MENTAL HEALTH AND COUPLE COMMUNICATION

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To the Dean of the Graduate School:

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ABSTRACT

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The current research study explored couple communication from a social-cognitive theoretical perspective in couples with one spouse/partner diagnosed with Major Depressive Disorder (MDD). The study consisted of two groups that included couples with one spouse/partner diagnosed with MDD who were recruited from an inpatient psychiatric unit and a comparison group. This research was conducted to identify initiate/avoid communication styles in these two groups using the *Initiator Style Questionnaire* (ISQ; Denton & Burleson, 2007) and to determine whether these communication patterns affect the overall quality of their relationships. There were correlations between quality of relationship and initiator style in both the comparison group and the inpatient group, in which couples that were initiators were more satisfied in their relationships. The results also revealed gender differences in initiator tendency that are consistent with findings from other research studies. Several other findings also expand the current understanding of the interpersonal aspects of couples with one spouse/partner diagnosed with MDD.

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CHAPTER I

INTRODUCTION

Investigations of mental disorders are increasingly focusing on ways in which disorders affect interpersonal dimensions of couple/marital relationships. There are several research studies that report links between marital distress and depression. Over the past two decades, empirical investigators have begun to adopt an interactional perspective in exploring marital distress and depression (Benazon & Coyne, 1999). Other researchers (Coyne & Benazon, 2001; Whisman, 2001) reported a correlation between relationship discord and depression. These findings led researchers to develop systemic views of depression. Research studies highlighted the etiological differences in individuals diagnosed with depression based on symptom severity and treatment setting. Winokur (1986) asserted that discontinuity existed in the interpersonal correlates of depression between samples with severe depression that required inpatient treatment and those individuals with milder forms of the disorder. Since marital interaction is associated with health outcomes, the main question is whether changing patterns of marital interaction aids in preventing or ameliorating illness (Denton, Burleson, Hobbs, Von Stein, & Rodriguez, 2001).

Statement of Problem

Marriage and family researchers have spent decades trying to identify salient characteristics of communication patterns that pertain to marital interaction in an effort to

assist couples with improving their relationships and reduce the divorce rates in the United States. Veroff, Kulka, and Douvan (1981) reported that more people seek psychological help for marital difficulties than for any other type of problem. According to Winokur (1986), inpatients were less likely than less severely depressed patients to present the turbulent interpersonal styles that could precipitate marital problems. Winokur's work emphasized the importance of determining whether depression is likely to precipitate interpersonal difficulties. Post, Rubinow, and Ballenger (1992) asserted that for patients who have had depressive episodes that progressed in severity to the point of requiring inpatient hospitalization, interpersonal problems were less likely to have been influential in at least the recent depressive episodes. Post et al. (1992) sought to determine whether stressors such as interpersonal problems play a role as precipitants of depression. Coyne, Palmer, and Thompson (2002) highlighted that both of these models assume that the association between depression and marital problems should be weaker among the inpatients than in the outpatients. Two of the common communication patterns that have been identified include demand-withdraw (Wile, 1981) and initiate-avoid (Denton et al., 2001), and these communication patterns have been linked with relationship satisfaction. For example, Kelly, Fincham, and Beach (2003) asserted that discussing relationship concerns is a key to healthy marriages, and people who freely initiate discussions tend to be more satisfied with their marriages than those who avoid discussions.

Denton and Burleson (2007) defined initiator tendency as the propensity to initiate relationship-focused discussions with one's partner or avoid these discussions.

Initiator tendency has not been explored in couples with one partner diagnosed with a severe mental illness. Interest in studying the initiator and avoidance behavioral patterns in married couples was initially stimulated by couples' therapists' descriptions of their observations of couple therapy sessions (Denton & Burleson, 2007). According to Denton and Burleson, initiator tendency is a relatively stable, relationship specific trait to initiate or avoid initiating discussions of relationship problems with one's partner. Initiator tendency becomes a relatively stable individual difference within a particular intimate relationship as the relationship acquires an increasingly predictable form over time because it is a relationship specific trait (Denton & Burleson, 2007). Denton and Burleson asserted that patterns of initiation and avoidance may contribute to the stabilization of the relationship, as manifested in both actual patterns of interaction in addition to partners' expectations for self and other. This is consistent with Walter Cannon's (1939) concept of homeostasis in physiological systems, which is that social organizations maintain a relatively steady state in the face of external perturbations. Consistent with Cannon, Jackson (1954) emphasized that family homeostasis is a dynamic state of relative stability that is defined within family members' interactions with each other as well as those outside the family system. Therefore, families or couples seek to maintain or restore the status quo, individuals function as governors, and the system acts in error-activated ways, which is the result of stability in variance of behavior (Haley, 1963).

There are research and clinical contexts in which individual differences in interaction tendencies are of interest in determining whether individuals with a particular

clinical condition tend to be more initiating or avoiding in their relationships than those without the condition (Denton & Burleson, 2007). Initiators are individuals who initiate relationship problem discussions. Avoiders are people who avoid relationship problem discussions. Both initiating and avoiding tendencies have been associated with depression, substance abuse, domestic violence, and relationship distress (Denton & Burleson, 2007).

Denton and Burleson (2007) conducted a study on initiator tendency and explored gender differences in sixty married couples. They found that women consistently saw themselves as more likely to initiate problem discussions than they see their partners as likely to initiate these discussions. Denton and Burleson's finding is consistent with self-in-relation theoretical researchers' findings on gender differences. Self-in-relation theorists believe that women place greater importance on establishing and maintaining close relationships (Gilligan, 1982; Jack, 1991). Miller (1991) suggested that gender socialization was such that females' relationships played integral roles in shaping sense of self, where as males tended to develop a sense of self that was more independent of interpersonal relationships. Self-in-relation researchers suggest that there may be ways that these gender differences affect an individual's view of his/her relationships. Self-in-relation theorists posit that couple dissatisfaction is more strongly associated with depression for women than for men. Therefore, gender differences in addition to other demographic variables were explored in the current study.

Initiator tendency has not been explored in couples with one partner diagnosed with a severe mental illness. There is a gap in the literature on initiator tendency in

couple communication patterns in couples with one partner diagnosed with severe major depressive disorder. It may be important to determine how this population and their partners respond to relationship problems. It is also important to explore this communication pattern in couples with one partner diagnosed with major depressive disorder who is compliant with taking his/her medications. Assessing communication styles in these couples may lead to the development of interventions utilized to increase medication compliance.

Analyses of the results provided data that contributed to probable communication style profiles representative of patients experiencing severe mental illnesses and their partners. A potential benefit of this study is to further the understanding of the interpersonal aspects of severe mental illness and identify initiate/avoid patterns in couples with one partner diagnosed with the illness. This type of research could serve as a catalyst for clinicians in assisting couples in their responses and reactions to these illnesses as well as facilitate opportunities for the development of interventions to aid these couples with development of effective coping strategies, which could reduce relapse rates through enhancing individual growth as well as relational support. This research provided opportunities for replication studies in order to provide further clinical and theoretical significance in this area.

Expanding the existing knowledge of the interpersonal aspects of these mental illnesses and identifying these communication patterns in these couples could provide valuable information that clinicians can utilize in assisting these couples with effective

responses to these illnesses that could potentially reduce relapse rates through enhancement of individual growth as well as relational quality.

Statement of Purpose

The purpose of this research study was to explore couple communication from a social-cognitive theoretical perspective in couples with one partner diagnosed with a mental illness. This research was conducted to identify initiate/avoid communication styles in patients diagnosed with major depressive disorder. A comparison group, consisting of couples not diagnosed with major depressive disorder, schizoaffective disorder and/or schizophrenia was included in this study to determine whether the initiate/avoid communication styles in patients and their spouses/partners differ from couples in the comparison group. The objectives for this research are as follows: expansion of the current understanding of the interpersonal aspects of mental illness through identifying communication patterns in these couples; determination of whether these communication patterns affect the overall quality of their relationships; and determination of whether there are specific gender related communication patterns in these couples.

Initiator tendency has not been explored in couples with one partner diagnosed with a severe mental illness. It would be valuable to examine the relationship between symptom severity and couple communication styles to gain a better understanding of how to assist these couples in outpatient and inpatient treatment settings. Analyses of the results provided data that contributed to communication style profiles representative of patients diagnosed with major depressive disorder and their partners. This research

provided opportunities for replication studies in order to provide further clinical and theoretical significance in this area.

Research Questions

1. Will the patients' Initiator Style Questionnaire (ISQ) scores be different from their spouses'/partners' Initiator Style Questionnaire (ISQ) scores?
2. Is there a relationship between the patients' symptom severity scores and their self initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ)?
3. Is there a relationship between the patients' symptom severity scores and their perceived spouse/partner initiator tendency scores?
4. Will females' Initiator Style Questionnaire (ISQ) scores differ from males' Initiator Style Questionnaire (ISQ) scores?
5. Is there a relationship between participants' Initiator Style Questionnaire (ISQ) scores and their Quality of Marriage Index (QMI) scores?

Hypotheses

In this study, the hypotheses are as follows:

1. There will be no statistically significant relationship between the patients' symptom severity scores as measured by the Inventory of Depressive Symptomatology- Clinician Rated (IDS-C) and self initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ).
2. There will be no statistically significant relationship between the patients' symptom severity scores as measured by the Inventory of Depressive

Symptomatology- Clinician Rated (IDS-C) and participants' marital/relationship quality scores as measured by the Quality of Marriage Index (QMI).

3. There will be no statistically significant difference in female participants' self initiator tendency scores when compared to male participants' self initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ).
4. There will be no statistically significant difference in female participants' perceived spouse/partner initiator tendency scores when compared to male participants' perceived spouse/partner initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ).
5. There will be no statistically significant relationship between initiate-avoid communication patterns as measured by the Initiator Style Questionnaire (ISQ) and participants' marital/relationship quality scores as measured by the Quality of Marriage Index (QMI).
6. There will be no statistically significant relationship between mutual initiation communication patterns as measured by the Initiator Style Questionnaire (ISQ) and participants' marital/relationship quality scores as measured by the Quality of Marriage Index (QMI).

Definition of Terms

Initiator tendency is "the propensity to initiate relationship-focused discussions with one's partner or avoid such discussions" (Denton & Burleson, 2007, p. 245). Initiator tendency is the degree to which each partner expresses his/her discontentment with the other partner's behavior and/or opinion or chooses not to disclose it in the

intimate couple relationship (Denton & Burleson, 2007). Denton and Burleson asserted that patterns of initiation and avoidance may contribute to the stabilization of the relationship, as manifested in both actual patterns of interaction in addition to partners' expectations for self and other. Partners relatively high in the initiator tendency are termed initiators and partners relatively low in the initiator tendency are termed avoiders (Denton & Burleson, 2007). A committed relationship is defined by couples that agree they have been in a monogamous, romantic relationship for at least six months with each other. Communication patterns are the interactional "style or manner in which information is exchanged within a family (that is, coded or encoded) the precision, clarity or degree of ambiguity of the transmission, and the behavioral or pragmatic effect of the communication – as much as the content of what is communication help determine those relationships" (Goldenberg & Goldenberg, 2000, p. 218). The definition of marital/relationship quality is based on Spanier's (1979) definition of marital quality, and is a subjective evaluation of a couple's relationship, with the range of evaluations constituting a continuum reflecting numerous characteristics of couple interaction in addition to couple relational functioning that includes relationship satisfaction.

Delimitations and Limitations

The sample is restricted to recruitment from one inpatient psychiatric unit in a hospital, and thus, the results from this study may not generalize to inpatient populations in other types of hospitals due to the differences in demographic variables. The small sample size may increase the risk for Type I error, and so it is important that interpretation of the results is tentative. Due to the restrictions from the Joint Commission

on Hospital Accreditation (JCAHO) for research studies conducted on inpatient psychiatric units, there is a very strict limit on the amount of time that is allotted for research in order to decrease the risk of increasing the patients' length of stay. Therefore, the total amount of time that the principal investigator was permitted for each inpatient participant in the study was only thirty minutes. As a result only three instruments were included in the study. Since only three instruments could be utilized for the inpatient participants, there were no additional instruments included with the other groups in order to increase the validity of the results. There is only one marital/relationship quality measure included in this study, and so the results related to marital/relationship quality may not be as strong as if a marital/relationship satisfaction measure were included in the study.

Summary

The purpose of this research study was to explore couple communication from a social-cognitive theoretical perspective in couples with one partner diagnosed with a mental illness. The initiate-avoid communication pattern was explored in couples where one partner was diagnosed with major depressive disorder. The initiate-avoid communication pattern was also explored in a comparison group in order to identify the ways in which these couples differ from couples with one partner diagnosed with a mental disorder. Expansion of the existing knowledge of the interpersonal aspects of mental illness and identification of this communication pattern in these couples could provide valuable information that clinicians may be able to utilize in assisting these

couples with effective responses to these illnesses, which could potentially reduce relapse rates through enhancement of individual growth as well as to relational quality.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The contributions of various theoretical frameworks for the current research study are identified and described in this section. These theoretical frameworks include social-cognitive theory, systems theory, and communication theory, in addition to interactional models of mental illness. Given the depth of each theoretical framework, the theoretical concepts that pertain to the current research study are highlighted and explored to demonstrate the relevance to the overall conceptual framework. A brief overview of each theoretical framework is provided in addition to the ways in which theoretical concepts exemplify the current research on couple communication. The theoretical and clinical significance of these theoretical concepts is demonstrated through a review of the current research.

Theoretical Framework

Social-Cognitive Theory

Social-cognitive theory is the main theoretical perspective for the current study. Social cognitive model encompasses cognitive and cognitive-behavioral therapeutic models. Dr. Albert Ellis and Dr. Aaron Beck are two main figures associated with cognitive therapy. The emphasis of cognitive therapy is based on the ideas of Ellis, a psychologist. In 1962, Ellis asserted that disturbed feelings and maladaptive behaviors

are a result of irrational beliefs. Ellis developed Rational Emotive Therapy in January 1955, which helps clients to challenge these irrational beliefs. Rational Emotive Therapy has many behavioral components, and Ellis decided to change the name of his model to Rational Emotive Behavior Therapy (REBT) in 1993 because the new name better described his approach. Beck, a psychiatrist, is a pioneer in cognitive therapy. Beck developed cognitive therapy in the 1960s, and this model asserts that an individual's automatic thoughts trigger his/her feelings, not events. Beck's approach differs from Ellis' approach in that Beck posits that each mental disorder is characterized by a set of unique faulty cognitions where as Ellis posits that all mental disorders are characterized by the same set of irrational beliefs. Automatic thoughts are thoughts or images that occur to the spouse(s) simultaneously and are usually associated with negative affect (Datillio, 2004). These automatic thoughts can lead to maladaptive assumptions or cognitive distortions. Maladaptive assumptions are a set of rules that a spouse or family member follows to guide and evaluate their own and other's behavior. The automatic thoughts are a reflection of the person's schema. Beck (1976) defined schema as a person's core beliefs about the world and how it functions. Therefore, the individual fits new information into an organized network of already accumulated knowledge (Davison & Neale, 1998). The individual may seek information to fit the schema or reorganize the schema to fit the new information (Davison & Neale).

Some theorists have developed interpersonal models of mental illness that have been examined in outcome studies. Marital interaction researchers have focused on social cognition in two areas of study. The first area is the content of the partners' beliefs, which

include beliefs about relationship satisfaction and partners (Crosbie-Burnett & Lewis, 1993). The second area encompasses partners' beliefs about the reasons for their behaviors. Marcotte and Safran (2002) highlighted the role of an individual's interpersonal schema in cognitive-interpersonal cycles. They defined interpersonal schema as a cognitive representation of characteristic self-other interactions based on previous experiences. Marcotte and Safran asserted that the individual's interpersonal schema influences his/her interactions with others. Marcotte and Safran asserted that a cognitive-interpersonal cycle is a characteristics pattern of self-other interactions influenced by the individual's interpersonal schema that tends to maintain this schema in a self-perpetuating fashion due to characteristic aspects of the individual's manner or behavior that plays a role in perpetuating his or her typical cognitive-interpersonal cycle. The current study explored the relationship-specific patterns of self-other interactions that are influenced by each partner's beliefs about initiating or avoiding relationship problem discussions and the ways in which symptom severity affect these interactions.

Sacco and Nicholson (1999) proposed the social-cognitive model of interpersonal processes of depression that described the bidirectional interactional process whereby both the depressed (or depression prone) person and others in the social environment influence interpersonal outcomes. Sacco and Nicholson asserted that others' responses to a depressed person arise partly because of the depressed person's less socially skillful behavior and in part because of autonomous cognitive and affective processes that serve to perpetuate a negative mental construction of that depressed person. These researchers posited that the reactions of significant others are expected to adversely influence the

depressed person's self-concept, affect, and behaviors which reinforces the tendency of others to think negatively about the depressed person.

Sacco and Nicholson (1999) asserted that the social-cognitive model focuses on two social-cognitive constructs that include attributions about the depressed person's behaviors, the mental representations in memory of the depressed person's attributes, behavioral tendencies, interests, and values termed a "person schema." They reported that researchers have found reciprocal causality between affect and social judgment, which suggests that social cognition is influenced by affect and influences affect. They also asserted that affective reactions serve to exaggerate the valence of cognitions about the person. According to Sacco and Nicholson, schemata, attributions, and affect each contribute independently to each partner's relationship satisfaction and behavioral reactions to the depressed person. These authors suggested that perceived negative reactions could be a trigger for depressed mood and concurrently, activate a self-relevant negative cognitive network that could alter interpretations and responses to subsequent interpersonal stimuli. Sacco and Nicholson asserted that depressed (or depression-prone) individuals should be made aware of their possible negative impact on others and assisted with modifying potentially aversive social behaviors such as excessive reassurance-seeking (i.e., social skills training). Other researchers (Benazon & Coyne, 1999; Coyne, 1976 a, 1976 b; Coyne, Thompson, & Palmer, 2002; Ebling, 2006) have made similar suggestions.

One aspect of social-cognitive marital interaction research is the assessment of spousal perceptions regarding their interactions and relationship quality. Initiator

tendency is the degree to which each partner expresses his/her discontentment with the other partner's behavior and/or opinion or chooses not to disclose it in the intimate couple relationship (Denton & Burleson, 2007). Initiator tendency is a relatively stable tendency to initiate or avoid initiating discussions of relationship problems with one's partners in a specific intimate relationship, such as marriage or cohabitation. Denton and Burleson asserted that patterns of initiation and avoidance may contribute to the stabilization of the relationship, as manifested in both actual patterns of interaction in addition to partners' expectations for self and other. Partners relatively high in initiator tendency are termed initiators and partners relatively low in initiator tendency are termed avoiders. Both aspects of initiator tendency have been associated with depression, relationship distress, substance abuse, and domestic violence (Denton & Burleson, 2007).

Systems Theory

The systems theoretical perspective is the view that the essential properties of a living system, are properties of the whole, and the whole is always greater than the sum of its parts (von Bertalanffy, 1950). Marital interaction researchers consider how problems may be a product of relationships surrounding a couple. Systems theory is the study of feedback mechanisms in self-regulating systems. According to von Bertalanffy, a pioneer in cybernetics, cybernetic systems have a tendency to maintain stability by using information about its performance as feedback. A feedback loop, according to von Bertalanffy, is the process by which a system gets the information necessary to maintain a steady course, and it usually includes information about the system's performance relative to its external environment as well as the relationship among the system's parts.

