

THE ROLE OF DEPRESSIVE SYMPTOMS, PARTNER EMOTIONAL EXPRESSION, AND
COUPLE INTERACTIONS ON MARITAL QUALITY

by

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(Under the Direction of Chalandra Bryant and Ted Futris)

ABSTRACT

Previous research on married couples has demonstrated the direct influence of mental health on marital quality. However, the processes that mediate and moderate the associations between depressive symptoms and marital quality are less understood. Using a social functionalist perspective, this study examined whether depressive symptoms were associated with marital quality directly or through couple interactions, and whether perceptions of one's partner's emotional expression buffer the negative association between depressive symptoms and couple interactions. Based on data collected from a sample of 512 married individuals analyses supported the indirect association between depressive symptoms and marital quality such that married individuals who reported more frequent depressive symptoms were more likely to report less frequent positive couple interactions and consequently lower marital quality. As well, the results indicated that partner emotional expression moderates this association. This study facilitates understanding the mechanisms through which mental health is associated with marital quality.

INDEX WORDS: Marital Quality, Depressive Symptoms, Couple Interactions, Partner Emotional Expression, Marriage

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DEDICATION

I dedicate this to my daughter, Jordyn Chappell. Everything I do is for you. I love you,
Jelly.

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First, I would like to thank my fiancé, Corwin Chappell. Thank you so much for your unwavering support throughout this process. I will forever be grateful for continued encouragement and understanding. I love you. Also, to my daughter, Jordyn Chappell, you make all of this worth it.

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER	
1 Introduction.....	1
Partner Emotional Expression.....	2
Linking Individual Well-being and Couple Interactions	4
Linking Couple Interactions and Marital Quality	6
Present Study	7
2 Literature Review.....	8
Marital Quality.....	8
The Association between Depressive Symptoms and Couple Functioning.....	9
Linking Couple Interactions and Marital Quality	12
Partner Emotional Expression.....	14
Present Study	18
3 Methods.....	19
Data Collection	19
Participants.....	19
Measures	20

Validity of Measures	22
Data Analysis	22
4 Results.....	24
Preliminary Analyses	24
Measurement Model	26
Mediation Model.....	27
Moderated Mediation Model	27
5 Discussion	30
Limitations, Future Directions, and Conclusion	33
REFERENCES	36
APPENDICES	
A Measurement Scale and Item Descriptives	43
B Female and Male Correlations	45

LIST OF TABLES

	Page
Table 1: Descriptive Statistics and Correlations	25
Table 2: Correlations between Study Variables and Controls	26
Table 3: Model estimates with and without Covariates.....	28

LIST OF FIGURES

	Page
Figure 1: Conceptual Model	7
Figure 2: Interaction Simple Slopes.....	29

CHAPTER 1

INTRODUCTION

According to the National Institute of Mental Health (2008), about 6.7% of U.S. adults experience depression. Further, approximately one in five adults exhibit at least mild depressive symptoms such as feeling down or hopeless, feeling bad about oneself, and little interest in doing things (Shim, Baltrus, Ye, & Rust, 2011). Previous research on married couples has shown that experiencing symptoms of depression is related to more negative (e.g., demand-withdraw and self-silencing) and less positive (e.g., mutual support, effective problem-solving) marital interactions (Benazon & Coyne, 2000; Gabriel, Beach, & Bodenmann, 2010; Uebelacker, Courtnage, & Whisman, 2003). In turn, these interaction patterns are associated with lower marital quality (Chaney, 2010; Gottman, 1993; Holman & Jarvis, 2003); however, research on the direct and indirect effects of individual health on this association is limited. Also, while research studies do suggest a positive association between partner emotional expression (e.g., gratitude and understanding) and various marital outcomes (Epstein, Warfel, Johnson, Smith, & McKinney, 2013; Neff & Karney, 2005), few studies have examined how these positive appraisals moderate the association between partner health and couple functioning.

Conceptually, marital quality reflects each partner's subjective assessment of the relationship (Fincham & Rogge, 2010). The present study takes a multidimensional approach and examines marital quality as reflective of commitment, satisfaction, and stability. Personal commitment has been conceptualized as reflecting a desire to stay in a relationship (Johnson, Caughlin, & Huston, 1999), the inclination to maintain the relationship (Schoebi, Karney, &

Bradbury, 2012), dedication to the relationship (Stanley & Markman, 1992), and the motivation behind behaviors to preserve the relationship (Rusbult & Buunk, 1993; Stanley, Rhoades, & Whitton, 2010). Marital satisfaction, a common indicator of marital quality (Fincham & Rogge, 2010), is conceptualized as the evaluation of the marriage “in which positive features are salient and negative features are relatively absent” (Bradbury, Fincham, & Beach, 2000, p. 973). This evaluation is an intrapersonal process that indicates the individual’s sentiments toward their marriage and their partner (Fincham & Rogge, 2010). Lastly, marital stability refers to the status of the relationship (e.g., whether or not the relationship had dissolved; Jose, O’Leary, & Moyer, 2010) and to feelings or thoughts of wanting to leave the relationship (Brown, Orbuch, & Bauermeister, 2008). Collectively, these indicators provide a more holistic perspective of marital quality, examining feelings and behaviors associated with wanting to stay in the relationship and assessing overall sentiments toward the relationship.

