your case number. Only clinic staff will have access to your file which would connect your name and case number. As explained on the

consent form, we will maintain your confidentiality. If you elect not to participate in this project, this in no way will affect the services you receive at the clinic.

The following set of questions refers to you and the family members with whom you are receiving treatment here at The Family Therapy Clinic. This information will help us to get a quick "snap shot" of you and your family as we begin our work with you, and also allow us to chart your progress through treatment.

If you do not wish to answer one of the questions, please skip that one, and go on to the next one. We hope that you will complete all the questions. This will provide your therapist with valuable information about you and your family that will enable him/her to develop a treatment plan more quickly. The questionnaire should take you about 30 minutes to complete. When you have finished, please place the questionnaire in the envelope provided and give it to your therapist.

If you elect to participate in the research study, you will be asked to complete a form that should take you about 5 to 10 minutes to complete after this session and the following 5 sessions. It asks you about your relationship (if you are currently in one), how you're feeling, your opinion of progress made in therapy, and your relationship with your therapist. Once you have completed this 1 page form place it in the envelope provided and drop it into the box at the clinic door. Your therapist will not have access to this information, so please feel free to answer as honestly as possible. Again, your participation in this part of the project is completely voluntary, but would help us to understand what factors contribute to the most effective treatment.

Thank you in advance for your time and attention to these questions and the project. If you have questions please feel free to ask your therapist, or me (614-688-3259). If for any reason these questions upset or concern you, please don't hesitate to talk to your therapist about your feelings. If you don't want to talk with your therapist about it and would like a referral to another therapist, please feel free to call me.

Sincerely,

Suzanne Bartle-Haring, Ph.D.

Associate Professor of Marriage and Family Therapy
Prinicpal Investigator

General Information

Case #: Therapist Code: Person:	Asian Hispanic Caucasian African American
1. What is your age?	Other
2. What is your gender? (Circle one) Male Female	
3. What is your current relationships status? (Circle all that apply) Married (first time) Remarried Cohabiting Divorced Widowed Single (never married)	10. How many hours a week are you currently employed? Less than 10 10 to 20 hours 21-35 hours 35-40 hours more than 40 hours 11. What is your occupation?
4. How many children do you have?	12. What is your annual family income?
5. How many children do you currently have living with you?	Less than 10,000 10,000-19,000 20,000-29,000
6. How many stepchildren do you have?	30,000-29,000 40,000-49,000 50,000-59,000
7. How many stepchildren do you have living with you full time?	60,000-69,000 70,000-79,000 80,000-89,000
8. Circle your highest degree earned:	90,000-99,000 100,000 or more
Less than highschool Highschool Diploma GED Some College	13. Have you or any of your family members been to therapy before? Yes No
Associates Degree Bachelor's Degree Master's Degree Professional Degree	14. Have you or any of your family members been in therapy for the same problem you are now seeking therapy for? Yes No
Ph.D., MD, JD. 9. Which best describes your	15. Have you or any of your family members been in treatment for alcohol or drug abuse? Yes No
race/ethnicity? Native American	16. Has there ever been violence between adults in the household?

Yes No
17. Are you or any member of your family currently on medication? Yes No
If so please list the member and the medication:

18. Have you been the victim of abuse during childhood? Yes No

1.	How long do you expect to come to therapy for this problem?		
	(number of session	ons)	
2.	Who do you expe	ect be in therapy with you (Circle all the apply)	
Sp	ouse/Partner	Friend(s)	
Ch	ild(ren)	Parent(s)	
No	One Else	Other (specify)	
3.	a 1, next to the m the third most imp Give adv Listen Provide of Allow n Tell me Help us	options	
4.	rank the top three most important, a important different feel bette Get along Fight less	better	
	Solve pro	d each other better	

Adults (18 years of age and older)

Please complete the following set of questions if you are currently in a married or cohabiting relationship. If you are not currently married or cohabiting, please skip this section and go on to the next section.