Feedback loops can be negative and positive. Negative feedback loops indicate a change that threatens the integrity of the system, which can have desirable or undesirable consequences, and it signals the system to restore the status quo (Maruyama, 1968). Positive feedback loops signal the need to modify the system, which can have desirable or undesirable consequences (Maruyama).

Circular causality occurs when problems are sustained by an ongoing series of actions and reactions, and actions are related through a series of recursive loops (Bateson, 1979). Recursion directs attention to the context of mutual interaction and mutual influence and the awareness that "a unilateral focus on part of the system will disrupt and fractionate the balanced diversity of an ecosystem" (Keeney, 1983, p. 126). Circular causality of a feedback loop occurs when each element has an effect on the next, until the last element feeds back the cumulative effect into the first part of the cycle (Jackson, 1967). Therefore, marital interaction researchers explore the ways that communication patterns shape each partner's behavior in the relationship.

Communication Theory

Communication theory was developed at the Palo Alto Mental Research Institute, and it is the study of interpersonal sequences between people in terms of verbal and nonverbal messages they exchange. Communications theorists focus on the present instead of the past, analyze recursive patterns of interaction and communication, and gain an understanding of the establishment of a dysfunctional relationship pattern, which through repetition, represents their characteristic way of relating to each other (Watzlawick, Bavelas, & Jackson, 1967). When two people in a long-term relationship

have conflict, they develop their own relational conflict style, which is a pattern of managing disagreements (Adler & Towne, 2003).

Watzlawick, Bavelas, and Jackson (1967) highlighted the importance of semantics, syntax, and communication. Semantics is the clarity of meaning between what is said and received. Syntax is the pattern as well as the manner of style in which information is transmitted. Pragmatics are the behavioral effects or consequences of communication. Watzlawick et al. (1967) also identified several axioms for interpersonal communication. The first is that all behavior is communication at some level. The second axiom is that communication may occur simultaneously at many levels. The third axiom, based on Bateson's (1951) work, is that every communication has a content (report) and a relationship (command) aspect. The fourth axiom is that relationships are defined by command messages. The fifth axiom is that relationships may be described as symmetrical or complementary. The sixth axiom is that symmetrical relationships run the risk of becoming competitive. The seventh axiom is that complementary communication inevitably involves one person who assumes a superior position and another who assumes an inferior one. Complementary is the reciprocity that is the defining feature of any relationship (Jackson, 1965). If one partner changes, then the relationship changes, and the other partner is influenced by and must respond to this. This type of communication is characteristic of the demand-withdraw pattern of communication. The eighth axiom is that each person punctuates a sequence of events in which he/she is engaged in different ways. The last axiom is that problems develop and are maintained within the context of redundant interactive patterns and recursive feedback loops.

Couple Communication Patterns

Marriage and family researchers have spent decades trying to identify salient characteristics of communication patterns that pertain to marital interaction to assist couples with improving their relationships in an effort to reduce the high divorce rates in the United States. Researchers in family sciences have identified patterns in which women try to engage in relationship problem discussions, while men try to avoid relationship problem discussions (Acitelli, 1992; Denton, Burleson, Hobbs, Von Stein, & Rodriguez, 2001; Eldridge & Christensen, 2002; Gottman, 1989). These patterns are often referred to as nag-withdraw (Watzlawick, Bavelas, & Jackson, 1967); engager-distancer (Fogarty, 1976); demand-withdraw (Wile, 1981); pursue-distance (Greenberg & Johnson, 1988); and initiate-avoid (Denton et al.).

Demand-Withdraw Communication Pattern

The demand-withdraw communication pattern (Wile, 1981) has been emphasized in marital interaction research. This pattern is enacted when one partner (demander) criticizes, nags and makes demands on the other, while the other partner (withdrawer) avoids confrontation, withdraws and gets defensive (Eldridge & Christensen, 2002). According to Eldridge and Christensen, the demand-withdraw pattern is an indicator that couples are in conflict in addition to distress. Empirical research (Berns, Jacobson, & Gottman, 1999; Watzlawick, Bavelas, & Jackson, 1967; Weiss & Heyman, 1997) has consistently demonstrated that demand-withdraw is linked with marital dissatisfaction.

Eldridge and Christensen (2002) posed the question of whether gender differences actually account for the demand-withdraw communication pattern in heterosexual

relationships. Some researchers (Christensen, 1987, 1988; Jacobson, 1989; Gottman & Levenson, 1986, 1988; Jacobson & Margolin, 1979;) have reported findings that suggest that conflicts about emotional intimacy in marriage tend to involve wives seeking closeness and husbands seeking autonomy and these preferences for closeness and separateness occur in cyclical interactions between males and females. Several researchers (Kelley et al., 1978; Komarovsky, 1962, 1976; Rubin, 1976, 1983; Rugel, 1997) have reported consistent findings that support the gender difference hypothesis.

These marital interaction theorists have attempted to provide explanations for the gender differences found in demand-withdraw communication patterns. Terman, Buttenweiser, Ferguson, and Wilson (1938) conducted one of the earliest studies on this communication pattern, and they found that distressed wives complained of their husbands' tendencies to withdraw, while distressed husbands complained of their wives nagging, criticism, and emotionality (Eldridge & Christensen, 2002). Eldridge and Christensen proposed explanations for the demand-withdraw communication pattern that included gender differences, individual differences, societal structure or traditional marriage, and structure of conflict. The theoretical explanation for gender differences in the demand-withdraw communication pattern has primarily been described by self-in-relation theorists (Gilligan, 1982; Jack, 1991).

Whisman (2001) performed a meta-analysis, and cited empirical evidence that marital dissatisfaction was more strongly associated with depression for women than for men. These findings revealed that women placed more importance on establishing and maintaining close relationships, which is consistent with the self-in-relation theoretical

perspective (Gilligan, 1982; Jack, 1991). Consistent with this perspective, Miller (1991) suggested that gender socialization factors into females' relationships and plays an integral role in shaping the sense of self, where as males tend to develop a sense of self that is more independent of interpersonal relationships. Although relationships are important for both genders, the self-in-relation researchers suggested that there may be ways that these gender differences affect an individual's view of his/her relationships.

Eldridge and Christensen (2002) asserted that the demand-withdraw pattern is clinically significant because it has also been linked to power, violence, and gender in relationships. Wile (1981) reported that gender differences are applicable to this pattern, in which the wife is usually the demander and the husband is typically the withdrawer in nonviolent relationships. Some researchers (Chodorow, 1987; Gilligan, 1982; Rubin, 1983) have suggested that gender socialization practices have contributed to the woman-demand/man-withdraw pattern because women have been socialized to be more affiliative as well as emotionally expressive, and identity is developed in the context of relationships; whereas men are socialized to be independent and inexpressive in which an identity develops in the context of separation. Gottman and Levenson (1986, 1988) suggested that physiologically related gender differences may be manifested in demand-withdraw communication patterns because they found that males reacted with greater physiological arousal than females, in response to stress, and males tended to have a slower return to baseline levels of arousal.

Eldridge and Christensen (2002) reported research findings that suggested that individual differences may be associated with gender, but gender differences may not be

solely attributed to the demand-withdraw pattern. For example, Walczynski (1997) found evidence to support the individual difference perspective when she examined gay and lesbian relationships in an attempt to detach gender from the personality traits typically associated with it. The author reported that same-sex couples demonstrated as much demand-withdraw communication patterns as opposite-sex couples, and same-sex couples are similarly characterized by one partner's tendency to be consistently in the withdrawing role during conflict. The results suggested that in same-sex couples, the more committed partner was perceived as more demanding during conflict, and the less committed partner was perceived as more withdrawing. Walczynski's findings suggest that relationship characteristics, such as discrepant desires for closeness and commitment, may produce demand-withdraw communication patterns in these couples.

Eldridge and Christensen (2002) also described the social and marital structure perspective as a potential causal factor for the demand-withdraw communication pattern. The social and marital structure perspective emphasizes the different social positions for men and women in society. Some research findings (Murphy & Meyer, 1991; Noller, 1993), related to the structure of society, highlighted the power and status discrepancies between men and women in accounting for the gender pattern in demand-withdraw communication patterns. Other researchers (Christensen & Heavey, 1990; Jacobson, 1989, 1990) posited that traditional marital roles placed men in a higher status role than women, and their husbands met requests or demands with resistance or withdrawal because the traditional marital structure did not permit direct confrontation.

Eldridge and Christensen (2002) highlighted research findings that pertained to conflict that could account for the gender differences in demand-withdraw pattern of communication. They asserted that the length of the couples' relationship or their history of gridlocked topics in addition to the marital structure (traditional versus egalitarian) interacted with level of distress in determining demand-withdraw communication patterns. Eldridge (2000) conducted a study on the demand-withdraw pattern and marital satisfaction. Eldridge reported that highly distressed couples, who were locked into the demand-withdraw pattern, had been together for over eight and half years. Christensen, Heavey, and colleagues (1990, 1993; Heavey et al., 1993) suggested that the roles adopted by men and women during conflict depended on the specific structure of the conflict topic. They found that if the conflict topic was one in which the wife desires change from the husband, wife-demand/husband-withdraw was more likely than husband-demand/wife-withdraw communication patterns. They found that the conflict topic was one in which the husband desires change from the wife, husband-demand/wife-withdraw was more likely than wife-demand/husband-withdraw. They reported that these patterns of communication arose because the individual that desired change had to rely on the other partner's compliance to induce change, and he/she had to engage in behaviors that elicited change from the partner, such as demands. These researchers asserted that without the partner's cooperation, negative feedback enters the system but may be lost if active problem solving happens between partners.

Finally, several researchers (Christensen & Heavey, 1990; Eldridge, 2000; Heavey, Layne, & Christensen, 1993; Noller, Feeney, Bonnell, & Callan, 1994) contend

that self-report measures in conjunction with behavioral observations have consistently revealed correlations between demand-withdraw communication and relationship satisfaction. Some researchers have suggested that self-report measures given to diverse samples revealed that demand-withdraw communication patterns are associated with lower relationship satisfaction in undergraduate dating couples (Sullaway & Christensen, 1983), cohabitating couples (Christensen, 1987), engaged and newlywed couples (Noller et al., 1994), and married couples (Christensen, 1987; Noller & White, 1990). Denton and Burleson (2007) highlighted that assessments of demand-withdraw communication treat it as a dyadic variable.

Differences between Demand-Withdraw and Initiate-Avoid Patterns

Denton and Burleson (2007) asserted that although initiator tendency is similar to the construct of demand-withdraw communication, it differs in various ways. One of the ways in which these patterns differ is the external versus internal characteristics. The demand-withdraw communication pattern refers to a negative behavioral pattern that is a characteristic distress style of couple communication. Initiator tendency refers to the internal process of an individual. Another way that these two constructs differ is that initiator tendency is conceptualized as a relationship-specific individual difference, where as demand-withdraw is typically viewed as a dyadic variable. Also, attention must be directed to a central difference between the outcomes of produced by the demand-withdraw pattern and initiate-avoid pattern. The demand-withdraw construct assumes that demanding or withdrawing are negative behaviors; however, Denton and Burleson asserted that initiating or avoiding problem discussions is not assumed to be intrinsically

negative behavior. Another difference is that initiator tendency varies in different clinical contexts and demand-withdraw does not vary in different clinical contexts (Denton & Burleson, 2007).

Initiate-Avoid Communication Pattern

The initiate-avoid pattern (Denton, Burleson, Hobbs, Von Stein, & Rodriguez 2001) is a recent addition to the marital interaction literature. Denton and Burleson (2007) defined initiator tendency as the tendency to initiate relationship-focused discussions with one's partner or avoid such discussions. Initiator tendency is the degree to which each partner expresses his/her discontentment with the other partner's behavior and/or opinion, or chooses not to disclose it in the intimate couple relationship (Denton & Burleson, 2007). It is conceptualized as an individual's relatively stable tendency to initiate or avoid initiating discussions of relationship problems with one's partners in a specific intimate relationship, such as marriage or cohabitation. Initiator tendency applies to a committed relationship where patterns of interaction have developed over time because it is viewed as a relationship-specific trait.

Assumptions of Initiator Tendency

Denton and Burleson (2007) outlined several assumptions of initiator tendency. The first assumption is that initiator tendency becomes a relatively stable individual difference within a particular intimate relationship as the relationship acquires an increasingly predictable form over time. The second assumption is that patterns of initiation and avoidance may contribute to the stabilization of the relationship, as manifested in both actual patterns of interaction in addition to partners' expectations for

self and other. For example, a husband and wife may have established a pattern in which the wife initiates relationship problem discussions, so the husband expects her to initiate these relationship problem discussions, neglecting to ever initiate these types of discussions. Partners relatively high in initiator tendency are termed initiators and partners relatively low in initiator tendency are termed avoiders (Denton & Burleson, 2007).

Although initiator tendency relates to the constructs of conflict engagement and conflict avoidance, the differences are addressed in the third assumption. Denton and Burleson (2007) asserted that initiator tendency is narrower in scope than Burgoon's (1976) unwillingness to communicate, and Swann's (2001) blirtatiousness because both of these constructs refer to more general tendencies to enjoy interpersonal communication, readily express one's viewpoints, and inaugurate interactions with a variety of individuals on diverse topics. In the fourth assumption, Denton and Burleson asserted that initiator tendency is different from the construct of conflict style because most of the conflict style assessments examine an individual's general approach to waging conflict across people, topics and settings (Putnam, 2006). Their final assumption is that initiator tendency can be executed through a variety of strategies such as those that may regularly have neutral, positive, or negative outcomes within the marital/couple relationship.

Theoretical Significance of the Initiate-Avoid Pattern

The theoretical significance of the initiate-avoid pattern has been demonstrated in various research studies. Gallo, Smith, and Cox (2006) utilized an interpersonal

theoretical perspective in the exploration of socioeconomic status, psychosocial processes, and perceptions of health. Gallo et al. (2006) found that individuals with lower SES described their social worlds as more hostile and less friendly compared with their higher SES counterparts. These researchers also reported that lower SES was associated with perceptions of exposure to more dominant or controlling behavior from others, compared with higher SES. Gallo et al. concluded that appraisals of hostility versus friendliness, in particular, helped explain the inverse association between SES and some aspects of perceived health. Gottman (1990, 1991; Gottman & Levensen, 1988) proposed a psychophysiologic model of marital distress in which excessive cardiovascular reactivity is aversive and explains why some people withdraw from unpleasant relationship discussions. Gottman further proposed that over time the people that avoid relationship problem discussions might eventually develop coronary heart disease.

Denton, Burleson, Hobbs, Von Stein, and Rodriguez (2001) conducted a study with 60 married couples to test Gottman's (1990, 1991; Gottman & Levensen, 1988) psychophysiologic model of marital interaction. Denton et al. (2001) classified participants as avoiders or initiators of relationship problem discussions by trained coders observing videotaped semistructured interviews. Denton et al. assessed blood pressure and heart rate reactivity during a cold pressor test, during a mental math test, while watching a marital argument on video, and during a conjoint interview.

Denton, Burleson, Hobbs, Von Stein, and Rodriguez (2001) found results that both supported and suggested modifications to Gottman's psychophysiologic model. Denton et al. (2001) found that avoiders had significantly greater systolic blood pressure

reactivity during the interview. They found that husbands who interacted with avoider wives had significantly greater diastolic and systolic blood pressure reactivity than did husbands of initiator wives. They also reported that initiator husbands, who were married to avoider wives, had greater systolic blood pressure reactivity. During interactions with their spouses, avoiders exhibited significantly greater reactivity as evidenced by systolic blood pressure than did initiators, and avoiders experienced the physiological arousal associated with confrontative spousal interaction as aversive, which is the reason they sought to avoid such interactions (Denton, Burleson, Hobbs, Von Stein, & Rodriguez 2001).

Rohrbaugh, Shoham, Coyne, Cranford et al. (2004) conducted a study on marital quality on patients with heart failure. Rohrbaugh, Shoham, Coyne, Cranford et al. (2004) reported that interview and observational measures of marital quality in 189 patients with heart failure (139 men and 50 women) and their spouses predicted patient mortality over four years, and these findings were independent of the baseline severity of illness. Rohrbaugh, Shoham, and Coyne (2006) conducted a follow-up study on the effect of marital quality of eight-year survival of patients with heart failure. Rohrbaugh, Shoham, Coyne, Cranford et al. (2006) reported that Cox regression analyses showed that marital quality continued to predict survival over eight years, especially in when the patient was a woman. Rohrbaugh, Shoham, Coyne, Cranford et al. (2006) asserted that marital satisfaction contributed less to patient survival than more behavioral indicators, such as frequency of partners' discussions about the illness and how positive they were during social interactions with each other. These findings suggest that frequency of couples'

discussions about an illness and the amount of positive affect they exhibit during these discussions influence health outcomes.

Clinical Significance of the Initiate-Avoid Pattern

Both aspects of initiator tendency have been associated with depression, relationship distress, substance abuse, and domestic violence (Denton & Burleson, 2007). According to Denton and Burleson, women consistently saw themselves as more likely to initiate problem discussions than they saw their partners as likely to initiate these discussions, and women consistently saw themselves as more likely to initiate problem discussions than men see themselves (2007). These authors suggested that there are research and clinical contexts in which individual differences in interaction tendencies are important in determining whether individuals with a particular clinical condition tend to be more initiating or avoiding in their relationships than those without the condition.

Some studies have reported results suggesting that individuals who were dissatisfied with their relationships were more likely to be clinically depressed than those in satisfactory relationships, and marital dissatisfaction may increase vulnerability to depression in addition to negatively impacting the course and resolution of depression (Beach, Whisman, & O'Leary, 1994; Weissman, 1987, 1999; Whisman & Bruce, 1999). Koerner, Prince, and Jacobson (1994) suggested that the association between marital dissatisfaction and depression could be modeled in one of the following three ways: marital dissatisfaction may cause depression, depression may cause marital dissatisfaction, or a third variable may be the cause for depression and marital dissatisfaction. Uebelacker, Courtnage, and Whisman (2003) conducted a study to

explore the third variable proposed by Koerner et al. (1994) and examined whether a third variable is the link to both depression and marital dissatisfaction, especially in women. Koerner, Prince, and Whisman (1994) proposed a model that suggests that third variables that may be causal factors for both marital dissatisfaction and depression in women, and they identified gender socialization practices linked with depression to support their model. Koerner et al. highlighted the following gender-specific interaction styles that include wife-demand and husband-withdraw, and the wife's perception of herself as self-silencing in response to the husband's avoidance. According to Jack (1991) and Jack and Dill (1992), self-silencing is based on the premise that relationships are of central importance to women and is described as a process in which women silence their needs, thoughts, and actions in order to preserve a conflict-free relationship. Cultural norms may dictate that males' needs are more important than women's needs and that a "good" woman is one who is self-sacrificing (Jack & Dill; Koerner et al.). Thompson (1995) found that women's self-silencing has been associated with relationship dissatisfaction in addition to depression, but men's self-silencing did not correlate with their own or their partner's marital dissatisfaction.