Consistent with a social functionalist perspective (Keltner & Haidt, 1999), this study examines the association between individual well-being, couple functioning, and marital quality. Specifically, this study examines whether individual well-being is associated with marital quality directly or indirectly through couple interactions. In addition, the present study tests the moderating, or buffering, effect of individual’s perception of their partner’s emotional expression on the association between individual well-being on couple interactions.

Partner Emotional Expression

According to a social functionalist perspective (Keltner & Haidt, 1999), an individual’s emotions facilitate social interactions and relationships to contend with or manage internal and external stressors. Specifically, emotions impact social relationships by helping individuals recognize the emotions and intentions of others, which in turn, facilitates social interactions

(Keltner & Haidt, 1999). For example, negative emotions such as anger, disgust, and contempt are interpreted uniquely by individuals and dictate how individuals react to situations or others (Hutcherson & Gross, 2011). In contrast, positive emotions (e.g., gratitude, joy) can increase personal resources (e.g., mindfulness, social support), which in turn, has been found to improve life satisfaction and reduce depressive symptoms (Fredrickson, Cohn, Coffey, Perk & Finkel, 2008). While negative emotions (i.e., aggression) have necessary adaptive functions, such as in situations when individuals feel threatened, positive emotions can combat lingering effects of stress and adversity (Fredrickson, 2004). In line with this perspective, the current study examines the influence of emotional expression – operationalized as gratitude and understanding – on marital processes.

Expressions of emotions, such as showing gratitude, have been argued to initiate and strengthen relationships (Fincham & Beach, 2013). Algie and colleagues (2010) found that gratitude facilitates relationship quality by giving individuals a renewed sense of closeness and satisfaction with their partner and relationship. It is also theorized that gratitude is “associated with feeling understood, valued and cared for” (Fincham & Beach, 2013, p.16) which, consistent with a social functionalist perspective, helps individuals navigate difficult times and thrive in good times (Algie, Haidt, & Gable, 2008).

Research on gratitude in marital relationships is quite recent and has primarily focused on the individual’s expression of gratitude. Couples who express appreciation for one another exhibit more relationship maintenance behaviors and report feeling more committed to their relationship (Gordon, Arnette, & Smith, 2011; Gordon, Impett, Kogan, Oveis, & Keltner, 2012; Lambert & Fincham, 2011). Recently, attention has turned to perceptions of received gratitude. Findings indicate that husbands’ expression of gratitude can facilitate a decrease in their wives’

depression (Chang, Li, Teng, Berki, & Chen, 2012). There is also support for perceived gratitude's role in buffering negative marital interaction's (e.g., demand/withdraw communication patterns) impact on marital outcomes (Barton, 2013). While the literature on gratitude and relationships has grown, very little is known about how perceptions of receiving gratitude influence marital processes.

Self-disclosure and responsiveness, another indicator of emotion expression, are described as intimate processes, leaving the individual feeling validated and understood (see Derlega, Winstead, & Greene, 2008). Laurenceau, Rivera, Schaffer, & Pietromonaco (2004) suggest that partner responsiveness to self-disclosure is most salient for relationship closeness. Individuals who perceive that their partners' are responsive to their disclosures have more positive evaluations of their relationship and report greater relationship functioning (Laurenceau, Barrett, & Rovine, 2005). In addition, having knowledge of partners' goals and having an accurate perception of their qualities (e.g., intellectual capabilities, social skills) is associated with positive relationship outcomes and supportive behaviors (Epstein, Warfel, Johnson, Smith, & McKinney, 2013; Neff & Karney, 2005). Further, a partner's knowledge of their significant other's goals can foster the significant other's feelings of being understood and cared for, resulting in greater feelings of interpersonal closeness (Riediger & Raters, 2010).