Instructions: Please circle the number closest to how you have been feeling over the past month.

On a scale from 1 to 10, how satisfied would you say you are with your relationship, 1 meaning not satisfied at all and 10 meaning completely satisfied.

1 2 3 4 5 6 7 8 9 10

On a scale from 1 to 10, how committed would you say you are to your relationship, 1 meaning not committed at all and 10 meaning completely committed.

1 2 3 4 5 6 7 8 9 10

Instructions: These are questions concerning your thoughts and feelings about yourself and relationships with others. Please read each statement carefully and decide how much the statement is *generally true* of you on a 1 (*not at all*) to 6 (*very*) scale. If you believe that an item does not pertain to you (e.g., you are not currently married or in a committed relationship, or one or both of your parents are deceased), please answer the item according to your best guess about what your thoughts and feelings would be in the situation. Write the number corresponding to your answer in the space provided using the following scale:

1 2 3 4 5

Not at all true of me

Very true of me

1. People have remarked that I'm overly emotional.
2. I have difficulty expressing my feelings.
3. I often feel inhibited around my family.
4. I tend to remain pretty calm even under stress.
5. I'm likely to smooth over or settle conflicts between two people whom I care about.
6. When someone close to me disappoints me, I withdraw from him or her for a time.
7. No matter what happens in my life, I know that I'll never lose my sense of who I am.
8. I tend to distance myself when people get too close to me.
9. It has been said (or could be said) of me that I am still very attached to my parent(s).
10. I wish that I weren't so emotional.
11. I usually do not change my behavior simply to please another person.
12. My spouse or partner could not tolerate it if I were to express to him or her my true feelings about some things.
13. Whenever there is a problem in my relationship, I'm anxious to get it settled right away.
14. At times my feelings get the best of me and I have trouble thinking clearly.
15. When I am having an argument with someone, I can separate my thoughts about the issue from my feelings about the person.
16. I'm often uncomfortable when people get too close to me.

17. It's important for me to keep in touch with my parents regularly.
18. At times, I feel as if I'm riding an emotional roller coaster.
19. There's no point in getting upset about things I cannot change.
20. I'm concerned about losing my independence in intimate relationships.
21. I'm overly sensitive to criticism.
22. When my spouse or partner is away for too long, I feel like I am missing a part of me.
23. I'm fairly self-accepting.
24. I often feel that my spouse or partner wants too much from me.
25. I try to live up to my parents' expectations.
26. If I have had an argument with my spouse or partner, I tend to think about it all day.
27. I am able to say no to others even when I feel pressured by them.
28. When one of my relationships becomes very intense, I feel the urge to run away from
it.
29. Arguments with my parent(s) or sibling(s) can still make me feel awful.
30. If someone is upset with me, I can't seem to let it go easily.
31. I'm less concerned that others approve of me than I am about doing what I think is
right.
32. I would never consider turning to any of my family members for emotional support.
33. I find myself thinking a lot about my relationship with my spouse or partner.
34. I'm very sensitive to being hurt by others.
35. My self-esteem really depends on how others think of me.
36. When I'm with my spouse or partner, I often feel smothered.
37. I worry about people close to me getting sick, hurt, or upset.
38. I often wonder about the kind of impression I create.
39. When things go wrong, talking about them usually makes it worse.
40. I feel things more intensely than others do.
41. I usually do what I believe is right regardless of what others say.
42. Our relationship might be better if my spouse or partner would give me the space I
need.
43. I tend to feel pretty stable under stress.

Instructions: In the next set of questions, we would like you to choose the statement (a or b) that best fits what you believe to be true.