Uebelacker, Courtnage, and Whisman (2003) posited that variables that predict marital dissatisfaction may also serve to predict depression symptoms, especially in women. Uebelacker et al. (2003) conducted a study to explore the associations between marital dissatisfaction, symptoms of depression, and perceptions of marital communication styles. Uebelacker et al. found that in their community sample of 127 married men and women, marital dissatisfaction was significantly correlated with

depressive symptoms, as evidenced by participants' scores on the Beck Depression Inventory II (BDI-II), self-silencing, and husband-demand and wife-withdraw communication. They reported that scores on the BDI-II revealed that 82% of their sample reported minimal depressive symptoms, 13% reported mild depressive symptoms, 5% reported moderate depressive symptoms, and 1% reported severe depressive symptoms. Uebelacker et al. found that depression symptoms were correlated with self-silencing and wife-demand and husband-withdraw communication. They also found that self-silencing mediated the association between marital dissatisfaction and depression symptoms, and there was a trend toward the association between depressive symptoms and perceptions of the wife-demand and husband-withdraw communication being greater than the association between depression symptoms and husband-withdraw and wife-withdraw communication.

Uebelacker et al. (2003) found that for males, marital dissatisfaction was correlated with self-silencing, wife-demand and husband-withdraw communication, in addition to husband-demand and wife-withdraw communication. They reported that for males, depression symptoms were significantly correlated with self-silencing and wife-demand and husband-withdraw communication. They also found that being in the demanding role was more highly associated with depressive symptoms for women than for men, and so self-silencing was identified as the third variable that was related to both depression symptoms and marital dissatisfaction in women. However, they reported that these associations were also significant in men, but self-silencing was only found to mediate the association between marital dissatisfaction and depressive symptoms in

women. They concluded that their findings were consistent with the literature on self-silencing (Gratch, Bassett, & Attra, 1995; Thompson, 1995) because it accounted for 36% of the variance in women's depressive symptoms and 16% of the variance in men's depressive symptoms. Their results suggested that perceptions of interactions with one's spouse, in addition to gender-related expectations of how both husband and wife should interact, may be important to address when considering depression and marital dissatisfaction in both genders.

Major Depressive Disorder

Brief Overview

The unipolar depressive disorders are some of the most common mental disorders in the United States. Depression ranks third in mortality and lost work days (World Health Organization, 1996). According to the Diagnostic Statistical Manual of Mental Disorders - Fourth Edition – Text Revision (*DSM-IV-TR*), the unipolar depressive disorders consist of three depressive disorders that include major depressive disorder, dysthymic disorder, and depressive disorder not otherwise specified. This research will only focus on major depressive disorder, since this is the diagnosis for the inpatient participants. Major depressive disorder is the most severe unipolar depressive disorder. Gaeddert (2001) highlighted that major depression is one of fifteen leading causes of disability in developed countries, and this illness is projected to become the second leading cause of disability worldwide by 2020.

According to the *DSM-IV-TR*, major depressive disorder is characterized by one or more major depressive episodes for at least two weeks and consists of a depressed

mood or loss of interest or pleasure. For an individual to be diagnosed with this disorder, the *DSM-IV-TR* specifies that he/she must have at least five or more of the following symptoms: significant weight loss (without dieting) or weight gain; insomnia or hypersomnia; fatigue or loss of energy; feelings of worthlessness or inappropriate guilt; psychomotor agitation or retardation; and/or recurrent thoughts of death or suicide. According to the *DSM-IV-TR*, the average of age of onset for major depressive disorder is in the mid 20s, and it is 1.5 to 3 times more common among first-degree biological relatives of people with this disorder than among the general population.

Suicidality

According to the Department of Health and Human Services (2007), an individual commits suicide every eighteen minutes, and suicide is the eleventh leading cause of death in the United States. According to the World Health Organization (WHO; 2007), mental disorders are associated with more than 90% of all cases of suicide; however, suicide results from many complex sociocultural factors and is more likely to occur particularly during periods of socioeconomic, family, and individual crisis situations. Divorce rates have been linked with suicide rates for centuries. For example, in 1897, Durkheim suggested that the societal rate of suicide might be explained by societal factors such as marriage, divorce, and birth rates (Tartaro, 2005).

Donald, Dower, Correr-Velez, and Jones (2006) reported that suicide risk factors for medically serious suicide attempts included early school leaving; parental divorce (males only); distress due to problems with parents (females only); distress due to problems with peers; distress due to the break-up of a romantic relationship; tobacco use;

high alcohol use; severity of current depressive symptoms and a previous diagnosis of depression. Donald et al. (2006) reported that the protective factors included social connectedness, problem-solving confidence, and locus of control. Donald et al. also found that there was a trend for social connectedness to be more protective among individuals with higher rather than lower levels of depressive symptomatology. The National Strategy for Suicide Prevention encourages adherence to specific objectives. Objective 7:8 emphasizes the importance of family communication and includes the need for education of family members and significant others of persons receiving care for the treatment of mental health and substance abuse disorders with risk of suicide. The American Association of Suicidology (AAS; 2005) prepared recommendations for inpatient and residential patients known to be at elevated risk for suicide that was inspired by Objective 7:8, and includes the following recommendations: routinely scheduled family sessions, assessment of social support availability, and assistance from family members and significant others in outpatient monitoring.

Gender Differences in Depression

According to the *DSM-IV-TR*, major depressive disorder appears in 10-25% of women and 5-12% of men. According to Sadock and Sadock (2003), an almost universal observation, independent of country or culture, is the twofold greater prevalence of major depressive disorder in women than in men. Sadock and Sadock reported some hypotheses that may account for these gender differences that include hormonal differences, effects of childbirth, differing psychosocial stressors for both genders, and behavioral models of learned helplessness.

Culp and Beach (1998) found an association between marital quality and depression symptoms that was mediated by self-esteem for women but not for men. However, Culp and Beach reported that self-esteem moderated the dissatisfaction-depression association in men and thus, men with higher self-esteem reported a smaller association between dissatisfaction and depression symptoms. Sadock and Sadock (2003) reported that behaviorists tend to believe that reduction of depressive symptoms is contingent on the patient learning a sense of control and mastery of the environment. Byrne, Carr, and Clark (2004) examined power difficulties specifically associated with depression in twenty couples in which the female partner was depressed and compared them on a range of interpersonal power variables with twenty healthy control couples in addition to twenty couples in which the female was diagnosed with panic disorder with agoraphobia. Byrne et al. (2004) found that in the depressed group, both partners reported more physical assault in the year prior to the study, and depressed women were more dissatisfied with their control of surplus spending money. They also found that depressed women were less committed in their relationships, and they reported an overall dissatisfaction with decision-making and childcare task distribution. Byrne et al. [(2004)] found that partners in the depressed couples reported more demand-withdraw transactions and less mutual constructive communication within their relationships. Their findings revealed that depressed women did not view separation as an option for various reasons such as religious beliefs, financial hardship, fear of being alone, negative effect on their children, and self-blame for the relationship problems.

Interactional Views of Mental Illness

Communication Theory

According to the communication theory, the existence of a patient diagnosed with a mental disorder in a family or marriage can be viewed as essential for stability in that system, even though this type of stability is very undesirable (Watzlawick, Bavelas, & Jackson, 1967). Inputs, which are defined as family members' actions or environmental actions, introduced into the family system are acted upon and modified by the system (Watzlawick et al., 1967). Therefore, the nature of the system and its feedback mechanisms must be considered in addition to the nature of the input (Watzlawick et al.). This input could produce positive or negative feedback, but regardless of the type of feedback, the system responds to it. For example, some families can effectively manage crises while other families become disengaged during crises. Interpersonal systems, such as families and couples, are viewed as feedback loops since each individual's behavior affects and is affected by the behavior of each other individual (Watzlawick et al.). These systems react quickly and effectively to any internal or external attempts to change its organization, and since manifestations of life are evidently distinguished by stability and change, negative in addition to positive feedback mechanisms must occur in them in specific forms of interdependence or complementarity (Watzlawick et al.).

Specific characteristics of systems can contribute to psychopathology in one or more family members or partners. These interactional patterns that transcend individual family member qualities include complements of or mutually double binding communication (Watzlawick et al., 1967). These interactional patterns typically arise and

become rigid in couples with conflict. According to Watzlawick et al., a series of communications can be viewed as an uninterrupted sequence of interchanges. Whorf (1956) and Bateson and Jackson (1964) noted that individuals participating in interactions typically introduce the punctuation of the sequence of events, and this punctuation organizes behavioral events that are vital to ongoing interactions. They noted that in a long sequence of interchange, the individuals will punctuate the sequence so that it will appear that one individual or the other individual has initiative, dominance, or dependency. The individuals in a system, such as a married couple, will set up patterns of interchange, for which they may or may not be in agreement, and these patterns will be the rules of contingency regarding the exchange of reinforcement (Bateson & Jackson; Whorf). Disagreement about how to punctuate the sequence of events is usually at the root of relationship difficulties (Watzlawick et al.). The nag-withdraw and initiate-avoid patterns of communication are examples.

William Fry (1962) identified ways in which couples with one partner diagnosed with a mental illness typically interact and the function of the symptoms. Fry noted that the patient's symptoms are usually protective of the spouse and the onset of symptoms is associated with a major life change/ life event that is perceived as anxiety-provoking or uncomfortable for his/her spouse. This interactional pattern is referred to as dual control because the patient's symptoms put him/her in the role of the ailing partner, which demands that the other partner be at his/her beck and call (Fry). Thus, the patient's difficulties function to permit the spouse to avoid many situations in which he/she might experience anxiety or discomfort, without being confronted with symptoms (Fry).

These couples usually are described as distant and dissatisfied with their relationship (Watzlawick et al., 1967). Fry (1962) noted that the patient typically becomes uneasy about whether his/her spouse really wants to remain in the relationship with him/her and as a result, he/she begins to demand more from him/her because he/she is sick, which pushes the spouse further away. Although the spouse may remain in the marriage, this does not reassure the patient because he/she believes that the illness is holding the marriage together (Watzlawick, et al.). Fry asserted that as long as the symptoms persist, there is no way out of this dilemma since the spouse feels compelled to associate with the sick spouse for the sake of the illness, he/she can never reassure herself/himself that he/she would voluntarily seek the sick spouse's company. The spouse is in a bind because if he/she remains married to the sick spouse, it may only be because the spouse is so sick, and if the spouse decides to divorce the sick spouse, than he/she is usually viewed as selfish (Fry). Regardless of whether the spouse divorces the sick spouse or the sick spouse recovers from the illness, he/she would have to deal with his/her own anxiety and symptoms that the sick spouse masked (Fry).

The emphasis on the punctuation of interactional sequences and establishment of communication patterns within systems are key ingredients that distinguish communication theory from the other theoretical perspectives outlined in this study. This theoretical perspective can be generalized to couples where one spouse/partner is diagnosed with any type of mental disorder. However, the communication theoretical perspective is only one of the interactional views of mental illness. There are additional perspectives described in this section of the paper that are also valid.

Mood Disorders

Sadock and Sadock (2003) reported that the environmental stressor most often associated with the onset of a depressive episode is the loss of a spouse. Sadock and Sadock also reported that major depressive disorder most often occurs in individuals without close interpersonal relationships, or in individuals who are divorced or separated. There have been several research studies that have reported links between marital distress and depression. Over the past two decades, empirical investigators have begun to adopt an interactional perspective in exploring marital distress and depression (Benazon & Coyne, 1999). Other researchers (Coyne & Benazon, 2001; Whisman, 2001) have reported an association between relationship discord and depression. These findings have led researchers to develop more systemic views of depression. Researchers, such as Bruce (1998) in addition to Dew and Bromet (1991), found that depression substantially increases the likelihood of divorce.

In 1976, James Coyne developed one of the most well known interpersonal models of depression. He suggested that initially nondepressed but mildly dysphoric individuals might seek reassurance from others in order to alleviate their doubts of self worth and doubts about whether other people truly care about them. Coyne posited that other people often respond to these individuals with reassurance, but they doubt the reassurance, attributing it instead to others' sense of pity or obligation. He posited that the potentially depressed person is faced with an inflexible dilemma in that he/she both needs and doubts other individuals' reassurance. According to Coyne, this emotionally powerful need compels the potentially depressed individual to request more feedback

from other individuals but they continue the reassurance, and this pattern repeats again. He posited that because this pattern is repetitive and resistant to attempts to change it, the increasingly depressed person's significant others become frustrated and irritated, which increases their own chances of becoming depressed and it increases the likelihood of them rejecting the depressed individual. Coyne suggested that rejection furthers the shrinkage and disruption of the depressed person's interpersonal environment, which maintains or exacerbates the depressive symptoms (1976a, 1976b).

Benazon and Coyne (1999) admitted that Coyne's (1976) original model did not identify exactly what depressed people did that led to rejection and mood induction in those with whom they interacted. Coyne originally speculated that the nonreciprocal disclosure of intimate problems by individuals diagnosed with depression may have been a source for these effects (Benazon & Coyne). Joiner, Alfano, and Metalsky (1992) challenged Coyne's interactional model of depression by suggesting that reassurance-seeking is responsible for the effects of distressed and depressed individuals on others. Benazon and Coyne noted that Joiner and his colleagues have a different interpretation of Coyne's perspective because they cited Coyne as support for their view that nondistressed people can work their way into clinical depression as a result of excessive reassurance-seeking.

Joiner, Alfano, and Metalsky (1992) reported findings that suggested reassurance-seeking is a discernible feature of the interpersonal behaviors associated with depression and interpersonal distress. Coyne and Benazon (1999) argued that Joiner and colleagues have not proven that reassurance-seeking explains the epidemiology and

temporal parameters of depression by focusing on the short-term relations between reassurance-seeking and distress. For example, Benazon (2000) conducted a study on reassurance-seeking in individuals diagnosed with depression and concluded there was no relation observed between reassurance-seeking and depression. However, Benazon reported evidence that depressed patients did seek reassurance in their marital relationships, and reassurance-seeking behavior was correlated with spouse distress, but other factors may have contributed as well.

Joiner, Metalsky, Katz, and Beach (1999) asserted that excessive reassurance-seeking constituted the key element in this theory in that it served as a type of interpersonal vehicle that transmitted the distress and desperation of depression from one individual to another individual with untoward consequences for all. Joiner et al. (1999) defined excessive reassurance-seeking as the relatively stable tendency to excessively and persistently seek assurances from others that one is lovable and worthy, regardless of whether such assurance has already been provided. They emphasized excessive reassurance-seeking, in the context of Coyne's theory, which produced research that pertained to causal factors in depression and the consequences of depression. Joiner et al. argued that reassurance-seeking can be viewed both as a vulnerability factor for depression as well as an explanation of the consequences of depression. They proposed that a high level of reassurance-seeking is an indication in the subsequent development of depression, and so this reassurance-seeking behavior actually serves as a diathesis for depression (Benazon & Coyne, 1999). Benazon and Coyne argued that Joiner et al. cited temporal precedence as evidence that reassurance-seeking is casually related to distress,

but none of their studies actually included clinical samples. Thus, their case that reassurance-seeking is labeled as a diathesis of depression is based on their display of commonplace mood fluctuations as predicted by reassurance-seeking (Benazon & Coyne).

Coyne, Thompson, and Palmer (2002) conducted a study on a sample of 73 couples in which the wives were diagnosed with depression and being treated in outpatient and inpatient settings in an effort to identify precipitating events of the most recent episode. Coyne et al. (2002) found that for couples with a depressed wife treated in an outpatient setting, there was a reduced exchange of affection, especially physical affection, and more pervasive marital problems in addition to more destructive and less constructive, conflict resolution tactics. They also found that the husbands of these depressed outpatient women reported expressing more affection and using more constructive tactics for resolving conflict than their wives report for themselves.

Coyne, Thompson, and Palmer (2002) reported that depressed outpatient women had more complaints of sexual dissatisfaction, marital boredom, spousal stubbornness, and financial disagreements, in addition to difficulties in communication. Coyne et al. (2002) found that their husbands complained more about their wives' failure to meet role expectations, conflicts about children, sexual dissatisfaction, and the wives' lack of respect for them. These authors also reported that husbands of inpatient and outpatient women complained about a number of similar things when compared with community controls, including feeling blamed, having arguments, and their wives' dependency and lack of ambition. They found that the husbands of inpatients complained more about their

wives' chronic illness (most probably their depression) and less about difficulty with communication than the husbands of outpatient depressed women.

Coyne, Thompson and Palmer (2002) suggested that these couples may have adapted to the recurrent, episodic nature of depression, and couples who were less able to adapt were no longer represented among the still married. Coyne et al. (2002) reported that the outpatient women (mean age was 39 years old) in their sample, recruited from the University of Michigan Depression Program, did not have an increased likelihood of having been previously married, and the older depressed inpatient women (mean age was 48 years old) who were still married had less marital distress and less destructive coping styles. The authors did not identify a single factor that provided an explanation of the older age of the inpatient depressed women or its associated correlates. They suggested that the attributions that spouses and other family members have about the depressed individual's symptoms may differ, and so the patient's difficulties may be more readily accepted by spouses and family members when attribution to a disorder is supported by formal diagnosis and hospitalization, in the case of inpatient depressed women. They also highlighted a potential disadvantage of this attribution is that the patient's dissatisfaction with their husbands may be discounted and their efforts to renegotiate these relationships could actually be hampered by others' attributions of their discontent to a mental disorder instead of treating it as a legitimate concern. They asserted that without comparisons to a sample of married depressed men, it could not be determined whether effects found for depression in married women are due to depression or to an interaction between depression and gender.

Coyne, Thompson, and Palmer (2002) asserted that despite the findings on marital functioning in interpersonal perspectives on depression (Coyne, 1976; Joiner & Coyne, 1999) and discussions of the social consequences of depression (Bruce, 1998), the empirical literature that focuses on individuals with depressive diagnoses is restricted in quantity and scope. Coyne et al. (2002) asserted that marital satisfaction and conflict require a broader assessment of marital functioning, specifically the role of variability in positive interactions because some couples remained married and did not regret their choice of partners even in the face of severe depression that required hospitalization, which directs greater attention to the strengths of such persevering couples. Johnson and Jacobs (2000) reported that a lack of affection and other deficiencies in positive aspects of the marital relationship may contribute directly and indirectly to an observed lack of problem-solving skills and destructive means of dealing with conflict. They also asserted that without comparisons to a sample of married depressed men in their study, it was not determined whether effects found for depression in married women were due to depression or to an interaction between depression and gender. Coyne et al. (2002) asserted that greater attention is needed concerning the heterogeneity in couples with a depressed person, both in terms of the settings from which depressed individuals are recruited in addition to the quality of their marriages.

Denton and Burleson (2007) conducted a study to explore the extent to which Initiator Style Questionnaire (ISQ) assessments of self and partner initiator tendencies converged with assessments of initiator tendencies provided by trained judges who coded videotaped conjoint interviews conducted with spouses. This study included assessments

of mood, personality, interaction, and relationship quality. The sample included 60 married couples. The personality measures included an assessment of conflict management skills derived from Burleson and Samter's (1990) Communication Functions Questionnaire in addition to a religiosity assessment. Mood was assessed by the Beck Depression Inventory (BDI). The interaction assessments from the Communication Patterns Interview (CPI; Denton, Burleson, Hobbs, Von Stein, & Rodriguez, 2001) provided the basis for examination of the extent to which ISQ assessments of self and partner initiator tendency converged with assessments of initiator tendency based on a clinical-type interview. The relationship variable measures included the Dyadic Adjustment Scale (DAS; Spanier, 1976), which is a relationship satisfaction measure, and the Positive Feelings Questionnaire (PFQ; O'Leary, Fincham, & Turkewitz, 1983), which measures the degree of liking partners have for each other.