Linking Individual Well-being and Couple Interactions

While there are many indicators of well-being, the present study, focuses on depressive symptoms. Depressive symptoms have been examined by assessing mood-related symptomology (e.g., feelings of sadness, isolation, guilt, worthlessness) and behaviors (e.g., loss of energy, inability to focus, loss of interest in usual activities) (Haines, Beggs, & Hulbert, 2011; Holahan, Moerbak, Moos, Cronkite, Holahan & Kenney, 2007). Moreover, the depressed mood of

significant others' can trigger similar mood in their partners (Benazon & Coyne, 2000; Coyne, Thompson, Palmer, 2002; Uebelacker, Courtnage, & Whisman, 2003). Longitudinal studies of depressive symptoms suggest a negative association between marital quality and depressive symptoms (Beach, Katz, Kim, & Brody, 2003).

Much of the literature has focused on depressive symptoms as an outcome of negative interactions and marital dissatisfaction. For example, negative relationship interactions (e.g., lack of support, controlling behaviors, withdrawal) have been shown to increase depressive symptoms (Fagan, 2009; Whitton et al., 2007). The focus of the present study, however, is on depressive symptom's impact on marital processes and outcomes. Research has shown that depressive symptoms contribute to negative patterns of communication (e.g., demand-withdraw and self-silencing) and low levels of positivity (e.g., expressions of affection). For example, a study of older couples suggested that when one partner was experiencing depression couples experienced problems communicating and engaging in effective problem-solving (Sandberg, Miller, & Harper, 2002). Papp, Kouros, and Cummings (2009) linked both husbands' and wives' depressive symptoms to increased reports of husband demand-wife withdraw behaviors during conflict. Further, a longitudinal study of middle-aged and older adults found that depressive symptoms at baseline predicted marital discord at the two-year follow-up assessment (Whisman & Uebelacker, 2009). While research has supported a reciprocal association between depressive symptoms and marital quality (Gustavson, Røysamb, Soest, Helland, Karevold, & Mathiesen, 2012), information regarding the mechanisms involved in moderating the association between depressive symptoms and relationship quality is absent from the literature.

Linking Couple Interactions and Marital Quality

Positivity has been associated with beneficial marital outcomes (Rauer & Volling, 2013), while negativity has been associated with detrimental outcomes (Caughlin, Huston, & Houts, 2000). Positive and negative interactions have most commonly been assessed in the form of communication patterns, problem solving, and mutual support (Rauer & Volling, 2013). The nature of couple interactions are likely to be seen during times of conflict. Conflict is experienced by every couple, but the manner in which couples interact during these times is a determinant of their marital quality (Stanley, Markman, & Whitton, 2002).

In addition to positivity, negative couple communication has been found to influence marital quality. In Gottman's (1994) work with married couples, he identified four destructive communication processes¹ (criticism, contempt, defensiveness, and stonewalling) that build upon one another. The presence of these negative processes is associated with low marital satisfaction and is predictive of divorce (Gottman & Levensen, 2000; Lannin, Bittner, & Lorenz, 2013). Similarly, demand/withdrawal, a process where one partner urges the other to engage in discussion while the other "pulls away" from the discussion, also has been reported to negatively affect marital quality (Caughlin & Scott, 2010) marital satisfaction over time (Heavey & Christensen, & Malamuth, 1995).

Along with these patterns of interactions, spending time together also has been found to influence marital quality (Anderson, Van Ryzin, & Doherty, 2010; Zuo, 1992). In fact, time spent together tends to facilitate companionship, commitment, and mutual dependence which couples draw upon during difficult times (Chaney, 2010). Thus, spending time together and engaging in shared activities represents an investment in the relationship, which can have implications for commitment to the relationship, an important indicator of marital quality.

¹ While "belligerence" was also added to Gottman's destructive processes, this study focuses on his original four.

Present Study

As shown in Figure 1, the present study examines the influence of depressive symptoms on marital interactions and marital quality. Based on the literature assessing these associations, the following hypotheses were examined: a) individuals experiencing frequent depressive symptoms are expected to report more negative couple interactions, b) individuals experiencing frequent depressive symptoms are expected to report lower marital quality and, c) couple interactions are expected to mediate the association between depressive symptoms and reported marital quality. Based on a social functionalist perspective, gratitude and understanding are argued to be emotional expressions that serve as a personal resource during psychological distress. Thus, it is hypothesized that individuals who report receiving gratitude and understanding from their partner will also report more positive couple interactions, despite experiencing depressive symptoms.