- 1. A. Many of the unhappy things in people's lives are partly due to bad luck.
 - B. People's misfortunes result from the mistakes they make.
- 2. A. In the long run, people get the respect they deserve in this world.
 - B. Unfortunately, an individual's worth often passes unrecognized no matter how hard he/she tries.
- 3. A. Without the right breaks, one cannot be an effective leader.
 - B. Capable people who fail to become leaders have not taken advantage of their opportunities.
- 4. A. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
 - B. Getting a good job depends mainly on being in the right place at the right time.
- 5. A. What happens to me is my own doing.

- B. Sometimes I feel that I don't have enough control over the direction my life is taking.
- 6. A. When I make plans, I am almost certain that I can make them work.
 - B. It is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyhow.
- 7. A. In my case, getting what I want had little to nothing to do with luck.
 - B. Many times we might just as well decide what to do by flipping a coin.
- 8. A. Who gets to be boss often depends on who was lucky enough to be in the right place first.
 - B. Getting people to do the right thing depends on ability; luck has little or nothing to do with it.
- 9. A. Most people don't realize the extent to which their lives are controlled by accidental happenings.
 - B. There is really no such thing as "luck."
- 10. A. In the long run, the bad things that happen to us are balanced by the good ones.
 - B. Most misfortunes are the result of lack of ability, ignorance, laziness or all three.
- 11. A. Many times I feel that I have little influence over the things that happen to me.
- B. It is impossible for me to believe that chance or luck plays an important role in my life.

Instructions: Using the scale below, indicate the number which best describes how often you felt or behaved in this way during the past week:

- 1= Some or a little of the time (1-2 days)
- 2= Occasionally or a moderate amount of time (3-4 days)
- 3= Most or all of the time (5-7 days)

1. I was bothered by things that usually don't bother me.
2. I did not feel like eating; my appetite was poor.
3. I felt that I could not shake off the blues even with help from my family or friends
4. I felt that I was just as good as other people.
5. I had trouble keeping my mind on what I was doing.
6. I felt depressed.
7. I felt that everything I did was an effort.
8. I felt hopeful about the future.
9. I thought my life had been a failure.
10. I felt fearful.
11. My sleep was restless.
12. I was happy.
13. I talked less than usual.
14. I felt lonely.

Instructions: Using the scale below, indicate the number which best describes how often you felt or behaved in this way during the past week:

0= Rarely or none of the time (less than 1 day)

	1= Some or a little of the time (1-2 days) 2= Occasionally or a moderate amount of time (3-4 days) 3= Most or all of the time (5-7 days)
16. I e 17. I h 18. I f 19. I f	ad crying spells.
problems and each item was brought you to	0= Not at All 1= Rarely 3= Sometimes
2. I avo	5= Often ught about it when I didn't mean to. ided letting myself get upset when I thought about it or was reminded of it.
4. I had	d to remove the problem or event that brought me to therapy from my memory. trouble falling asleep or staying asleep because of pictures or thoughts that came mind. waves of strong feelings about the problem or event that brought me to therapy. dreams about it.
7. I stay	dreams about it. yed away from reminders of it. as if it hadn't happened or it wasn't real. d not to talk about it.
10. Pict	tures about it popped into my mind. er things kept making me think about the problem or event that brought me to
12. I wa	as aware that I still had a lot of feelings about it, but I didn't deal with them. ed not to think about it.

Instructions: Finally, Considering how you have been feeling these days, please answer the following questions by circling YES or NO: Did you ever feel....

1. Particularly exc	ited or interested in something?
YES	NO
2. Did you ever fee	el so restless that you couldn't sit long in a chair?
YES	NO
3. Did you ever fee	el proud because someone complimented you on something you had done?
YES	NO
4. Did you ever fee	el lonely or remote from other people?
YES	NO
5. Did you ever fee	el pleased about having accomplished something?
YES	NO
6. Did you ever fee	el bored?
YES	NO
7. Did you ever fe	el on top of the world?
YES	NO
8. Did you ever fe	el depressed or very unhappy?
YES	NO
9. Did you ever fe	el that things were going your way?
YES	NO
10. Did you ever t	eel upset because someone criticized you?
YES	NO