Denton and Burleson (2007) reported that the ratings for self initiator tendency were negatively associated with depression and depression was not associated with ratings of partner initiator tendency. They reported that associations between ISQ assessments of initiator style and value for conflict management skill, depression, and marital quality were modestly but statistically significant. They found negative associations of self initiator tendency with depression, and a positive association of self ratings with the value placed on conflict management skill. They reported that these associations suggest that less depressed people, who value constructive conflict management, also perceived themselves as more likely to initiate relationship discussions.

According to Denton and Burleson (2007), women consistently saw themselves as more likely to initiate problem discussions than they see their partners as likely to initiate these discussions. Denton and Burleson's finding is consistent with self-in-relation theoretical researchers' findings on gender differences. Self-in-relation theorists believe that women place greater importance on establishing and maintaining close relationships (Gilligan, 1982; Jack, 1991).

Marks and Choi (2006) conducted a study that included longitudinal data from a national sample of 1,842 married adults (ages 35 and older) to investigate whether the psychological consequences of transitioning into the caregiver role for a biological parent, parent-in-law, spouse, other kin, or nonkin among married adults was moderated by marital quality. Marks and Choi found that when compared to noncaregivers, new caregivers for a biological parent or spouse experienced a greater decline in happiness and an increase in depressive symptoms when they reported a higher level of marital disagreement. They reported that the psychological effects of becoming a caregiver for a biological parent or spouse among married adults is contingent on marital quality role, and higher levels of marital disagreement was found to be harmful to the psychological well-being of primary kin caregivers, but not secondary kin. Although Marks and Choi did not find any significant gender differences in depression, they reported that higher ratings of marital disagreement led to a greater decrease in global happiness and a larger increase in depression over time for biological parent or spouse caregivers when compared to their noncaregiver counterparts.

Summary

This chapter consisted of an overview of the literature on dynamics within couple communication patterns. The two main couple communication patterns presented included demand-withdraw and initiate-avoid patterns. The characteristics of these two communication patterns represent the ways in which these patterns differ in terms of the duration of the couple's relationship, marital quality, marital satisfaction, marital stability, and conflict style. However, the research findings suggest that these two communication patterns influence health outcomes in similar ways, and gender differences are evident in both of these communication patterns. Several of the findings reported reflected the ways in which couple interactional patterns influence mental health outcomes in addition to physical health outcomes. Since the purpose of the current study is to explore initiate-avoid patterns in couples where one partner/spouse is diagnosed with severe major depressive disorder, the interactional view of this illness was also outlined. Given the gap in the research on initiate-avoid communication patterns in these couples, this study will be the first to demonstrate ways in which this pattern manifests in their relationships.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this quantitative research study is to explore couple communication from a social-cognitive theoretical perspective in couples with one partner diagnosed with a mental illness. This quantitative research study was conducted to identify initiate/avoid communication styles in patients diagnosed with major depressive disorder and their spouses/partners. A comparison group, consisting of couples with individuals that are not diagnosed with the severe mental disorders, was also included in this study to determine whether the initiate/avoid communication styles in patients and their spouses/partners differs from couples in the comparison group. Data were collected by the principal investigator through the administration of the Inventory of Depressive Symptomatology – Clinician Rated (IDS-C), the Initiator Style Questionnaire (ISQ), and the Quality of Marriage Index (QMI) to inpatient participants diagnosed with major depressive disorder. Data were collected by the principal investigator through the administration of the ISQ, QMI, and a Brief Demographic Questionnaire (Appendix F) to inpatient participants' spouses/partners. The participants in the comparison group completed the Brief Demographic Questionnaire, ISQ, and QMI online through Survey Monkey.

Research Questions

1. Will the patients' Initiator Style Questionnaire (ISQ) scores be different from their spouses'/partners' Initiator Style Questionnaire (ISQ) scores?
2. Is there a relationship between the patients' symptom severity scores and their self initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ)?
3. Is there a relationship between the patients' symptom severity scores and their perceived spouse/partner initiator tendency scores?
4. Will females' Initiator Style Questionnaire (ISQ) scores differ from males' Initiator Style Questionnaire (ISQ) scores?
5. Is there a relationship between participants' Initiator Style Questionnaire (ISQ) scores and their Quality of Marriage Index (QMI) scores?

Hypotheses

1. There will be no statistically significant relationship between the patients' symptom severity scores as measured by the Inventory of Depressive Symptomatology-Clinician Rated (IDS-C) and self initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ).
2. There will be no statistically significant relationship between the patients' symptom severity scores as measured by the Inventory of Depressive Symptomatology-Clinician Rated (IDS-C) and participants' marital/relationship quality scores as measured by the Quality of Marriage Index (QMI).

3. There will be no statistically significant difference in female participants' self initiator tendency scores when compared to male participants' self initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ).
4. There will be no statistically significant difference in female participants' perceived spouse/partner initiator tendency scores when compared to male participants' perceived spouse/partner initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ).
5. There will be no statistically significant relationship between initiate-avoid communication patterns as measured by the Initiator Style Questionnaire (ISQ) and participants' marital/relationship quality scores as measured by the Quality of Marriage Index (QMI).
6. There will be no statistically significant relationship between mutual initiation communication patterns as measured by the Initiator Style Questionnaire (ISQ) and participants' marital/relationship quality scores as measured by the Quality of Marriage Index (QMI).

Participants

The principal investigator recruited 30 individuals admitted to an acute care inpatient psychiatric unit at the University of Texas Southwestern Medical Center for the treatment of major depressive disorder diagnosed by the Diagnostic Statistical Manual of Mental Disorders – Fourth Edition – Text Revision (*DSM-IV-TR*) criteria and their spouses/partners. After receiving written informed consent of the University of Texas (UT) Southwestern Institutional Review Board (IRB) consent forms from willing

participants, the principal investigator contacted their spouses/partners. The principal investigator only administered the Inventory of Depressive Symptomatology-Clinician Rated (IDS-C), Initiator Style Questionnaire (ISQ), and Quality of Marriage Index (QMI) one time to the participants on the inpatient psychiatric unit. Each inpatient participant was randomly assigned a number included on the IDS-C, ISQ, and QMI in place of his/her name. The inpatient participants' spouses/partners only completed the Brief Demographic Questionnaire, ISQ and QMI one time on the inpatient psychiatric unit. The inpatient participants' spouses/partners were assigned a random number that was included on the ISQ and QMI in place of his/her name. Recruitment from this site was from December 2007 through November 2009. The total sample size recruited from this facility was 60 participants.

A comparison group consisting of 30 couples consisted of graduate students in the Family Sciences Department at Texas Woman's University, others in the community that these students thought might want to participate in the study, and other people that the principal investigator did not know but were recruited by people whom she does know. The principal investigator received permission from the Family Sciences Department Chair, Larry Leflore, Ph.D., at Texas Woman's University, to send an email that contains information about the study to the students currently enrolled in Family Sciences graduate programs at Texas Woman's University. Students who received this email (see Appendix D) could choose to anonymously participate in the research study online through accessing the inclusion criteria, consent form (see Appendix E), directions (see Appendix G), and completing the instruments through the Survey Monkey secured

website. Survey Monkey is a well-known and secure website. Survey Monkey utilizes a third-party firm to conduct daily audits of their security, and the researchers' data were also protected by the latest firewall and intrusion prevention technology. These students could also forward this email to other people they knew who may be willing to anonymously participate in the study online. The same process applied to the other people not affiliated with TWU that received the email.

A total of forty-one comparison couples were recruited. Thirty of these comparison couples were matched to the thirty inpatient couples based on homosexual/heterosexual status, gender, ethnicity, age, and length of relationship. Nine comparison group couples were not used as they were acquaintances of the principal investigator, two comparison group couples were not used due to self and spouse/partner answers being nearly identical, and occurring one right after another (within two minutes), an indicator that one member of the couple filled out the assessments for both. Fifty percent of the couples included as participants filled out assessments within two minutes of each other but their responses were different from one another, and therefore were deemed acceptable for inclusion. Health information was not collected from the comparison group participants. The comparison group participants did not complete the Brief Demographic Questionnaire, ISQ and QMI on the UT Southwestern Medical Center at Dallas campus.

Criteria for Inclusion

Adult patients, ages 18 and up, were included in the study. Patients must be married or in a committed romantic relationship for at least six months to be eligible for

participation in this study. All inpatient participants must have a major depressive disorder diagnosis. Each inpatient participant's admission status was voluntary. All participants had to speak English and read English because the ISQ and QMI have not been translated into any other languages and funding is not available for a translator.

Criteria for Exclusion

Patients were excluded from this study if they were (1) mentally retarded, (2) diagnosed with psychosis that interferes with their ability to complete the measures for this study, (3) receiving Electroconvulsive Therapy (ECT), or (4) diagnosed with dementia. Comparison group participants were excluded from the study if they were diagnosed with major depressive disorder, schizoaffective disorder, or schizophrenia.

Instrumentation

The Initiator Style Questionnaire (ISQ). The ISQ (Denton & Burleson, 2006) was administered to the inpatients diagnosed with depressive disorders and their partners. The ISQ provides self-report assessments of self and partner's perceived initiator tendencies. The ISQ consists of ten items (*alpha* = .91) that assess individual difference in the tendency to initiate or avoid discussions about perceived problems in relationships. Denton and Burleson (2007) reported that the ISQ exhibits excellent reliability with the two subscales displaying strong unidimensionality across all three studies and robust internal consistency with alpha coefficients approaching or exceeding .90. They reported that both scales exhibit excellent test-retest reliability, with these correlations approaching .80 for partner tendency and exceeding .80 for self-tendency. They reported

that the ISQ demonstrated good discriminant validity by its independence from most demographic variables (other than gender).

Denton and Burleson (2007) conducted a factor analysis for the self item set, and they reported that all ten items correlated acceptably with a single factor solution, with loadings ranging from .59 to .84 (item loadings ranged from .52 to .83 for men and from .61 to .86 for women). The internal consistency (Cronbach's alpha) for these ten items was x =.89 (.86 for men and .89 for women), and a unidimensional solution was accepted for the ten self items (Denton & Burleson, 2007). They reported that the factor analysis on the partner item set extracted only one factor, which had a large eigenvalue (66.6), and explained 66.6% of the variance in the correlations among the ten items. Denton and Burleson found that all ten items correlated strongly with this factor in which loadings ranged from .61 to .90 (item loadings ranged from .58 to .87 for men and from .65 to .92 for women). The internal consistency (Cronbach's alpha) for these ten items was x = .94 (.93 for men and .95 for women), and the unidimensional solution for the ten partner items was accepted (Denton & Burleson, 2007). They reported that the items measured the perceived tendencies by self and partner to initiate discussions about relationship issues, and face validity was further supported by the unidimensional character of the items for each scale. Denton and Burleson also reported that the construct validity of the ISQ was supported by the expected gender differences and by associations with marital quality, and this is consistent with research examining sex differences in conflict behavior, social influence, and demand-withdraw communication. They found that the

construct validity of the ISQ was further supported by the positive associations of both of its subscales with marital quality (2007).

Quality of Marriage Index (QMI). The QMI (Norton, 1983) is a six item scale that produces a measure of marital/relationship satisfaction. Items one through five are on a 7-point Likert scale, and item six is on a 10-point Likert scale. Reliability and validity are established for this instrument.

Inventory of Depressive Symptomatology – Clinician Rated (IDS-C). The psychometric properties of the IDS-C (Rush, Giles et al., 1986; Rush, Gullion, Basco, Jarrett, & Trivedi, 1996) have been established, and it assesses all of the criterion in the *DSM-IV* to diagnose a major depressive episode. This assessment typically measures of symptom severity. This measure has been utilized in numerous inpatient populations. The seven-day period prior to assessment is the usual time frame for assessing symptom severity. This instrument assesses the nine diagnostic symptom domains of a major depressive episode. The nine domains include sad mood; concentration; self criticism; suicidal ideation; interest; energy/fatigue; sleep disturbance that include initial, middle, and late insomnia or hypersomnia; decrease or increase in appetite or weight; and psychomotor agitation or retardation. This measurement includes thirty items and the clinician rates each item on a scale of zero to three.

Brief demographic questionnaire. This questionnaire consisted of a total of four questions regarding the participant's age, gender, ethnicity, and length of time in the committed relationship or marriage.

Psychometric properties of the Initiator Style Questionnaire. Denton and Burleson (2007) conducted three studies to establish initial evidence of the reliability and validity of the Initiator Style Questionnaire (ISQ). The first study focused on the development of the ISQ items, assessed reliability, and provided initial validation. The sample in the first study included 151 married adults. Construct validity was established through evaluation of gender differences in reports of self and partner initiate-avoid tendencies. Participants in this study responded to a preliminary version of the ISQ that consisted of items describing the tendencies of self and partner with respect to initiating or avoiding discussions of relationship problems. The factor analysis for the self item set for all 10 items correlated acceptably with a single factor solution, with loadings ranging from .59 to .84 (item loadings ranged from .52 to .83 for men and from .61 to .86 for women). The internal consistency (Cronbach's alpha) for these 10 items was excellent, x =.89 (.86 for men and .89 for women). A unidimensional solution was accepted for the 10 self items. The identity coefficient (Van de Vijver & Leung, 1997) for the pattern of item loadings for men and women were quite high (e =.984), indicating a high degree of similarity in the factor matrices for the two sexes.

Factor analysis on the partner item set extracted only one factor, which had a large eigenvalue (66.6), and explained 66.6% of the variance in the correlations among the 10 items. All 10 items correlated strongly with this factor, with loadings ranging from .61 to .90 (item loadings ranged from .58 to .87 for men and from .65 to .92 for women). The internal consistency (Cronbach's alpha) for these 10 items was excellent, x = .94 (.93 for men and .95 for women). The unidimensional solution for the 10 partner items was

accepted. A very high identity coefficient (e = .995) indicated great similarity in the factor matrices for men and women. Face validity, internally consistency, and a dimensionally simple set of items for assessing self and partner's initiator tendencies were established through developing 10-item scales to measure each of these tendencies. Consistent with Denton and Burleson's hypothesis (2007), the ISQ demonstrated sensitivity to gender differences. They found that women saw themselves as more likely to initiate problem discussions than men saw themselves, and men also viewed women as likely to initiate relationship problem discussions. Women also viewed their partners as less likely to initiate problem discussions. Denton and Burleson reported that consistent with the other research on sex differences in communication and social behavior, the magnitude of these sex differences is modest, explaining between 1% and 11% of the variability in initiator ratings (and averaging 6% of the variability; 2007). They reported that the ISQ findings are consistent with the results from previous research that indicate women are more likely than men to initiate problem discussions with their intimate partners, and these findings provide some support for the validity of the ISQ.

The test-retest reliability was established in the first and second studies. Denton and Burleson (2007) reported that both scales exhibited excellent test-retest reliability, with these correlations approaching .80 for partner tendency and exceeding .80 for self-tendency. Denton and Burleson (2007) offered additional assessments of the reliability and the validity of the ISQ in their second study. They assessed whether initiator tendency was positively associated with social approval, verbal aggression, and argumentativeness using three personality measures. Their sample consisted of 120

patients recruited from a general psychiatric outpatient clinic and a marriage and family therapy clinic. The demographic variables included age, years married, family income, gender, ethnicity, number of marriages, and number of divorces.

The Marlowe-Crowne Social Desirability Scale, Trait Argumentativeness Scale and the Trait Verbal Aggressiveness Scale were administered in addition to the ISQ to the participants. Denton and Burleson (2007) reported that correlational analyses indicated that the ISQ was negatively associated with both need for approval (r = -.20, p<.05) and verbal aggressiveness (r =.-30, p<.001). They reported that these modest negative correlations between ratings of one's own initiator tendency and the traits of need for approval and verbal aggressiveness suggested that those who see themselves as initiating relationship discussions are less likely to see themselves as acting in socially desirable ways or as trying to hurt others by attacking their self-concept.

Denton and Burleson (2007) found that individuals with a high need for social approval may be somewhat less inclined to report initiating problem discussions with their partners than those with a lower need for social approval, and the amount of variance shared (4%) indicated that the approval motive does not substantially confound the ISQ's assessment of one's own initiator tendency. Denton and Burleson (2007) reported that the negative association of one's own initiator tendency with verbal aggressiveness suggested that the tendency to initiate problem discussions is not a form of aggression. They found that participants who avoided relationship discussions reported higher levels of verbal aggression. Denton and Burleson (2007) reported that this finding is consistent with clinical observations that a reason given by avoiders to avoid

relationship discussions is their concern that the discussion will be destructive because when avoiders finally get forced into engagement they may do so with shouting, cursing, etc. Denton and Burleson (2007) reported that ratings of partner initiator tendency were not associated with the need for approval, verbal aggressiveness, or argumentativeness.

Denton and Burleson (2007) also established discriminant validity in their second study by the ISQ's independence from most demographic variables (other than gender). Denton and Burleson reported that several indices derived from the ISQ subscales correlated at moderate to strong levels with assessments of dyadic interaction patterns obtained with the well-established CPQ. Denton and Burleson reported that a correlation (r =.39) was observed between the ISQ and Communication Patterns Questionnaire (CPQ; Christenson & Heavey, 1990 Christenson & Sullaway, 1984) assessments of mutual constructive communication.

Denton and Burleson (2007) reported a weaker (r = .39) correlation between the ISQ and CPQ assessments of total demand-withdraw but these correlations are not so strong to suggest that the ISQ and CPQ are parallel measures. Denton and Burleson found that indices from the ISQ and CPQ correlated in a very similar manner with marital quality that was consistent with previous theorizing about communication patterns and marital quality. They found that indices of demand-withdraw (or initiate-avoid) communication from both instruments were negatively associated with marital quality, while indices of mutual initiations (mutual constructive communication) from both instruments were positively associated with marital quality. Denton and Burleson found

that the construct validity of the ISQ was supported by the expected gender differences and by associations with marital quality.

Replicating the results of the first study and consistent with research examining sex differences in conflict behavior, social influence, and demand-withdraw communication, both men and women generally rated women in this sample as being more likely to initiate relationship discussion than men (Denton & Burleson, 2007). The construct validity of the ISQ was further supported by the positive associations of both of its subscales with marital quality, and these positive associations confirm the expectation that the perceived ability to discuss relationship issues contributes to marital satisfaction (Denton & Burleson, 2007).The context specificity of the attributes assessed by the ISQ could explain the lack of association with the argumentativeness scale because the general trait of argumentativeness did not influence the perceived likelihood of self or partner initiation of discussion about relationship issues (Denton & Burleson).

Denton and Burleson (2007) further validated the ISQ in the third study by comparing the self-report assessments with coder ratings based on a semistructured interview. Denton and Burleson conducted this study to obtain further evaluations of the convergent, construct, and discriminant validity of the ISQ (2007). They accomplished this by including several additional assessments that included all of the variables included in the second study as well as level of education, religious denomination or affiliation, and number of children in the home. They also included a personality measure (Communication Functions Questionnaire), a religious measure, an interactional measure (the ISQ and CPI; assessments from the CPI provide the basis for examining the extent to

which ISQ assessments of self and partner initiator tendency converge with assessments of initiator tendency based on a clinical-type interview), a relational measure (Dyadic Adjustment Scales and the Positive Feelings Questionnaire), and a mood assessment (Beck Depression Inventory). This third study also explored the extent to which ISQ assessments of self and partner initiator tendencies converged with assessments of initiator tendencies provided by trained judges who coded videotaped conjoint interviews conducted with spouses.