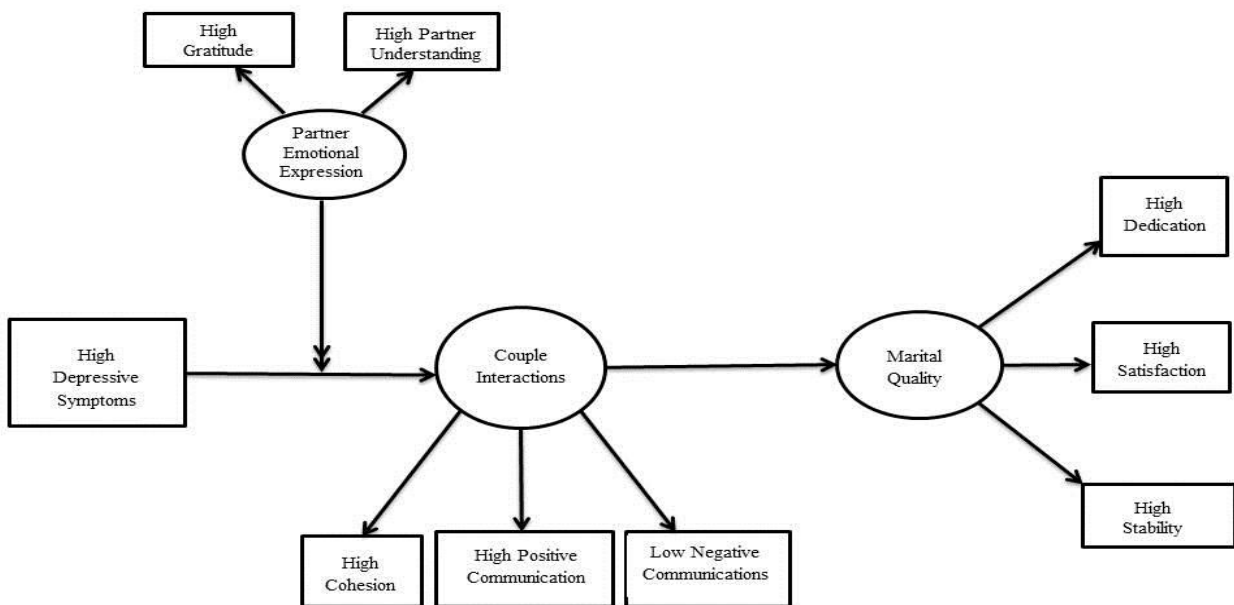


Figure 1. Conceptual Model

CHAPTER 2

LITERATURE REVIEW

In this literature review, I explore the research on the association between depressive symptoms, and couple interactions and marital quality. In addition, from a social functionalist perspective I review the literature on partner emotional expression within the context of marriage and hypothesize that partner emotional expression moderates the association between depressive symptoms and positive couple interactions. Consistent with the model depicted in Figure 1, I will specifically examine the direct association between depressive symptoms and marital quality, the association between depressive symptoms and marital quality mediated by couple interactions, and how partner emotional expression may buffer the impact of depressive symptoms on couple interactions.

Marital Quality

In relationship literature, marital quality is one of the most commonly studied topics (Bradbury, Fincham & Beach, 2000; Fincham & Rogge, 2010). Because strong marriages have important implications for individuals, families, and society (Bradbury et al, 2000), a large body of literature has been dedicated to understanding the factors influencing marital quality. Conceptually, marital quality reflects each partner's subjective assessment of the relationship (Fincham & Rogge, 2010). Despite the extensive research examining marital quality, there is no exclusive measure dedicated to this concept. Most studies have relied on marital satisfaction as the primary indicator of marital quality (Fincham & Rogge, 2010; Knapp & Lott, 2010). Marital satisfaction refers to the intrapersonal evaluation of the individual's sentiments toward the

marriage and their partner (Fincham & Rogge, 2010), thus making it a fitting assessment of marital quality. Recently, however, there has been a call to investigate marital quality by going beyond assessing only satisfaction (Knapp & Lott, 2010).

This study goes beyond measuring satisfaction, and also examines commitment and stability as indicators of marital quality. Personal commitment has been found to be a function of love, marital satisfaction, and couple identity (Johnson, Caughlin, & Huston, 1999). Researchers who have studied commitment have furthered the understanding and conceptualization of personal commitment to include the inclination to maintain the relationship (Schoebi, Karney, & Bradbury, 2012), dedication to the relationship (Stanley & Markman, 1992; Stanley, Rhoades, & Whitton, 2010), and the motivation behind behaviors to preserve the relationship (Rusbult & Buunk, 1993). Relatedly, marital stability refers to whether or not the relationship is believed to last (Busby, Holman, & Niehus, 2009) as well as feelings or thoughts of wanting to leave the relationship (Brown, Orbuch, & Bauermeister, 2008). Collectively, these indicators provide a more holistic framework of marital quality, examining feelings and behaviors associated with wanting to stay in the relationship and assessing overall sentiments toward the relationship.