The sample in this third study included 60 married couples. The Beck Depression Inventory (BDI) was used to measure depression in participants, and the reliability of the BDI was $\alpha = .88$. Denton and Burleson (2007) reported that ratings for self initiator tendency were significantly, but weakly, negatively associated with depression ($r = .17$, $p < .05$, one-tailed) and depression was not associated with ratings of partner initiator tendency ($r = -.11$). Denton and Burleson reported that associations between ISQ assessments of initiator style and value for conflict management skill (CPI), depression (BDI), and marital quality (DAS) were statistically significant. The construct validity is further supported by the negative associations of self initiator tendency with depression, and the positive association of self ratings with the value placed on conflict management skill. They reported that these associations indicated that less depressed people, who valued constructive conflict management, also perceived themselves as more likely to initiate relationship discussions.

Denton and Burleson (2007) examined the Initiator Style Questionnaire (ISQ) across three studies and found that these findings indicated that the 2 parallel 10-item

measures of the ISQ exhibited strong unidimensionality, internal consistency, and test-retest reliability, as well as appropriate discriminant validity and good convergent as well as construct validity. Good internal consistency and strong unidimensionality was demonstrated in all three studies, and the ISQ exhibited excellent reliability with the two subscales displaying strong unidimensionality across all three studies and robust internal consistency with alpha coefficients approaching or exceeding .90.

Denton and Burleson (2007) also reported that the items clearly appear to be measuring the perceived tendencies by self and partner to initiate discussions about relationship issues in all three studies. Denton and Burleson reported that the face validity was further supported by the unidimensional character of the items for each scale. Denton and Burleson reported that the gender differences were the same in the first and second study, but the third study revealed that men rated themselves as more likely to initiate discussion than they rated their partners.

Sampling Procedures

Recruitment of Subjects

Since the principal investigator is employed as a Licensed Professional Counselor and Licensed Marriage and Family Therapist, on a part-time as needed basis, on the inpatient psychiatric unit, there is a possibility that potential subjects could be her patients on the unit after they have completed their participation in this research study. Any inpatients that have been established as the principal investigator's patients, within the context of a counseling relationship, were not approached about participation in this research study to avoid a dual relationship. Only potential inpatient participants that have

not been established as the principal investigator's patients, within the context of a counseling relationship, were approached by her about the possibility of participating in the study.

The principal investigator determined whether potential inpatient subjects may be eligible for participation in the study through consultation with staff members who have had contact with them and/or through attending the weekly treatment team meetings on the inpatient psychiatric unit. After the treatment team meetings, the principal investigator consulted with all potential inpatient participants' treating physicians about the possibility of recruiting them for the study. The principal investigator approached the potential inpatient participants about the study. All potential inpatient participants were approached by the principal investigator about the study within twenty four hours of admission to the inpatient psychiatric unit (see Appendix A). The principal investigator answered any questions that the inpatient asked her about the research study.

If the inpatient decided to participate in the study, then the principal investigator obtained written informed consent to contact his/her spouse/partner during visitation hours on the unit or by telephone about the possibility of participating in the study (see Appendix B). The principal investigator answered any questions the spouse/partner asked her about the study. Written informed consent of the University of Texas Southwestern Medical Center at Dallas (UTSW) IRB consent form and HIPAA consent form was obtained from each willing inpatient participant. Written informed consent of the UTSW IRB consent form was obtained from each inpatient participant's spouse/partner who was willing to participate in the study.

Since both spouses/partners must agree to participate in this study, the principal investigator informed the inpatients about whether their spouses/partners decided to participate in the study. If the inpatient's spouse/partner decided not to participate in the study, then the principal investigator informed the inpatient (see Appendix C). The principal investigator answered any questions that the inpatient asked her.

The principal investigator administered the IDS-C, ISQ and QMI to each willing inpatient participant within twenty four hours of admission to the inpatient psychiatric unit. The principal investigator has received the appropriate level of training to administer these instruments. Their spouses/partners completed the Brief Demographic Questionnaire, ISQ and QMI on the inpatient psychiatric unit. Each inpatient participant and his/her spouse/partner received a ten dollar gift card to Walmart for participation in the study after completing the instruments.

The principal investigator included a comparison group consisting of 30 couples. The principal investigator received permission from the Family Sciences Department Chair at Texas Woman's University, Larry LeFlore, Ph.D., to send an email that contains information about the study to the students currently enrolled in Family Sciences graduate programs at Texas Woman's University. Students who received this email could choose to anonymously participate in the research study online through accessing the inclusion criteria, consent form, and completing the instruments through the Survey Monkey secured website. These students could also forward this email to other people they knew who may be willing to anonymously participate in the study online. The principal investigator's acquaintances were also included in the comparison group to

reach the goal of recruiting 30 couples. Health information was not collected from the comparison group participants. The comparison group participants did not complete the Brief Demographic Questionnaire, ISQ and QMI on the University of Texas Southwestern Medical Center at Dallas campus. The comparison group participants only completed the Brief Demographic Questionnaire, ISQ, and QMI one time for the study. The comparison group participants were not paid for participation in the research study.

Data Collection

Results of the IDS-C, ISQ, QMI, and Brief Demographic Questionnaire were collected and entered into a database in a password-protected file. Random numbers were assigned to each participant. The test results were filed under a list containing only the randomized participant numbers.

Treatment of Data

Demographic data on the inpatient participants were collected from their charts, by the principal investigator after obtaining written informed consent of the HIPAA consent form and UTSW IRB consent form from these participants. No health information was collected from the inpatients' spouses/partners. No health information was collected from the comparison group participants. Random numbers were assigned to each participant. The demographic data and the results were filed under a list containing only the randomized participant numbers.

Ethical Considerations

The administration of these measures presented no more than minimal risk to participants in this study. The IDS-C is a standard psychometric measure routinely used

in the collection of data for patients. No psychological, physical or emotional impact is anticipated. There are no associated negative psychological or physical effects for any of the measures used in this study. The potential benefit from this investigation is the determination of whether there is an association between initiator style and severe mental illnesses, which expands the knowledge of the interpersonal nature of these illnesses. The risks for this study are minimal as the instruments are used in patient care, are noninvasive, and did not cause any change in patient care and rapport or interfere with their treatment.

Protection of Human Subjects

All of the assessment results were filed under a list containing only randomized participant numbers. Each spouse/partner completed the ISQ and QMI separately to maintain confidentiality. Random numbers were assigned to each participant. The data were kept on a database in a password-protected file. Analyses of these results provided data to determine probable communication style profiles representative of couples with one partner diagnosed with major depressive disorder. A potential benefit is to expand the knowledge of the interpersonal aspects of these mental illnesses through the identification of initiate/avoid communication patterns in these couples. There were no special precautions for this research study. The instruments utilized in this study did not interfere with participants' treatment. These instruments did not increase inpatient participants' length of stay on the inpatient psychiatric unit.

Data Analysis Procedures

1. In order to replicate the analyses performed by Denton and Burleson (2007), an index was produced from the ISQ for males' perceptions of the man-demand, woman-withdraw pattern by subtracting males' scores for spouse/partner initiator tendency from their own initiator tendency score ($ISQ_{self} - ISQ_{spouse/partner}$) which reflected the extent to which males see themselves as initiating more relationship problem discussions than their spouses/partners. A second index was produced for females' perceptions of man-demand, woman-withdraw by subtracting females' scores for their own tendency from their spouse/partner tendency score ($ISQ_{spouse/partner} - ISQ_{self}$), which reflected the extent to which females see their male spouses/partners initiating more relationship problem discussions than they do. A third index was produced from the ISQ for females' perceptions of the woman-demand, man-withdraw pattern by subtracting females' scores for spouse/partner tendency from their own tendency ($ISQ_{self} - ISQ_{spouse/partner}$). A fourth index was produced for males' perceptions of woman-demand, man-withdraw by subtracting males' self initiator tendency scores from their spouse/partner tendency score ($ISQ_{partner} - ISQ_{self}$). An index for total demand-withdraw communication in a relationship was produced by calculating the absolute value of the difference between the two ISQ subscales ($ISQ_{self} - ISQ_{spouse/partner}$) for all of the participants. A two (gender: male vs. female) X four (group: inpatient vs. spouse/partner of inpatient vs. inpatient comparison vs. spouse/partner comparison) X two (within subjects factor: self initiator score vs.

perceived spouse/partner initiator score) repeated measures ANOVA was conducted on these scores.

2. For hypotheses one and two, Pearson's correlation coefficients, paired t-tests, and one-way analysis of variance were computed.
3. For hypotheses three and four, 2 X 2 ANOVAs were conducted.
4. For hypotheses 5 and 6, correlations and 2 X 2 ANOVAs were computed to assess whether there was a significant relationships between the QMI scores and ISQ scores. A correlation was computed to assess whether there was a significant relationship between participants' QMI scores and the total demand-withdraw index on the ISQ. A correlation was computed to assess whether there was a significant relationship between the mutual communication index and the participants' QMI scores.

Summary

The purpose of this research study was to explore couple communication from a social-cognitive theoretical perspective in couples with one partner diagnosed with a major depressive disorder. Participants in this study were recruited from the inpatient psychiatric unit, Texas Woman's University and community sites. The principal investigator recruited a total of 60 participants for this research study in order to achieve adequate statistical power. Data were collected through the Inventory of Depressive Symptomatology – Clinician Rated (IDS-C), the Initiator Style Questionnaire (ISQ), the Quality of Marriage Index (QMI), and a Brief Demographic Questionnaire. The principal investigator maintained all of the professional standards in accordance with Texas State

Board of Examiners of Licensed Professional Counselors, Texas State Board of Examiners of Licensed Marriage and Family Therapists, the University of Texas at Southwestern Medical Center at Dallas, and Texas Woman's University. The participants' confidentiality was protected as permitted by law.

CHAPTER IV

RESULTS

The purpose of the current research was to explore couple communication when one partner had been hospitalized for major depressive disorder and to compare the couple communication to couples not diagnosed with major depressive disorder. Couple communication was also examined in light of quality of marriage, depression symptom severity, and various demographic variables.

In the current study, measures of central tendency, including means and standard deviations, as well as frequencies and percentages were used to describe the sample. Relationships among categorical demographic variables were examined using crosstabulations with Pearson's chi square, and also Cramer's V to check for multicollinearity. Continuous variables were tested for normality using the Kolmogorov-Smirnov test of normality. Relationships among continuous variables were tested using Pearson's product moment correlations. One-way and two-way Analysis of Variance (ANOVA), independent samples t-tests, and paired sample t-tests were conducted to test for differences between the levels of categorical variables on the continuous dependent variables. In addition, homogeneity of variance was tested using Levene's Test for Equality of Variances.

Preliminary Analyses

Demographic Descriptives

The present study included 60 couples for a total of 120 participants. Of the 60 couples, one half had one member of the couple who was hospitalized due to Major Depressive Disorder. The other 30 couples were a comparison sample, where neither member of the couple had been diagnosed with Major Depressive Disorder, Schizoaffective Disorder, or Schizophrenia. The reason why Schizoaffective Disorder and Schizophrenia were part of the exclusion criteria for the comparison group was because the current study originally included patients with these diagnoses. However due to time constraints, the research including these patient populations was discontinued, but the diagnoses remained in the exclusion criteria for the comparison group because these couples already completed the study. The comparison couples were matched to the couples who had one member hospitalized on the demographic variables of gender, ethnicity, age, and length of relationship. Two of the couples included in the sample were homosexual. One couple was in the group of hospitalized patients and the other couple was a comparison couple. Both homosexual couples consisted of two males, and these couples were included in analyses.

The demographic characteristics are discussed in terms of four groups, which are the 30 inpatients, 30 spouses/partners of inpatients, 30 comparison participants, and 30 spouse/partner comparison participants. For the inpatient group, the majority were female (70.0%), and Caucasian (93.3%). One Asian participant (3.3%) and one Hispanic participant (3.3%) were also in the inpatient group. The mean years of age was $M = 48.90$

(*SD* = 14.49), with a minimum of 18 and a maximum of 80 years. The mean years in relationship was *M* = 22.83 (*SD* = 15.98), with a minimum of 10 months and a maximum of 58 years. The comparison group had a similar demographic profile because they were matched on demographic variables to the inpatient group. The comparison group was also made up of 70.0% female. For ethnicity, 96.7% were Caucasian and one participant was Hispanic (3.3%). The mean years of age was *M* = 48.33 (*SD* = 13.89), with a minimum of 26 and a maximum of 72 years. The mean years in relationship was *M* = 22.38 (*SD* = 14.81), with a minimum of 16 months and a maximum of 43 years.

For the spouse/partner of inpatient group, the majority were male (73.3%) and Caucasian (80.0%). There were three Hispanic participants (10%), one Asian participant (3.3%), one African-American (3.3%), and one American Indian/Caucasian participant (3.3%) in the spouse/partner of inpatient group. The mean years of age was *M* = 50.40 (*SD* = 14.43), with a minimum of 19 and a maximum of 81 years. The mean years in relationship was *M* = 22.83 (*SD* = 15.98), with a minimum of 10 months and a maximum of 58 years. The spouse/partner comparison group had a similar demographic profile as they were matched on demographic variables to the spouse/partner of inpatient group. The comparison group was also made up of 73.3% male. For ethnicity, 90.0% were Caucasian, two participants were Hispanic (6.7%), and one was American Indian/Caucasian (3.3%). The mean years of age was *M* = 50.23 (*SD* = 14.81), with a minimum of 26 and a maximum of 80 years. The mean years in relationship was *M* = 22.38 (*SD* = 14.81), with a minimum of 16 months and a maximum of 43 years.

In addition to the demographic information collected on all participants, information on the total number of hospitalizations, presence of psychotic features, and whether or not the participant had attempted suicide or had suicidal thoughts were also collected on the inpatient participants only (see Table 1). Of the 30 inpatients, over one third had been hospitalized only once (36.7%), and another 30.3% reported being hospitalized twice. Nearly 20% had been hospitalized four times (16.7%), and 3.3% of participants had been hospitalized each three, six, seven, ten, and twenty times. Due to the distribution of variables, participants who had been hospitalized three or more times were collapsed into one group called *three or more hospitalizations* in further analyses. Nearly one-third of participants were diagnosed with Major Depressive Disorder with Psychotic Features (30.0%).

When asked about suicide attempts and suicidal thoughts, 20% reported having at least one suicide attempt within one month of admission to the hospital, but 90% reported having suicidal thoughts on admission to the hospital. Although no comparisons were done with the two suicide variables due to the uneven distribution of participants, some further descriptive statistics are included regarding the relationship of the suicide variables with the dependent measures.

Relationship among Demographics

Relationships among the demographic variables were analyzed using Pearson's product moment correlations, independent sample t-tests, one-way Analysis of Variance (ANOVA), and Crosstabulations with Pearson's chi square. Pearson's product moment

correlations were used to examine the relationship between the continuous demographic variables of age and years in relationship.

Table 1

Frequencies and Percentages for Categorical Demographic Variables for the Inpatient Group

	N	%
Number of Hospitalizations		
One	11	36.7
Two	9	30.0
Three	1	3.3
Four	5	16.7
Six	1	3.3
Seven	1	3.3
Ten	1	3.3
Twenty	1	3.3
Psychotic Features		
No	21	70.0
Yes	9	30.0
Suicide Attempts		
No	24	80.0
Yes	6	20.0
Suicidal Thoughts		
No	3	10.0
Yes	27	90.0

Each group was analyzed individually and not as couples. There was a strong positive correlation between age and years in relationship for all four groups, (inpatient group $r = .910, p < .001$, comparison group $r = .907, p < .001$, spouse/partner of inpatient, $r = .886, p < .001$, and spouse/partner comparison group, $r = .853, p < .001$), indicating that older participants had more years in the relationship. Independent sample t-tests were conducted to examine the relationship between males and females on age and years in relationship. No significant differences were found between males and females on age or length of relationship, all *t*s, *ns*.

For the inpatient group only, the differences between the presence of psychotic features on age and length of relationship were examined using independent sample t-tests. Again, no differences found between patients with the presence of psychotic features and those without on age or years in relationship, all *t*s, *ns*. A one-way ANOVA examining the difference between the number of hospital visits on age and length of relationship found no significant differences, all *F*s, *ns*. Finally, crosstabulations with Pearson's chi square found no significant relationships among the categorical variables of gender, presence of psychotic features and number of hospitalizations, all χ^2s, *ns*.

Descriptive Statistics of Dependent Variables

The dependent measures used in the current study were the Initiator Style Questionnaire (ISQ) and Quality of Marriage Index (QMI) for the entire sample, as well as the Inventory of Depressive Symptomatology – Clinician Rated (IDS-C) for the inpatient participants only. Scores for the IDS-C ranged from 19 to 68 with a mean score of $M = 48.07$ ($SD = 11.70$). The descriptive statistics were calculated on the couple data,

and the mean, standard deviation, minimum score, and maximum score for the QMI and ISQ are shown in Table 2. There was a QMI score for the inpatient and the spouse/partner. There was an ISQ score for inpatient's self initiator style, the inpatient's perception of their spouse's/partner's initiator style, the spouse's/partner's self initiator style, and the spouse's/partner's perception of the inpatient's initiator style.

Table 2

Means and Standard Deviations for QMI, ISQ Self, and ISQ Perceived Spouse/Partner Score for the Patient, Spouse/Partner, and Comparison Groups

	Inpatient Group				Comparison Group			
	Mean	*SD*	Min	Max	Mean	*SD*	Min	Max
QMI of Patient	35.83	7.07	18	45	40.27	4.95	27	45
QMI of Spouse/Partner	30.90	11.10	8	45	39.30	5.70	23	45
Patient ISQ	62.27	18.60	26	90	67.53	11.90	43	88
Patients Perceived Spouse/Partner ISQ	64.00	15.73	36	89	60.93	18.19	23	88
Spouse/Partner Self ISQ	64.80	15.11	30	90	63.93	16.38	29	90
Spouses/Partners Perceived Spouses/Partners ISQ	55.97	19.05	15	90	67.70	16.65	25	90

For the ISQ, a median split was performed on both the inpatient and spouse/partner ISQ_{self} scores to differentiate between those with relatively high initiator tendency (ISQ scores ranged from 66 – 90) and those with relatively low initiator tendency or high avoider tendency (ISQ scores ranged from 26 – 65). The high/low split for each participant was crossed with the high/low split for his or her spouse/partner self score. The result was a variable with three levels which categorized each person as a high/high match with their spouse/partner (hereafter *Both Initiators*), a low/low match with their spouse/partner (hereafter *Both Avoiders*), and a low/high (Avoid-Initiate) or high/low (Initiate-Avoid) no match with their spouse/partner (hereafter *No Match*). Of the 30 couples in the comparison group, nine couples were both initiators, six couples were both avoiders, and 15 couples were not a match. Of the 30 participants in the inpatient group, seven couples were both initiators, nine couples were both avoiders, and 14 couples were not a match in initiator style (see Table 3).

When examined individually, the relationship between the ISQ_{self} score and $ISQ_{perceived\ spouse/partner}$ score was not significant for the entire sample or for any of the four groups, all *r*s, *ns*. When examined as couples, the inpatient's self initiator style was not significantly correlated with the spouse's/partner's self initiator style, nor was the perceived inpatient's style significantly correlated with the perceived spouse's/partner's style, all *r*s, *ns*, indicating that increased initiator style by one spouse/partner was not related to significant increases or decreases in the other spouse's/partner's initiator style scores.

Table 3

Frequencies and Percentages for ISQ Match Category for the Comparison and Inpatient Group

	Comparison Group		Inpatient Group	
	n	%	n	%
ISQ Match Category				
No Match	15	50.0	14	46.7
Both Avoiders	6	20.0	9	30.0
Both Initiators	9	30.0	7	23.3

The inpatient's self initiator style, however, was significantly correlated with their spouse's/partner's perception of the inpatient's initiator style for both the inpatient group ($r = .669, p < .001$) and the comparison group ($r = .505, p < .01$). Similarly, the spouse's/partner's self initiator style was significantly correlated with the inpatient's perceived spouse/partner initiator style for the inpatient group ($r = .441, p < .05$) and the comparison group ($r = .515, p < .01$). Paired sample *t* tests between the inpatient self initiator scores and their spouse's/partner's perception of them was non-significant, as well as between the spouse/partner self initiator scores and their spouse's/partner's perception of them. These results indicate that spouses'/partners' perceptions of the other spouse's/partner's initiator style score were similar to their own self initiator scores. In

other words, that spouses/partners perceived their spouses/partners as they perceived themselves.

Relationships between Demographics and Dependent Variables

The relationships between the demographic variables and the dependent variables were calculated for each of the four groups individually (inpatient, spouse/partner of inpatient, comparison, and spouse/patient comparison group). The participants were analyzed individually and not as couples.

Gender. Females in the inpatient group had higher self initiator scores (M = 67.57, SD = 17.84) than males (M = 49.89, SD = 13.56), $p < .05$. In addition, females in the spouse/partner comparison group had higher self initiator scores (M = 79.75, SD = 9.65) than males (M = 58.32, SD = 14.57), $p < .001$. There was no difference between men and women in the spouse/partner of inpatient and comparison group, *ns*. In addition, there were no significant differences between perceived partner and gender for any of the four groups, all *t*s *ns*. Females in the spouse/partner comparison group had significantly higher QMI scores (M = 42.75, SD = 2.49) than did males (M = 38.14, SD = 6.08). However there were no significant differences between males and females for the inpatient, spouse/partner of inpatient, or the comparison group, all *t*s *ns*. A significant difference was found between males and females on the IDS-C, $t(28) = -2.41$, $p < .05$. Females had significantly more severe depressive symptoms (M = 51.19, SD = 10.81) than males (M = 40.78, SD = 10.88).

Age. Age was not significantly related to the QMI, IDS-C, or any of the subscales of the ISQ. However, there was a difference between ISQ match type on age, $F(2, 117)$ =

4.78, $p < .05$. Those who were both initiators were significantly younger ($M = 44.16$, $SD = 11.50$) than those who were both avoiders ($M = 55.13$, $SD = 11.50$), while those who were no match ($M = 49.47$, $SD = 13.98$) were not significantly different than the avoiders or initiators.

Length of relationship. The length of relationship was not significantly related to QMI, IDS-C, or any either of the subscales of the ISQ. However, there was a difference between ISQ match type on length of relationship, $F(2, 117) = 5.36$, $p < .01$. Those who were both initiators had a significantly shorter length of relationship ($M = 16.54$, $SD = 12.21$) than those who were both avoiders ($M = 28.74$, $SD = 14.37$), while those who were no match ($M = 22.77$, $SD = 15.86$) were not significantly different than the avoiders or initiators. It is important to note that age and length of relationship were very highly correlated ($r = .885$, $p < .001$), therefore the findings of match type with age and length of relationship were expected to be similar.

Psychotic features and number of hospitalizations. No significant differences were found between the IDS-C scores of inpatients who had and did not have psychotic features. In addition, no significant differences were found between the number of psychiatric hospitalizations and the IDS-C, all *t*s, *ns*. Similarly, no significant differences were found between number of hospitalizations and the ISQ_{self}, $ISQ_{perceived\ spouse/partner}$, QMI, or ISQ match category, all *F*s, *ns*. There were no significant differences between whether or not the inpatient had psychotic features on the ISQ_{self}, $ISQ_{perceived\ spouse/partner}$, or QMI, all *t*s, *ns*. However, a significant relationship between whether or not the inpatient had psychotic features and match type, $\chi^2 = 9.25$, $p < .01$, Cramer's $V = .555$ was found.

A greater percentage of those who had psychotic features were both initiators (55.6%) compared to those who had no psychotic features (9.5%). In addition, a greater percentage of those without psychotic features had no match in initiator style (61.9%) than those with psychotic features (11.1%). However these results should be interpreted with caution due to the fact that three cells had fewer than five participants.

Thoughts of suicide and suicide attempts. Of the three inpatients who did not have suicidal thoughts, two of them had the two lowest scores on the IDS-C (scores of 19 and 24), the third patient with no thoughts of suicide had IDS-C scores near the median of the entire group (score of 47). For the ISQ_{self} scores and the QMI, the three inpatients without suicidal thoughts were all near the median score of the group with suicidal thoughts. However, the three inpatients without suicidal thoughts had relatively lower $ISQ_{perceived\ spouse/partner}$ scores (range 36-60) than those with suicidal thoughts (range = 39-89). For the ISQ match category, two of the patients without suicidal thoughts were in the no match group and one was in the both avoiders group.

The average IDS-C scores of the patients with and without suicide attempts were not significantly different, *ns*. There were no significant differences between the ISQ_{self} or the $ISQ_{perceived\ spouse/partner}$ scores of patients with and without suicide attempts, *ns*. In addition, there were no significant differences between the QMI scores of those with and without suicide attempts, *ns*. Although these finding were not significant, caution should be used when interpreting these results due to the low number of participants in the suicide attempt group (n = 6). In addition, of the six participants who had attempted

suicide, three were in the ISQ no match group, two were in the both avoiders group, and one was in the both initiators group.

Primary Analyses

Analyses on the Inpatient Group

Research Question 1: Will the patients' Initiator Style Questionnaire (ISQ) scores be different from their spouses'/partners' Initiator Style Questionnaire (ISQ) scores? A Pearson's correlation coefficient was conducted to test the relationship between the ISQ_{self} score of the patients and spouse/partners. No relationship was found between the patient and spouse/partner ISQ_{self} scores, *ns*. In addition a paired comparison was used to examine the differences in ISQ_{self} scores between members of the same couple, when one of the members of the couple was hospitalized for depression. Again, no difference was found between the two groups. In addition, a Pearson's correlation coefficient and a paired t-test were conducted on the ISQ_{self} scores of the comparison couples, and no significant relationships were found.

Research Question 2/Hypothesis 1: Is there a relationship between the patients' symptom severity scores and their self initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ)? A Pearson's correlation coefficient revealed no significant relationship between patients' depression severity scores as measured by the IDS-C and the ISQ_{self} scores, $r = -.078$, $p = .684$. However, a significant difference was found between ISQ self-partner match on the IDS-C, $F(2, 27) = 3.80$, $p < .05$, indicating that there was a significant difference in IDS-C scores by match type (see Table 4). A Tukey's post hoc test revealed that those who were not a match in initiator style ($M =$

suicide, three were in the ISQ no match group, two were in the both avoiders group, and one was in the both initiators group.

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42.43, *SD* = 11.88) had significantly less depression severity than did those who were both avoiders (*M* = 54.33, *SD* = 9.58). Those who were both initiators (*M* = 51.29, *SD* = 9.38) did not differ significantly from either the no match group or the both avoiders group.

Table 4

Means and Standard Deviations for the IDS-C by ISQ Match Category

	n	Mean	*SD*	*F*	*p*
IDS-C				3.80	.035
No Match	14	42.43 [a]	11.88		
Both Avoiders	9	54.33 [b]	9.58		
Both Initiators	7	51.29 [ab]	9.38		

Note. Means with different superscripts differed significantly.

Research Question 3: Is there a relationship between the patients' symptom severity scores and their perceived spouse/partner initiator tendency scores? A Pearson's correlation coefficient revealed no significant relationship between patients depression severity as measured by the IDS-C and the $ISQ_{\text{perceived spouse/partner}}$ scores, $r = .077$, $p = .686$.

Hypothesis 2: There will be no statistically significant relationship between the patients' symptom severity scores as measured by the Inventory of Depressive Symptomatology- Clinician Rated (IDS-C) and participants' marital/relationship quality scores as measured by the Quality of Marriage Index (QMI). For the inpatient group and

their spouse/partner, Pearson's product moment correlations were conducted to examine the relationships between the continuous dependent measures. There were no significant correlations of the IDS-C with the QMI, $r = -.044$, $p = .819$.

Analyses on the Entire Sample

Prior to analyses being conducted to test the remaining research questions and hypotheses, the ISQ data were analyzed in order to replicate the analyses performed by Denton and Burleson (2007). A two (gender: male vs. female) X four (group: inpatient vs. spouse/partner of inpatient vs. comparison vs. spouse/partner comparison) X two (within subjects factor: self initiator score vs. perceived spouse/partner initiator score) repeated measures ANOVA was conducted. The results revealed a significant interaction between initiator scores (self vs. perceived spouse/partner) and gender, $F(1, 112) = 9.34$, $p < .00$, indicating that males saw themselves ($M = 60.08$, $SD = 14.08$) and their spouses/partners as having similar initiator tendencies ($M = 62.76$, $SD = 17.36$), while females saw themselves as having higher initiator scores ($M = 69.50$, $SD = 15.79$) than males ($M = 61.50$, $SD = 18.31$).

A significant interaction between initiator scores (self vs. perceived spouse/partner) and group was also revealed, $F(3, 112) = 2.97$, $p < .05$, indicating both comparison groups and the inpatient group saw their initiator tendencies (comparison $M = 67.43$, $SD = 11.89$; spouse/partner comparison $M = 67.83$, $SD = 16.62$; inpatient $M = 64.00$, $SD = 15.73$) as being similar to their spouse/partner (comparison $M = 60.80$, $SD = 18.17$; spouse/partner comparison $M = 64.03$ $SD = 16.41$; inpatient $M = 62.27$, $SD = 18.60$) but that the spouse/partner of the inpatient group viewed themselves as more

initiating ($M = 64.80$, $SD = 15.11$) than they viewed their spouse/partner (i.e. the inpatient), $M = 55.97$, $SD = 19.04$. These findings were largely consistent with the findings by Denton and Burleson (1997), see Study 2. A Pearson's product moment correlation between man-demand, woman-withdraw and woman-demand, man-withdraw (see directions for variable creation in Denton and Burleson (1997)) was also conducted to replicate the analyses. The results revealed no significant correlation between the man-demand, woman-withdraw score or the woman-demand, man-withdraw score and the QMI, which is in contrast to the findings by Denton and Burleson (1997).

Research Question 4/Hypothesis 3: Will females' Initiator Style Questionnaire (ISQ) scores differ from males' Initiator Style Questionnaire (ISQ) scores. A two (gender: male vs. female) X four (group: inpatient vs. spouse/partner of inpatient vs. comparison vs. spouse/partner comparison) two-way ANOVA on the ISQ_{self} score was conducted to examine the differences between male and female self initiator scores, the differences between groups, and also whether there were any interactions between these variables (see Table 5). The participants were analyzed as individuals and not as couples. The results revealed a significant main effect for gender, $F(1, 112) = 14.94$, $p < .001$, indicating that females had significantly higher self initiator scores ($M = 69.50$, $SD = 15.79$) than did males ($M = 60.08$, $SD = 14.08$). There was no significant main effect for group nor interaction between gender and group, *ns*.

Table 5

Means and Standard Deviations for the ISQ Self Scores by Gender and Group

	Male		Female		Total	
	n	Mean	n	Mean	n	Mean
Inpatient	9	49.89 (14.56)	21	67.57 (17.84)	30	62.27 (18.60)
Spouse/Partner of Inpatient	22	63.68 (13.14)	8	67.88 (20.33)	30	64.80 (15.11)
Comparison	9	65.78 (9.60)	21	68.14 (12.90)	30	67.43 (11.89)
Spouse/Partner Comparison	22	58.32 (14.57)	8	79.75 (9.65)	30	64.03 (16.41)
Total	62	60.08 [a] (14.08)	58	69.50 [b] (15.79)	120	64.63 (15.60)

Note. Standard Deviations are shown in parenthesis below means. Means with different superscripts differed significantly.

In addition, a two (patient gender: male vs. female) X two (group: inpatient vs. comparison) two-way ANOVA on the difference between the patient and spouse/partner self scores was conducted to examine the differences between the male spouse/partner and the female spouse/partner self initiator scores by analyzing the men and women as couples (see Table 6). The difference variable was created by subtracting the patient self score from the spouse/partner self score, thus a positive score indicates that the

spouse/partner had higher scores and a negative score indicates that the patient had higher scores. For this analysis, the homosexual couples were removed due to the fact that these couples included only males. The results revealed a significant main effect for patient gender, $F(1, 54) = 10.91, p < .01$, indicating that the male spouses/partners rate their female spouses/partners as having higher self initiator scores than their female spouses/partners ($M = 14.38$, $SD = 19.74$) and also indicating that the female spouse/partners rate themselves as having higher self initiator scores than their male spouses/partners ($M = -6.79$, $SD = 22.26$). There was no significant main effect for group nor interaction between gender and group, *ns*.

Table 6

Means and Standard Deviations for the Difference between Patient and Spouse/Partner ISQ Self Scores by Gender and Inpatient Group

	Inpatient Group		Comparison Group		Total	
	N	Mean	N	Mean	N	Mean
Male	8	17.38 (27.11)	8	11.38 (8.91)	16	14.38 [a] (19.74)
Female	21	-3.90 (22.19)	21	-9.67 (22.50)	42	-6.79 [b] (22.26)
Total	29	1.97 (25.08)	29	-3.86 (21.75)	58	-.95 (23.45)

Note. Standard Deviations are shown in parenthesis below means. Means with different superscripts differed significantly.

Hypothesis 4: There will be no statistically significant difference in female participants' perceived spouse/partner initiator tendency scores when compared to male participants' perceived spouse/partner initiator tendency scores as measured by the Initiator Style Questionnaire (ISQ). A two (gender: male vs. female) X four (group: inpatient vs. spouse/partner of inpatient vs. comparison vs. spouse/partner comparison) two-way ANOVA on the $ISQ_{\text{perceived spouse/partner}}$ score was conducted to examine the differences between male and female perceived spouse/partner initiator scores, the differences between groups, and also whether there were any interactions between these variables (see Table 7).

The participants were analyzed as individuals and not as couples, and these analyses were only conducted on heterosexual couples because the interpretation of the spouse/partner was for the opposite gender as the self. The results revealed a significant main effect for group, $F(3, 108) = 3.72$, $p < .05$, indicating that the spouse/partner of the inpatient ($M = 56.55$, $SD = 19.11$) had significantly lower perceived spouse/partner initiator scores than did the spouse/partner comparison group ($M = 68.86$, $SD = 15.91$). There was no significant main effect for gender, nor interaction between gender and group, *ns*.

Table 7

Means and Standard Deviations of Perceived Spouse/Partner ISQ Scores by Gender and Group

	Male		Female		Total	
	n	Mean	n	Mean	n	Mean
Inpatient	8	61.00 (18.30)	21	65.10 (15.38)	29	63.97 [ab] (16.01)
Spouse/Partner of Inpatient	21	60.33 (15.02)	8	46.63 (25.70)	29	56.55 [a] (19.11)
Comparison	8	67.63 (21.45)	21	59.10 (16.68)	29	61.45 [ab] (18.13)
Spouse/Partner Comparison	21	67.19 (17.24)	8	73.25 (11.51)	29	68.86 [b] (15.91)
Total	58	63.91 (17.11)	58	61.50 (18.31)	116	62.71 (17.69)

Note. Standard Deviations are shown in parenthesis below means. Means with different superscripts differed significantly.

In addition, a two (patient gender: male vs. female) X two (group: inpatient vs. comparison) two-way ANOVA on the difference between the patient and spouse/partner perceived spouse/partner scores was conducted to examine the differences between male spouse/partner and female spouse/partner perceived spouse/partner initiator scores by analyzing the men and women as couples (see Table 8). The difference variable was

created by subtracting the patient perceived spouse/partner score from the spouse/partner perceived spouse/partner score, thus a positive score indicates that the spouse/partner had higher perceived spouse/partner initiator scores and a negative score indicates that the patient had higher perceived spouse/partner initiator scores.

For this analysis, the homosexual couples were removed due to the fact that these couples only included males. The results revealed a significant main effect for group, $F(1, 56) = 4.54, p < .05$, indicating that participants in the comparison group rated the spouse/partner as having higher self initiator scores than the patient ($M = 7.14$, $SD = 25.44$) and also indicating that the inpatient group rated the patient as having higher self initiator scores than the spouse/partner ($M = -7.41$, $SD = 24.94$). There was no significant main effect for gender nor an interaction between gender and group, all *F*s, *ns*.

Research Question 5/Hypothesis 5: Is there a relationship between participants' Initiator Style Questionnaire (ISQ) scores and their Quality of Marriage Index (QMI) scores? A Pearson's correlation coefficient was conducted to examine the relationship between the QMI and the ISQ_{self} score for all participants. The significant positive correlation between the two variables ($r = .438, p < .001$) indicates that increased scores for self initiator style were associated with increased quality of marriage/relationship.

The relationship between the QMI and the ISQ subscales were examined by group on the participants as individuals (see Table 9). There were significant positive correlations between self initiator style and the QMI for all four groups, with the relationship for the inpatient group being the strongest ($r = .733, p < .001$), and moderate

correlations for the comparison ($r = .439, p < .05$), the spouse/partner of inpatient group ($r = .405, p < .05$), and the spouse/partner comparison group ($r = .368, p < .05$).

Table 8

Means and Standard Deviations for the Difference between Patient and Spouse/Partner ISQ Perceived Spouse/Partner Scores by Gender and Inpatient Group

	Inpatient Group		Comparison Group		Total	
	N	Mean	N	Mean	N	Mean
Male	8	-14.38 (38.72)	8	4.63 (14.95)	16	-4.88 (30.00)
Female	21	-4.76 (17.87)	21	8.10 (28.72)	42	1.67 (24.50)
Total	29	-7.41 [b] (24.94)	29	7.14 [a] (25.44)	58	-.14 (26.03)

Note. Standard Deviations are shown in parenthesis below means. Means with different superscripts differed significantly.

These positive correlations indicate that participant, particularly inpatients, with high ISQ_{self} scores tended to have higher quality of marriage/relationship scores. The correlation between the perceived spouse/partner initiator style and the QMI was significant only for the comparison ($r = .580, p < .001$) and the spouse/partner comparison groups ($r = .530, p < .01$), indicating that for the comparison group and the

comparison spouses/partners, increased perceptions of their spouse or significant other as an initiator was related to higher quality of marriage/relationship scores.