The Association between Depressive Symptoms and Couple Functioning

Indicators of well-being include life satisfaction, optimism, and mental health (Huppert & So, 2011). The current study explores mental health in terms of self-reports of depressive symptoms. Depressive symptoms have been examined by assessing mood-related symptomology (feelings of sadness, isolation, guilt, worthlessness, etc.) and behaviors (loss of energy, inability to focus, loss of interest in usual activities) (Haines, Beggs, & Hulbert, 2011; Holahan, Moerkbak, Moos, Cronkite, Holahan & Kenney, 2007).

Much of the literature has focused on depressive symptoms as an outcome of negative interactions. For example, negative relationship interactions have been shown to increase depressive symptoms. Using a predominantly White sample of 139 couples who were assessed prior to marriage and one year later, Whitton and colleagues (2007) found that destructive marital interactions (i.e., withdrawal, negative conflict, escalation) predicted increased depressive symptoms in women. Further, relationship confidence - the belief that the relationship will be successful - fully mediated the association between negative marital interactions and depressive symptoms. Similar findings have been found with racially/ethnically diverse samples. For example, in a study of 961 racially diverse married couples obtained from the Fragile Families and Child Wellbeing dataset, low quality spousal relationships at year one, such as low levels of relationship support (Fagan, 2009), predicted increased depressive symptoms at year three for African American and Hispanic fathers. In addition, Fagan (2009) found that non-Hispanic White fathers, Hispanic fathers and mothers, and African American mothers also reported increased depressive symptoms at year three when their spouse was more controlling (i.e., isolating partner from friends/family and withholding or attempting to control money).

Though these studies support a causal association between couple interactions and depressive symptoms, other studies show support for the direct effects of depressive symptoms on couple interactions. For example, in a study of marital processes and depression in older couples, 26 couples (10 of which reported that one or both partners was depressed) were interviewed regarding their marital interactions during depressive episodes. The study suggested that, when one partner was experiencing depression, couples experienced problems communicating and experienced difficulty engaging in effective problem-solving (Sandberg, Miller, & Harper, 2002). Further, depressive symptoms contribute to negative patterns of

communication (demand-withdraw and self-silencing). Furthermore, in a study comparing 73 couples with a depressed wife to 42 couples where neither spouse was identified as depressed, depressed wives reported expressing less affection towards their spouses and increased difficulty discussing problems (Coyne, Thompson, Palmer, 2002). Uebelacker and colleagues (2003) studied the association between depressive symptoms, marital communication, and marital satisfaction. They found that, for both husbands and wives, depressive symptoms were associated with self-silencing as well as wife-demand and husband-withdraw communication patterns. Moreover, the depressed mood of significant others' can trigger similar mood in their partners. A study of 79 couples found that the mood of a non-depressed spouse was correlated with the mood of their clinically depressed spouse, such that non-depressed spouses reported significantly higher levels of depressed mood than population norms (Benazon & Coyne, 2000). Papp, Kouros, & Cummings (2009) linked both husbands' and wives' depression to increased reports of husband demand-wife withdrawal behaviors during conflict. Further, a longitudinal study of middle-aged and older adults found that depressive symptoms at baseline predicted marital discord at the two year follow-up assessment (Whisman & Uebelacker, 2009).

Investigation of the association between depressive symptoms and marital quality has produced conflicting results. In a meta-analysis of 93 studies, Proulx and colleagues (2007) suggested that the association between personal well-being (e.g., depressive symptoms) and marital quality was stronger when personal well-being was examined as the dependent variable. Contrary to this finding, in a study of 115 individuals (68 married), Burns, Sayers, and Moras (1994) reported that relationship satisfaction yielded a weak causal effect on depression severity, but that chronic, low-level depression was associated with low relationship satisfaction. While recent literature has delved further into the link between marital quality and depressive

symptoms (Beach, Katz, Kim, & Brody, 2003), much remains to be explored with the reverse association (that is, the impact of depressive symptoms on marital quality).

In Whisman's (2001) review of literature examining depressive symptoms and marital dissatisfaction, he concluded that exploration of mechanisms involved in moderating and mediating this association needed to be considered. It is possible that depressive symptoms impact marital quality indirectly. For example, in a study of 110 college students in romantic relationships, researchers found that perceived understanding (e.g., perceptions of partners' ability to understand individuals' thoughts and feelings) mediated the link between depressive symptoms and relationship quality (e.g., satisfaction and conflict) (Gordon, Tuskeviciute, & Chen, 2013). Because of the limited literature on the investigation of mechanisms involved in moderating and mediating the influence of depressive symptoms on marital quality, this study aims to advance our understanding of how couple interactions influence this association. Specifically, it is expected that experiencing depressive symptoms will be negatively associated with couple interactions which in turn will reduce marital quality.