Table 9

Pearson's Correlation Coefficients among the ISQ Self and QMI Score for Inpatient, Spouse/Partner, Comparison, and Spouse/Partner Comparison Groups

	QMI	
	Inpatient	Spouse/Partner
Self ISQ		
Inpatient Group	.733 **	.405 *
Comparison Group	.439 *	.368 *

Pearson's correlation coefficients were also used to examine the relationship between the ISQ_{self} score and QMI for males and females individually. For males, the relationship between ISQ_{Self} and QMI was significant, $r = .300$, $p < .05$, indicating that increased self initiator tendency was associated with higher quality of marriage/ relationship for males. The relationship was also significant for females, $r = .569$, $p < .001$, indicating that increased self initiator tendency was associated with higher quality of marriage/relationship for females.

Hypothesis 6: There will be no statistically significant relationship between mutual initiation communication patterns as measured by the Initiator Style Questionnaire (ISQ) and participants' marital/relationship quality scores as measured by the Quality of Marriage Index (QMI). Mutual initiation communication patterns were examined by conducting a two (group: inpatient vs. comparison) X three (match category: both initiators vs. both avoiders vs. no match) two-way ANOVA on the patient QMI score (see Table 10). Analyses were conducted on the participants as couples. A significant main effect was found for group $F(1, 54) = 6.63, p < .05$, indicating that the inpatient group had significantly lower reports of quality of marriage/relationship ($M = 35.83$, $SD = 7.07$) than did the comparison group ($M = 40.27$, $SD = 4.96$). There was also a main effect for match category, $F(2, 54) = 18.62, p < .001$, indicating that the patient report of quality of marriage/relationship was significantly lower for couples who were both avoiders ($M = 31.27$, $SD = 6.04$), than for couples who were both initiators ($M = 42.06$, $SD = 2.52$) or had no match ($M = 39.34$, $SD = 5.05$). There was no significant interaction between group and match category, *ns*.

Similarly, a two (group: inpatient vs. comparison) X three (match category: both initiators vs. both avoiders vs. no match) two-way ANOVA was conducted on the spouse/partner QMI score. Analyses were conducted on the participants as couples. Table 11 shows that there was a significant main effect for group $F(1, 54) = 9.16, p < .01$, indicating that the inpatient group had significantly lower reports of spouse/partner quality of marriage/relationship ($M = 30.90$, $SD = 11.10$) than did the comparison group ($M = 39.30$, $SD = 5.70$). There was also a main effect for match category, $F(2, 54) = 5.73$,

$p<.001$, indicating that the spouse/partner report of quality of marriage/relationship was significantly lower for couples who both avoiders ($M = 28.87$, $SD = 10.60$), than for couples who were both initiators ($M = 39.88$, $SD = 3.74$) or had no match ($M = 35.69$, $SD = 10.57$). There was no main effect for match category, nor a significant interaction between group and match category, *ns*.

Table 10

Means and Standard Deviations of Self QMI by Match Type and Group

	Inpatient Group		Comparison Group		Total	
	N	Mean	N	Mean	N	Mean
No Match	14	37.21 (5.32)	15	41.33 (3.99)	29	39.34 [d] (5.05)
Both Avoiders	9	29.22 (7.00)	6	34.33 (5.75)	15	31.27 [c] (6.82)
Both Initiators	7	41.57 (2.57)	9	42.44 (2.56)	16	42.06 [d] (2.52)
Total	30	35.83 [a] (7.07)	30	40.27 [b] (4.96)	60	38.05 (6.45)

Note. Standard Deviations are shown in parenthesis below means. Means with superscripts of *a* and *b* differed significantly, and means with superscripts of *c* and *d* differed significantly.

Table 11

Means and Standard Deviations of Spouse/Partner QMI of Match Type and Group

	Inpatient		Comparison Group		Total	
	N	Mean	N	Mean	N	Mean
No Match	14	30.50 (11.89)	15	40.53 (4.36)	29	35.69 [d] (10.06)
Both Avoiders	9	26.44 (12.30)	6	32.50 (6.78)	15	28.87 [c] (10.60)
Both Initiators	7	37.43 (2.70)	9	41.78 (3.38)	16	39.88 [d] (3.74)
Total	30	30.90 [a] (11.10)	30	39.30 [b] (5.70)	58	35.10 (9.72)

Note. Standard Deviations are shown in parenthesis below means. Means with superscripts of *a* and *b* differed significantly, and means with superscripts of *c* and *d* differed significantly.

In addition, mutual initiation was examined by creating a difference score between the spouse/partner self score and the patient self score of the couples. The difference score was correlated with the patient QMI and the spouse/partner QMI for both the inpatient and comparison groups. A significant negative correlation was found between the amount of difference between patient and spouse/partner self scores and the patient QMI, for the inpatient group only, $r = -.508$, $p < .01$. This indicates that increased difference between the spouse/partner and patient (i.e. the spouse/partner has a higher

initiator score than the patient) was related to decreased quality of marriage/relationship as rated by the patient. No relationship was found between amount of difference and spouse/partner rating of quality of marriage/relationship for the inpatient group. Also, no relationships were found between amount of difference and quality of marriage/relationship for the comparison group.

Perceived mutual initiation was examined by creating two scores to examine the relationship between the self initiator tendency and the perception of the initiator tendency of the spouse/partner. The first score was created by taking the absolute difference of the self and perceived spouse/partner score in order to examine the amount of discrepancy in these scores. The second score was created by summing the ISQ_{self} score and the $ISQ_{perceived\ spouse/partner}$ score in order to reflect extent to which both spouses/partners are perceived as initiating discussions about relationship problems. Due to the non-normal distribution of these two scores, Spearman's rho correlation coefficients were used to examine the relationship between the QMI score and the absolute difference between self and perceived spouse/partner and the sum of self and perceived spouse/partner. A significant relationship was found between quality of marriage/relationship and the sum of self and perceived spouse/partner for the inpatient group ($r = .673, p < .001$), the spouse/partner of inpatient group ($r = .503, p < .01$), comparison group ($r = .580, p < .001$), the spouse/partner comparison group ($r = .564, p < .01$). This indicates that high quality of marriage/relationship was associated with increased perception of both spouses/partners initiating discussions about relationship problems for all groups. A significant negative correlation was also found between

quality of marriage/relationship and the absolute difference between self and perceived spouse/partner scores for the spouse/partner comparison group only, $r = -.552, p < .01$. This indicates that increased difference between the self initiator styles of the self and spouse/partner were associated with low quality of marriage/relationship.

Perceived mutual initiation communication was also examined by computing the absolute amount of difference between the patient and the spouse's/partner's perception of the patient, and between the spouse/partner and the patient's perception of the spouse/partner. These absolute difference scores were correlated with the patient QMI and with the spouse/partner QMI for both the inpatient and comparison groups. For the inpatient group, there were no significant correlations between the absolute difference scores and the QMI scores, all *r*s, *ns*. However, for the comparison group, there was a significant negative correlation between the absolute difference between the patient comparison and the spouse/partner comparison's perception of the patient comparison and the QMI of the spouse/partner, $r = -.416, p < .05$, indicating that increased difference between the comparison group and the spouse/partner's perception of the comparison group was associated with lower QMI scores for the spouse/partner.

Summary

The results of this research study revealed many unique features of couples' communication styles utilized to address relationship problems. There were not as many findings regarding the patients' IDS-C scores and their ISQ scores as well as their QMI scores. In summary, higher self initiator scores were related to QMI scores. The results also revealed very significant finding in more females were initiators than males that

regardless of group (inpatient, spouse/partner of inpatient, comparison inpatient, comparison spouse/partner).

CHAPTER V

DISCUSSION

The purpose of this research study was to explore couples' communication from a social-cognitive theoretical perspective in couples with one spouse/partner diagnosed with a Major Depressive Disorder (MDD). Thirty inpatients and their spouses/partners were recruited for this study from an inpatient psychiatric unit at the University of Texas Southwestern Medical Center. The comparison group couples were recruited through Texas Woman's University, online by existing participants, and by members of other communities acquainted with the principal investigator. The principal investigator recruited a total of 120 participants for this research study in order to achieve adequate statistical power. Data were collected through the Inventory of Depressive Symptomatology – Clinician Rated (IDS-C), the Initiator Style Questionnaire (ISQ), the Quality of Marriage Index (QMI), and the Brief Demographic Questionnaire for the inpatients. The inpatients' spouses/partners and the comparison group couples completed the ISQ, QMI, and a Brief Demographic Questionnaire. However, the comparison group couples completed these assessments online through Survey Monkey.

Although, there were few significant relationships between depressive symptom severity with quality of marriage, self initiator style, or perceived partner initiator style, there were more significant findings related to the Initiator Style Questionnaire (ISQ) and Quality of Marriage Index (QMI) scores. For the ISQ, a median split was performed to

differentiate between those with relatively high initiator tendency (ISQ scores ranged from 66 – 90) and those with relatively low initiator tendency or high avoider tendency (ISQ scores ranged from 26 – 65). The high/low split for each participant was crossed with the high/low split for his or her spouse/partner. The result was a variable with three levels, which categorized each person as a high/high match with their spouse/partner (hereafter *Both Initiators*), a low/low match with their spouse/partner (hereafter *Both Avoiders*), and a low/high (Avoid-Initiate) or high/low (Initiate-Avoid) no match with their spouse/partner (hereafter *No Match*). Of the 30 couples in the inpatient group, 7 couples were both initiators, 9 couples were both avoiders, and 14 couples were not a match in initiator style. Overall, for 120 participants, 32 participants (16 couples) were both initiators, 30 participants (15 couples) were both avoiders, and 58 (29 couples) were not a match. The findings suggest that, in all cases, higher self initiator scores were related to QMI scores. The results also revealed that regardless of group, more females were initiators than males.

Theoretical Implications for Findings

Research Question 1: Will the Patients' Initiator Style Questionnaire (ISQ) Scores be Different from their Spouses'/Partners' Initiator Style Questionnaire (ISQ) Scores?

The purpose of the current study was to explore initiate-avoid patterns in couples where one partner/spouse is diagnosed with major depressive disorder and provide analyses to determine the pattern that manifests in their relationships. The purpose of this research question was to explore whether the inpatients' ISQ scores would be different from their spouses'/partners' ISQ scores. While it was found that females in the current

study had depressive symptoms that were more severe than the males, and a greater proportion of females than males were in the depressive group, no significant relationships were found between the patient and spouse/partner ISQ_{self} scores. A paired comparison also revealed no differences in ISQ_{self} scores between members of the same couple, when one of the members of the couple was hospitalized for depression. These findings are not consistent with other research findings (O'Leary, Christian, & Mendell, 1994; Zlotnick, Kohn, Keitner, & Della Grotta, 2000) that suggested that marital discord correlates moderately with depressive symptoms, and MDD is associated with unpleasant interactions with spouses/partners.

Research Question 2/Hypothesis 1: Is there a Relationship between the Patients' Symptom Severity Scores and their Self Initiator Tendency Scores as Measured by the Initiator Style Questionnaire (ISQ)?

It was hypothesized that there would not be a significant relationship between the inpatients' symptom severity scores and their self initiator tendency scores as measured by the ISQ, which was also highlighted in the second research question. The purposes of research question two and hypothesis one were to determine if there is a relationship between patients' symptom severity scores and their self initiator tendency scores as measured by the ISQ. While there was no significant relationship between patients' depression severity scores as measured by the IDS-C and the ISQ_{self} scores, it was found that there was a relationship between severity of depression and initiator match type that indicated that those who were not a match in initiator type, or couples that consist of one spouse/partner that is an initiator and one spouse/partner that is an avoider, had

significantly lower scores on the IDS-C than those who were both avoiders. This finding was consistent with other research findings (Segrin, 1998; Uebelacker, Courtnage, & Whisman 2003) that indicated depressed individuals are less likely to initiate or actively participate in communication with intimates. Sacco and Nicholson (1999) asserted that the social-cognitive model focuses on two constructs that include attributions about the depressed person's behaviors, and person schema, which is the mental representations in memory of the depressed person's attributes, behavioral tendencies, interests, and values. They suggested that perceived negative reactions could be a trigger for depressed mood and concurrently, activate a self-relevant negative cognitive network that could alter interpretations and responses to subsequent interpersonal stimuli.

This finding is also consistent with Denton and Burleson's (2007) findings that the ratings for self-initiator tendency were negatively associated with depression, and depression was not associated with ratings of spouse/partner initiator tendency. The two main couple communication patterns identified in previous research studies include demand-withdraw and initiate-avoid patterns. The characteristics of these two communication patterns represent the ways in which these patterns differ in terms of the duration of the couple's relationship, marital quality, marital satisfaction, marital stability, and conflict style. Several of the findings reflected the ways in which couple interactional patterns influence mental health outcomes, which is consistent with the results of the current study. Denton and Burleson (2007) reported that both aspects of initiator tendency have been associated with depression, and the results of the current study are consistent with these findings.

Research Question 3: Is there a Relationship between the Patients' Symptom Severity Scores and their Perceived Spouse/Partner Initiator Tendency Scores?

The purpose of research question three was to explore whether there was a relationship between the inpatients' symptom severity scores and their perceived partner/spouse initiator tendency scores. It was found that there was no significant relationship between the inpatient perceived partner/spouse self-initiator score and the inpatient score for depressive symptoms. There was a significant relationship between self and spouses/partners who were a match or no match on initiator style in that that those who were not a match in initiator style had significantly less depression severity than did those who were both avoiders, while those who were both initiators did not differ significantly from either the no match group or the both avoiders group. These findings are discussed in more detail in the preceding section on hypothesis two.

Hypothesis 2: There will be no Statistically Significant Relationship between the Patients' Symptom Severity Scores as Measured by the Inventory of Depressive Symptomatology- Clinician Rated (IDS-C) and Participants' Marital/ Relationship Quality Scores as Measured by the Quality of Marriage Index (QMI).

It was also hypothesized that there would not be a statistically significant relationship between the patients' symptom severity scores as measured by the IDS-C and participants' marital/relationship quality scores as measured by the QMI. The results revealed that there was no significant relationship between depressive symptom severity and the QMI score of the inpatient. There was also no significant relationship between depressive symptom severity and the QMI score of the inpatient's spouse/partner.

These results are consistent with some of the other research findings. According to Winokur (1986), inpatients were less likely than less severely depressed patients to present the turbulent interpersonal styles that could precipitate marital problems. Winokur's work emphasized the importance of determining whether depression is likely to precipitate interpersonal difficulties. Post, Rubinow, and Ballenger (1992) asserted that for patients who have had depressive episodes that progressed in severity to the point of requiring inpatient hospitalization, interpersonal problems were less likely to have been influential in at least the recent depressive episodes. Post et al. (1992) sought to determine whether stressors such as interpersonal problems play a role as precipitants of depression. Coyne, Palmer, and Thompson (2002) highlighted that both of these models assume that the association between depression and marital problems should be weaker among the inpatients than in the outpatients. Therefore, the results of the current study contradicted several different findings from other research studies (e.g., Coyne & Benazon, 2001; Whisman, 2001) that revealed a relationship between marital conflict and depression in addition to an association between relationship discord and depression. The results of the current study may suggest a finding recognized by communication theorists (Watzlawick, Bavelas, & Jackson, 1967) which purports that the existence of a patient diagnosed with a mental disorder in a family or marriage can be viewed as essential for stability in that system, even though this type of stability is very undesirable.

Research Question 4/Hypothesis 3: Will Females' Initiator Style Questionnaire (ISQ) Scores Differ from Males' Initiator Style Questionnaire (ISQ) Scores?

There were several significant findings related to gender and communication. The purpose of research question four and hypothesis three were to explore whether females' ISQ scores would differ from males' ISQ scores. The fourth research question also highlighted this difference. It was found that regardless of group (inpatient, spouse/partner of inpatient, comparison, spouse/partner comparison), more females were initiators than males. These findings confirm Denton and Burleson's (2007) findings that women consistently saw themselves as more likely to initiate problem discussions than they see their spouses/partners as likely to initiate these discussions. The findings for the current study as well as Denton and Burleson's finding are consistent with self-in-relation theoretical researchers' findings on gender differences that suggest that women place greater importance on establishing and maintaining close relationships (Gilligan, 1982; Jack, 1991).

Hypothesis 4: There will be no Statistically Significant Difference in Female Participants' Perceived Spouse/Partner Initiator Tendency Scores when Compared to male Participants' Perceived Spouse/Partner Initiator Tendency Scores as Measured by the Initiator Style Questionnaire (ISQ).

The purpose of hypothesis four was to determine if there would be a statistically significant difference in female participants' perceived spouse/partner initiator tendency scores when compared to male participants' perceived spouse/partner initiator tendency scores as measured by the ISQ. Results revealed that regardless of gender, the inpatient's spouse/partner had lower perceived spouse/partner initiator scores than the spouse/partner comparison group. However, there was no relationship between gender and perceived

spouse/partner initiator category for any of the four groups. These results are inconsistent with findings from other research studies. Whisman (2001) asserted that the findings revealed that women placed more importance on establishing and maintaining close relationships, which is consistent with the self-in-relation theoretical perspective (Gilligan, 1982; Jack, 1991). Although relationships are important for both genders, the self-in-relation researchers suggested that there may be ways that these gender differences affect an individual's view of his/her relationships, which was not found in the current study.

Research Question 5/Hypothesis 5: Is there a Relationship between Participants' Initiator Style Questionnaire (ISQ) Scores and their Quality of Marriage Index (QMI) Scores?

The purposes of the fifth hypothesis and fifth research question were to determine if there would be a significant relationship between participants' ISQ scores and their QMI scores. It was found that the results revealed that in all cases higher self initiator scores were related to higher QMI scores. This significant relationship between quality of marriage/relationship and self-initiator scores was true for all four groups, with the relationship being the strongest for the inpatient group.

In addition, the comparison and spouse/partner comparison group also demonstrated a significant relationship between quality of marriage/relationship and perceived spouse/partner initiator scores with those with high QMI scores also being initiators. These findings are consistent with Roberts (2000) as well as Denton and Burleson's (2007) findings, which suggest that the expectation that the perceived ability

to discuss relationship issues is associated with marital satisfaction. These findings are also consistent with the findings of Kelly, Fincham, and Beach (2003), which suggest that the ability to discuss relationship concerns with a spouse/partner is a key ingredient in a healthy marriage, and so participants who perceived themselves and their spouses/partners as more likely to initiate relationship discussions usually evaluate their relationships more positively.

The relationship between self initiator scores and QMI scores was the strongest for the inpatient group ($p < .001$). The relationship was still significant ($p < .05$) for the spouse/partner of inpatient and comparison groups. When looking at gender, females who had high initiator scores also tended to have high QMI scores. Similarly, males who had high initiator scores also tended to have high QMI scores.

This finding is similar to the finding of Coyne, Thompson, and Palmer (2002) that suggests that couples with one spouse/partner hospitalized for depression may have adapted to the recurrent, episodic nature of the illness, and so the quality of their relationship may not have deteriorated because of the depression. Coyne et al. (2002) suggested that the attributions that spouses and other family members have about the depressed individual's symptoms may differ, and so the patient's difficulties may be more readily accepted by spouses and family members when attribution to a disorder is supported by formal diagnosis and hospitalization, in the case of inpatient depressed women. Coyne et al. also highlighted that a potential disadvantage of this attribution is that the patient's dissatisfaction with their husbands may be discounted, and their efforts

to renegotiate these relationships could actually be hampered by others' attributions of their discontent to a mental disorder instead of treating it as a legitimate concern.