Linking Couple Interactions and Marital Quality

Couple interactions are typically studied in terms of positive versus negative interactions within the context of marital conflict (Caughlin, Huston, & Houts, 2000; Rauer & Volling, 2013). Spending time together is also an example of a couple interaction that is associated with marital quality (Zuo, 1992). This review further examines these indicators of couple interactions.

Couples tend to report higher marital quality when there are more positive interactions than negative. Gottman and colleagues (1998) studied newlywed couples to determine which interaction processes were predictive of marital happiness and stability. Couples who exhibited positive affect during conflict reported happier marriages than couples who were less positive

during conflictual exchanges and were more likely to still be married after 6 years. Moreover, in a study of 173 couples, researchers found that couples that engaged in more positive problem solving behaviors reported higher marital satisfaction than those with more negative conflict responses (Ridley, Wilhelm, & Surra, 2001).

In addition to positivity, negative couple communication patterns such as criticism, contempt, defensiveness, and stonewalling have been associated with relationship distress and subsequent marital dissolution (Gottman, 1994). For instance, in a longitudinal study of 79 couples, participants who were observed engaging in criticism, conflict withdrawal (stonewalling), defensiveness, etc. were more likely to be divorced, on average, 7.4 years earlier than their counterparts (Gottman & Levensen, 2000). In a longitudinal study of 748 individuals, defensiveness was associated with future marital instability (Lannin, Bittner, & Lorenz, 2013). Further, defensiveness was found to lead to conflict escalating behaviors (i.e., criticism), which in turn, led to marital instability. Similarly, demand/withdrawal, conceptualized as one individual urging to engage in discussion while the other “pulls away” from the discussion (Caughlin & Scott, 2010), is associated with lower marital satisfaction over time. For example, in a sample of 48 couples, demanding and withdrawing were negatively associated with reports of marital satisfaction at Time 1 and Time 2 (2.5 years later) (Heavey, Christensen, & Malamuth, 1995). Specifically, wife demanding and husband withdrawal significantly predicted declines in wives’ marital satisfaction. Interestingly, in another study of 97 couples, wives’ withdrawal was found to be a greater determinant of husbands’ marital dissatisfaction than husbands’ withdrawal on wives’ marital dissatisfaction (Roberts, 2000). First-married couples and remarried couples also may differ in the prevalence of this demand/withdraw pattern. For example, in a sample of

128 married individuals, those in first marriages reported slightly higher demand/withdraw patterns than those in remarriages (Mirecki, Brimhall, & Bramesfeld, 2013).

Along with these patterns of interactions, spending time together – or couple cohesion - is also an example of couple interaction that has been found to influence relationship quality. For example, in a longitudinal study examining 706 continuously married individuals and their reports of marital happiness, couples that reported spending more time engaging in shared activities also reported higher levels of marital happiness over a 20 year span (Anderson, Van Ryzin, & Doherty, 2010). In another study of 30 couples, the willingness to share in each other's ideas and activities was a significant predictor of marital satisfaction (Russell-Chapin, Chapin, & Sattler, 2001). Time together has also been associated with commitment. Using a sample of 31 African American married couples and qualitative methods, Chaney (2010) examined what marriage meant to the couples and found that time spent together facilitated companionship, commitment, and mutual dependence which the couples drew upon during difficult times.

In summary, previous research has indicated that positive and negative marital processes and shared time together are significantly associated with marital quality. Consistent with the research examined, it is expected that couple interactions – operationalized as frequent positive communication, less frequent negative communication patterns, and high couple cohesion - will be directly and positively associated with marital quality in the present study. And, as previously noted, it is hypothesized that couple interactions will mediate the association between depressive symptoms and marital quality.

Partner Emotional Expression

The unique contribution of this study is the examination of the role of partner emotional expressions in the association between depressive symptoms and marital quality. From a social

functionalist perspective, emotions experienced within the couple relationship influence the nature of couple interactions (Keltner & Haidt, 1999). This review assesses how this perspective has been applied in the existing literature.

Keltner and colleagues (2006) suggest that emotions are functional and serve survival and reproductive purposes. For example, desire is an emotion that functions to increase the likelihood of sexual contact, and the emotion, love, facilitates the forging of long-term bonds. Thus, from a social functionalist perspective, emotions influence social interactions by helping individuals recognize the emotions and intentions of others, which in turn, facilitates social interactions (Keltner & Haidt, 1999). The specific assumptions of this perspective are as follows: (a) people are, by nature, social, and they cope with problems of survival within the context of relationships, (b) emotions are a way of facilitating social interactions and relationships to contend with or manage these problems, and (c) emotions are dynamic processes that negotiate the individuals' relation to an ever changing social environment (see Keltner & Haidt, 1999).

There are various ways in which both positive and negative emotions facilitate interactions (Fredrickson, 2004; Hutcherson & Gross, 2011). In her work, Fredrickson (2004) argued that positive emotions build “enduring personal resources” that last even when the emotions are no longer felt. She also posited that while negative emotions (i.e., aggression) have necessary adaptive functions, such as in situations when individuals feel threatened, positive emotions can combat lingering effects of negativity (i.e., stress and adversity). In a study of 139 working adults, positive emotions were indeed found to increase personal resources which, in turn, predicted life satisfaction and reduced depressive symptoms (Fredrickson, Cohn, Coffey, Perk & Finkel, 2008). A study exploring the role of anger, disgust, and contempt found that these emotions are interpreted uniquely (anger interpreted differently than disgust, disgust interpreted

differently than contempt, etc.) and dictate how individuals react to situations or other individuals (Hutcherson & Gross, 2011). In line with this perspective, the current study examines the influence of emotional expression, operationalized as gratitude and understanding, on marital processes.

Expressions of emotions, such as showing gratitude, have been argued to initiate and strengthen relationships (Fincham & Beach, 2013). As stated earlier, Algoe and colleagues (2010) found that gratitude facilitates relationship connection by giving the relationship a “booster shot,” providing individuals a renewed sense of closeness and satisfaction with their partner and relationship. It is also theorized that gratitude is associated with facilitating positive emotions within the relationship, such as feeling understood and cared for (Fincham & Beach, 2013) which, consistent with a social functionalist perspective, helps individuals navigate difficult times and thrive in good times (Algoe, Haidt, & Gable, 2008).

Research on gratitude has primarily focused on the individual’s expression of gratitude. Gratitude has been associated with improved mood and focusing on and appreciating the positive aspects of life (Watkins, Woodward, Stone, & Kolts, 2003; Wood, Froh, & Geraghty, 2010). Emmons and McCullough (2003) suggested that the positive effects of gratitude (optimism, overall life satisfaction) transcend the individual and can be observed by their significant other. While the effects of gratitude have been widely studied at the individual level, recent research has been dedicated to exploring the role of gratitude in dyadic relationships. Gratitude has been found to encourage relationship building behaviors (Bartlett, Condon, Cruz, Baumann, Desteno, 2012) which then lead to relationship satisfaction and feelings of relationship strength (Lambert, Clark, Durtschi, Fincham, & Graham, 2010). Couples who expressed appreciation for one another exhibited more relationship maintenance behaviors and showed commitment to their

relationship (Gordon, Arnette, & Smith, 2011; Gordon, Impett, Kogan, Oveis, & Keltner, 2012; Lambert & Fincham, 2011).

While the literature on the influence of gratitude on relationship quality has grown, very little is known about how perceptions of receiving gratitude influence marital processes. In a study of 18 couples, husbands' expression of gratitude was found to decrease their wives' depression (Chang, Li, Teng, Berki, & Chen, 2012). Recently, a study of 468 individuals revealed that perceived gratitude moderated the association between negative marital interaction (demand/withdraw communication patterns) and marital satisfaction and dedication (Barton, 2013). The current study further examines how perceived gratitude may act as a buffer on the association between depressive symptoms and couple interactions.

In addition to perceptions of gratitude, this study examines the role of partner understanding in marital processes. Self-disclosure and responsiveness are described as intimate processes, leaving the individual feeling validated and understood (see Derelega, Winstead, & Greene, 2008). Laurenceau, Rivera, Schaffer, and Pietromonaco (2004) suggest that partner responsiveness to self-disclosure is most salient for relationships. Individuals who perceive that their partners' are responsive to their disclosures have more positive evaluations of their relationship and report greater relationship functioning (Laurenceau, Barrett, & Rovine, 2005). Having knowledge of partners' goals and having an accurate perception of their qualities is associated with positive relationship outcomes and supportive behaviors (Epstein, Warfel, Johnson, Smith, & McKinney, 2013; Neff & Karney, 2005). One study indicated that partner's knowledge of the goals of a significant other fostered the significant other's feelings of being understood and cared for, resulting in greater feelings of interpersonal closeness (Riediger & Raters, 2010).