Consistent with the literature on gender differences and communication (Cupach & Canary, 1995; Denton & Burleson, 2007; and Kelly et al. 2003), the females were significantly more likely to initiate relationship discussions with men. Therefore, this finding suggests that regardless of whether the female is diagnosed with major depressive disorder, she is more likely to initiate relationship discussions with her partner/spouse if she is in a heterosexual relationship. Denton and Burelson found that women consistently saw themselves as more likely to initiate problem discussions than men saw themselves, and women consistently saw themselves as more likely to initiate problem discussions than they saw their partners/spouses. The current study produced a similar result in that there was a significant relationship between self initiator tendency scores (those that tend to avoid versus initiate) and gender, regardless of group. These findings are consistent with Marcotte and Safran's (2002) assertion about the role of an individual's interpersonal schema in cognitive-interpersonal cycles, in which they defined interpersonal schema as a cognitive representation of characteristic self-other interactions based on previous experiences. Marcotte and Safran asserted that the individual's interpersonal schema influences his/her interactions with others. Marcotte and Safran asserted that a cognitive-interpersonal cycle is a characteristics pattern of self-other interactions influenced by the individual's interpersonal schema that tends to maintain this schema in a self-perpetuating fashion due to characteristic aspects of the individual's

manner or behavior that plays a role in perpetuating his or her typical cognitive-interpersonal cycle.

Hypothesis 6: There will be no Statistically Significant Relationship between Mutual Initiation Communication Patterns as Measured by the Initiator Style Questionnaire (ISQ) and Participants' Marital/Relationship Quality Scores as Measured by the Quality of Marriage Index (QMI).

Finally, the purpose of the sixth hypothesis was to determine if there was a statistically significant relationship between mutual initiation communication patterns as measured by the ISQ and participants' QMI scores. In this study, a median split of scores was utilized on the patient and spouse/partner self scores in order to establish whether the couple was a match in initiator style, a match in avoider style, or no match. It was found that couples who were both avoiders had lower ratings of quality of marriage by the inpatient than those who were both initiators or no match. It was also found that couples who were both avoiders had lower ratings of quality of marriage by the spouse/partner than those who were both initiators or no match. In other words, those couples who were both avoiders had significantly lower QMI scores than either of the two groups for both the patient's rating of marital/relationship satisfaction and the spouse/partner rating of marital/relationship satisfaction. In addition, regardless of the match type, the comparison group had higher QMI scores than the inpatient group.

For the inpatient group, there was a significant negative relationship between the inpatient's QMI and the amount of difference between the inpatient and spouse/partner ISQ score, indicating that inpatients who had ISQ scores that were similar to their

spouse/partner had higher quality of marriage/relationship. This finding may be representative of Coyne's (1976) interpersonal model of depression in which depressed people have a tendency to reject reassurance from their partners/spouses. Coyne posited that the depressed person is faced with an inflexible dilemma in that he/she both needs and doubts other individuals' reassurance. Coyne asserted that because this pattern is repetitive and resistant to attempts to change it, the increasingly depressed person's significant others become frustrated and irritated, which increases their own chances of becoming depressed, and it increases the likelihood of them rejecting the depressed individual. Coyne speculated that the nonreciprocal disclosure of intimate problems by individuals diagnosed with depression may have been a source for these effects (Benazon & Coyne, 2001). In the inpatient group, there were 14 couples that consisted of one spouse/partner who was an initiator and one spouse/partner who was an avoider. In the inpatient group, there were 9 couples in which both spouses/partners were avoiders and only 7 couples in which both partners were initiators. Given that those couples in the inpatients group who were in the initiate-avoid category and the avoider category all had lower quality of marriage scores, a potential way to explain these results may be through Coyne's interpersonal model of depression, in which nonreciprocal disclosure of intimate relationship problems by individuals diagnosed with depression increases marital dissatisfaction because problems are not getting addressed and/or resolved.

For the inpatient group, there was a significant positive relationship between the QMI score of the inpatient and spouse/partner. There was a positive relationship between the QMI scores of the inpatient comparison group with the QMI scores of the

spouse/partner comparison group. These findings support the assertion made by Kelly, Fincham, and Beach (2003) in that discussing relationship concerns is a key to healthy marriages, and people who freely initiate discussions tend to be more satisfied with their marriages than those who avoid discussions.

Therapeutic Implications

The current study examined initiator tendency from a social cognitive theoretical perspective in couples with one spouse/partner diagnosed with MDD and a matched comparison group. This research was conducted to identify initiate/avoid communication styles in these two groups using the *Initiator Style Questionnaire* (ISQ; Denton & Burleson, 2007) and to determine whether these communication patterns affect the overall quality of their relationships. Denton and Burleson (2007) reported that interest in initiating and avoiding behavioral patterns in married couples was initially stimulated by couple therapists in their descriptions of their observations in couple therapy sessions. Denton and Burleson concluded that the ISQ provides another option for quantifying such observations, and this has potential significance for clinical work in addition to clinical research.

Denton and Burleson (2007) reported that some models of marital/couple therapy specifically target the alteration of the demand-withdraw (initiate-avoid) pattern, such as emotion-focused therapy for couples (Johnson & Denton, 2002). However, Denton and Burleson asserted that future research is needed to determine whether the ISQ would be sensitive to changes in therapy. Since this is the first research study conducted that explored initiator tendency in couples with one partner/spouse diagnosed and hospitalized

for MDD, there are no marital therapeutic models that are specifically designed to address initiator match style issues in these particular couples. However, in couple/marital therapy it would most likely be beneficial for the therapist to assist these couples with utilizing more effective communication skills, in addition to assisting them with expanding their tolerance for differences that may exist in their relationship.

Awareness of the gender differences in couple communication can guide therapists as to which therapeutic interventions to utilize in the couple/marital therapy sessions. These interventions serve as the platform for which couples make changes to accomplish their therapeutic goals. Therapeutic goals for these couples may include recognition that their differences may not necessarily be obstacles that prevent them from addressing and resolving their problems, but instead these differences could be utilized as a catalysts to assist them in identifying their problems and managing and/or resolving these problems.

Limitations

There were several limitations in the current study. Since over two-thirds of the inpatients were female, the sample did not consist of an equal number of male inpatients. Nearly all the participants were Caucasian, and the average age for each of the groups was approximately 50 years old. The sample was restricted to recruitment from one inpatient psychiatric unit in a hospital located in Dallas, Texas, and thus, the results from this study may not generalize to inpatient populations in other types of hospitals due to the differences in demographic variables. For example, the lack of ethnic variability reduces the likelihood of these results generalizing to a more ethnically diverse group of

people. The small sample size also increases the risk for Type I error, and so it is important that interpretation of the results is tentative.

Due to the restrictions from the Joint Commission on Hospital Accreditation (JCAHO) for research studies conducted on inpatient psychiatric units, there is a very strict limit on the amount of time that is allotted for research in order to decrease the risk of increasing the patients' length of stay. Therefore, the total amount of time that the principal investigator was permitted for each inpatient participant in the study was only 30 minutes. As a result, only three instruments were included in the study. There is only one marital/relationship quality measure included in this study, and so the results related to marital/relationship quality may not be as strong as there would be if more marital/relationship quality measures were included in the study.

Another limitation was that the inpatients and their spouses/partners were administered the assessments by the principal investigator in a controlled environment, and the comparison group participants completed the assessments online through Survey Monkey. Although the principal investigator was able to administer the assessments to inpatients and their spouses/partners separately to maintain confidentiality and reduce social desirability, the principal investigator did not administer these assessments to the comparison group couples. Each comparison group participant's response start date and time, and response end date and time was recorded by Survey Monkey, and participants that did not appear to have completed the assessments separately were excluded from the analyses.

The majority of the couples that participated in this study were heterosexual. Therefore, the results from this study do not necessarily generalize to gay and lesbian couples. There was only one gay couple in the inpatient group, and there was only one gay couple in the comparison group. Since primarily heterosexual couples chose to participate in this study, it is possible that the current understanding of how gender influences initiator style may have been expanded if more gay and lesbian couples chose to participate in the study.

Finally, the comparison group was matched on gender, age, ethnicity, and length of relationship. The matched comparison group was a convenience sample, and so the results produced from this sample are not as reliable or valid as results produced from a control group. Since participants were not randomly selected for a control group, the results are less likely to generalize to the general population.

Future Research

The current study produced results regarding gender differences in couple communication that were consistent with other research findings in this area. Future research should focus on the expansion of the current knowledge of gender differences in patterns of initiator style, specifically with a more ethnically diverse sample. If more studies are conducted in these areas, clinicians would acquire more knowledge and information for helping more diverse populations in addition to being able to address specific circumstances that impact marital/relationship quality. It would also be important for future studies to explore initiator style in lesbian and gay couples to gain further understanding of the ways in which gender influences initiator style.

Future researchers could explore initiate-avoid patterns in couples where one partner/spouse, or both, are diagnosed with major depressive disorder in inpatient and outpatient settings, because large diverse samples may provide analyses to determine the patterns that manifest in their relationships. Coyne, Thompson, and Palmer (2002) asserted that empirical literature that focuses on individuals with depressive diagnoses is restricted in quantity and scope. Coyne et al. (2002) asserted that marital satisfaction and conflict require a broader assessment of marital functioning, specifically the role of variability in positive interactions, because some couples remained married and did not regret their choice of partners, even in the face of severe depression that required hospitalization, which directs greater attention to the strengths of such persevering couples. Coyne et al. asserted that greater attention is needed concerning the heterogeneity in couples with a depressed person, both in terms of the settings from which depressed individuals are recruited, in addition to the quality of their marriages.

Future research could also explore initiator tendency in couples with one or both partners diagnosed with other mental illnesses or physical illnesses. The tendency to initiate or avoid relationship problem discussions is important to examine in relapse prevention for any illness given that symptoms usually create changes in relationships that can lead to relationship problems. Finally, Denton and Burleson (2007) asserted that future research is needed to determine whether the ISQ would be sensitive to changes in couple/marital therapy.

Summary

The current research study explored couple communication from a social-cognitive theoretical perspective in couples with one partner diagnosed with major depressive disorder. The results were consistent with many of the hypotheses as well as with the findings from other research studies. Consistent with the literature on gender differences and communication (Cupach & Canary, 1995; Denton & Burleson, 2007; and Kelly, Fincham, & Beach, 2003) females were significantly more likely to initiate relationship discussions than men. There were statistically significant relationships between quality of marriage scores and initiator style scores in both the comparison group and the inpatient group, in which couples that were initiators were more satisfied in their relationships. These findings are consistent with several other researchers (Denton & Burleson; and Kelly et al., 2003) findings. These findings are also consistent with Marcotte and Safran's (2002) assertion about the role of an individual's interpersonal schema in cognitive-interpersonal cycles, in which interpersonal schema serves as a cognitive representation of characteristic self-other interactions based on previous experiences that influences his/her interactions with others.

The couples in the comparison group, as well as the inpatient group that were in the initiate-avoid category and the couples in the avoider category had lower quality of marriage scores than the couples in the initiator category. These findings were also consistent with Marcotte and Safran's (2002) assertion that a cognitive-interpersonal cycle is a characteristic pattern of self-other interactions influenced by the individual's interpersonal schema that tends to maintain this schema in a self-perpetuating fashion due

to characteristic aspects of the individual's manner or behavior that plays a role in perpetuating his or her typical cognitive-interpersonal cycle. Given that those couples in the inpatient group who were in the initiate-avoid category and the couples in the avoider category all had lower quality of marriage scores, a potential way to explain these results may be to refer to Coyne's (1976) interpersonal model of depression. In working with clinical populations, it is important for therapists to use reliable and valid symptom severity measures in addition to the ISQ or other couple communication measures, as well as relationship satisfaction instruments to assess progress. All of the findings from the current research study demonstrate the need for future researchers to expand on Denton and Burleson's (2007) recommendation in determining whether individuals with a particular clinical condition tend to be more initiating or avoiding in their relationships than those without the condition.

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APPENDIX A

Inpatient Statement

Inpatient Statement

The principal investigator made the following statement to potential inpatient participants:

> "Hello my name is Fallon Cluxton-Keller, and I am conducting some research here on the inpatient psychiatric unit. Dr. Wayne Denton, a psychiatrist at UT Southwestern, and I are conducting a research study on mental health and couple communication to learn ways that couples usually handle relationship problems. We are interested in ways that partners or spouses communicate with each other, and so you and your spouse/partner will not be asked any questions about any specific problems in your relationship. You and your spouse/partner qualify for this study. Would you like to hear more about the study?"

If the inpatient said no, then the principal investigator made the following statement:

> "I understand. Thank you for your time. Good bye."

If the inpatient said yes, then the principal investigator proceeded with the following statement:

> "If you agree to participate in the study, your information will be kept confidential. Your spouse's/partner's information will also be kept confidential. The total participation time for this study is approximately thirty minutes for you. Since couple communication is the focus of this study, both you and your partner/spouse must agree to participate in the study. Your spouse/partner can come to the unit to complete the instruments. Both you and your spouse/partner will each receive a ten dollar gift card to Walmart for participation in this study.

Your treatment will not be affected regardless of whether you agree to participate or decide not to participate in the research study. You and/or your spouse's/partner's participation in other research studies will not be affected regardless of whether you agree to participate or decide not to participate in this study on mental health and couple communication. Do you have any questions about the study?"

APPENDIX B

Inpatient Spouse/Partner Statement

Inpatient Spouse/Partner Statement

The principal investigator made the following statement to each inpatient participant's spouse/partner:

> "Hello, my name is Fallon Cluxton-Keller and I am a researcher from the University of Texas Southwestern Medical Center in Dallas. Your spouse/partner gave me permission to talk with you about the possibility of participating in a research study. Would you like to hear about the study?"

If the spouse/partner said no, then the principal investigator made the following statement:

> "I understand. Thank you for your time. Good bye."

If the spouse/partner said yes, then the principal investigator proceeded with the following statement:

> "Dr. Wayne Denton, a psychiatrist at the University of Texas Southwestern Medical Center at Dallas, and I are conducting a research study on mental health and couple communication to learn ways that couples usually handle relationship problems. You and your spouse/partner qualify for this study. Your spouse/partner has agreed to participate in this study, and he/she consented for me to contact you about the possibility of participating in the study. We are interested in ways that partners or spouses communicate with each other, and so you and your spouse/partner will not be asked any questions about any specific problems in your relationship. If you decide to participate, your information will be kept confidential. Your spouse's/partner's information will also be kept confidential.

The total participation time for this study is approximately twenty minutes for you. Since couple communication is the focus of this study, both you and your partner/spouse must agree to participate in the study. You can complete the instruments on the inpatient psychiatric unit, and you will receive a ten dollar gift card to Walmart for participation in the study after completing these instruments. Your spouse's/partner's treatment will not be affected regardless of whether you agree to participate or decide not to participate in this research study. Do you have any questions about the study?"

APPENDIX C

Inpatient Spouse/Partner Decline Statement

Inpatient Spouse/Partner Decline Statement

The principal investigator made the following statement to inpatients if their spouses/partners decide not to participate in the research study:

> "I appreciate your interest in the research study on mental health and couple communication. Thank you for giving me permission to talk with your spouse/partner about the research study. At UT Southwestern, we honor each individual's right to choose whether to participate in a research study. Your spouse/partner has decided not to participate in this study. Your treatment will not be affected as a result of not participating in this research study. Do you have any questions for me?"

E-mail sent to Students Currently Enrolled in Family Sciences Graduate Programs at Texas Woman's University and Others in the Community

The following email was sent to students currently enrolled in Family Sciences graduate programs at Texas Woman's University, to others these students knew in the community, as well as others in the community:

"Hello, my name is Fallon Cluxton-Keller and I am a doctoral student in the Family Therapy program at Texas Woman's University. I am currently conducting research for my dissertation on mental health and couple communication. I am doing this research study with Wayne Denton, MD, Ph.D., at the University of Texas Southwestern Medical Center. I am recruiting couples for the study and I invite you to click on the following link to Survey Monkey [redacted]

If you would like to access the inclusion criteria and consent form for this research study. Participation in this study is voluntary and participation in this research study will not count as part of your coursework. You will not be paid to participate in this research study. This study will take you approximately 20 minutes to complete and the study will take your partner/spouse approximately 20 minutes to complete. Please email me at [redacted] if you have any questions. Respectfully, Fallon Cluxton-Keller"

APPENDIX E

Online Consent Script for the Comparison Group Couples

Online Consent Script For The Comparison Group Couples

The principal investigator posted the following consent script on the Survey Monkey secure website for the comparison group couples:

"This research study is being done on mental health and couple communication, specifically couples with one partner diagnosed with major depressive disorder, schizoaffective disorder or schizophrenia. This research study is being conducted by Wayne H. Denton, MD, Ph.D., and Fallon Cluxton-Keller, M.A., at the University of Texas Southwestern Medical Center. In order to determine how these couples differ from other couples, the researchers are interested in using two instruments to measure couple communication and relationship satisfaction in individuals who are not diagnosed with major depressive disorder, schizoaffective disorder or schizophrenia. Each participant will complete a Brief Demographic Questionnaire to indicate his/her age, gender, ethnicity, and length of time in the committed relationship or marriage. The Brief Demographic Questionnaire will take approximately 5 minutes to complete. The next instrument is the Initiator Style Questionnaire and it takes approximately 10 minutes to complete. The first part of this instrument asks the participant to rate how he/she typically responds to problems in his/her relationship on a scale of one, which represents "Strongly Disagree," to nine, which represents "Strongly Agree." The second part of the instrument asks the participant to rate how his/her spouse or partner typically responds to problems in their relationship on a scale of one, which represents

"Strongly Disagree," to nine, which represents "Strongly Agree." The last instrument is the Quality of Marriage Index and it takes approximately 5 minutes to complete. Each participant will rate how much he/she agrees or disagrees with the six statements. Statements one through five are rated on a scale of one, which is "Very Strong Disagreement" to seven, which is "Very Strong Agreement." For the last question the participant will rate the statement on a scale of one to ten with one being "Very Unhappy," five is "Happy," and ten is "Perfectly Happy." There are no psychological or physical risks associated with these measures. Your participation is completely voluntary. If you choose to participate in this research study, you can complete these instruments online through the Survey Monkey secured website anonymously. By completing these instruments, you will be consenting to a research study where your information will be used. Please email me at [redacted] if you have any questions about the study. Thank you for your time. Respectfully, Fallon Cluxton-Keller."

The principal investigator promptly answered any questions about the study.

APPENDIX F

Brief Demographic Questionnaire

Brief Demographic Questionnaire

Please use a pen to answer the questions in this questionnaire. You do not need to put your name on this questionnaire.

1. What is your age?

2. Please circle whether you are Male or Female

3. What is your ethnicity?

4. How many years and/or months have you been in the marriage or committed relationship with the spouse/partner you enrolled in this study with?

APPENDIX G

Directions for Comparison Group Couples

Directions For Comparison Group Couples

The principle investigator posted the following directions on the Survey Monkey website:

> "In order for your responses and your spouse's/partner's responses to remain anonymous, you and your partner/spouse will need to create a unique identification code prior to completing the instruments for this study. This unique identification code can consist of up to eight numbers and/or letters. You will need to enter this unique identification code in the box below prior to completing the instruments. Your spouse/partner will also need to enter the unique identification code in the box below prior to completing the instruments."