In conclusion, considering the assumptions of a social functionalist perspective and the findings from literature using this perspective, expressions of emotion by one's partner is expected to buffer the relationship between depressive symptoms and couple interactions. According to the social functionalist approach to emotions, partner emotional expression serves as a resource during times of negativity and distress. Therefore, it is expected that individuals experiencing depressive symptoms and reporting high levels of emotional expressiveness from their partner, will have more positive couple interactions.

Present Study

In summary, and based on the literature reviewed above and the model illustrated in Figure 1, the present study examined the following hypotheses:

- a) Individuals experiencing frequent depressive symptoms are expected to report couple interactions that are characterized as more negative and less positive in nature;
- b) Individuals experiencing frequent depressive symptoms are expected to report lower marital quality as reflected in self-reports of marital satisfaction, commitment, and stability;
- c) Couple interactions are expected to mediate the association between depressive symptoms and reported marital quality.
- d) The association between depressive symptoms and couple interactions is hypothesized to be moderated by partner emotional expressiveness, reflective of their appraisals of partner gratitude and understanding. In other words, individuals who experience more frequent depressive symptoms are expected to report more positive couple interactions under the condition that they report greater partner emotional expressiveness (*buffer effect*). In contrast, individuals who experience more frequent depressive symptoms are expected to report less positive couple interactions when they report lower partner emotional expressiveness (*exacerbation effect*).

CHAPTER 3

METHODS

Data Collection

The data for this project come from a larger study of financial management behaviors and relationship quality conducted in 2011 (Nielsen & Futris, 2011). Using a random-digit dial sampling of phone numbers, individuals living in a southeastern state were contacted and asked to complete a survey using a computer assisted telephone interviewing (CATI) instrument. Individuals had to be 18 years old or older and living with their spouse in order to participate in this study. In an attempt to obtain an equal percentage of husbands and wives, husbands and wives were randomly asked to complete the survey. Also, rural telephone numbers were oversampled to increase geographic diversity. Below is a description of measures examined in the present study. Appendix A provides more information about each item.

Participants

Of the 1,008 successful telephone contacts made, 496 individuals were eliminated from the sample due to (a) being non-married; (b) refusing to provide marital status; or (c) ending the call before any information was obtained. Thus, a sample of 512 married individuals were included in the current study. The majority of the respondents (62.6%) were female. The participants ranged in age from 21 to 86 ($M=51.4$; $MD=51$; $SD=13.99$) and their spouses' age ranged from 20-90 ($M=51.9$; $MD=51.5$; $SD=14.2$). The majority of the participants identified as White (74.6%) with 21.5% identifying as Black/African-American, 1.3% as Asian and 2.6% as multi-racial. Participants' responses regarding the length of their marriage ranged from less than

a year to 66 years ($M=23.3$; $MD=20.0$; $SD=16.1$). The majority of the respondents, 65.2%, reported that this was the first marriage for both themselves and their spouse. Also, 78.0% of the participants reported having children, with 15.1% reporting either they or their spouse having children from a prior relationship. Lastly, participants responded to items regarding educational attainment. The majority reported (62.0%) that either they or their spouse had earned a Bachelor's Degree or higher.

Measures

Depressive Symptoms. Participants responded to three items taken from the 20-item Center for Epidemiologic Studies Depression Scale (CES-D) developed to measure instances of depressive symptoms among the general population (Radloff, 1977). The abbreviated, three-item scale included items from the five-item depressed mood subscale and assessed how often participants felt symptoms of depression or sadness within the last week (e.g., “I felt sad that I could not shake off the blues, even with the help from my family and friends”). Responses ranged from (0) never to (3) three or more times. Mean scores were computed, with higher scores reflecting higher instances of depressive symptoms ($\alpha = .83$).

Couple Interactions. This construct was examined using two measures. First, participants responded to a three-item subscale from the revised Dyadic Adjustment Scale (DAS; Busby, Christensen, Crane, & Larsen, 1995) that assessed couple cohesion. These three items assessed how frequently (1 = never; 6 = more often than once a day) participants spent time with their spouse (“Do you and your spouse engage in outside interests together”). Second, using the nine-item Communication Pattern Questionnaire – Short form (CPQ-SF; Christensen & Sullaway, 1984), participants reported how likely (1=very unlikely; 9=very likely) they and their spouses used various positive (3-items; e.g., “You and your partner both try to discuss the

problem”) and negative (6-items; e.g., “Your spouse tries to start a discussion while you try to avoid a discussion”) communication strategies during conflict. Items assessing negative communication strategies were recoded, and mean scores were computed with higher scores reflecting stronger cohesion ($\alpha = .83$), more frequent positive interactions ($\alpha = .64$), and less frequent negative interactions ($\alpha = .77$).

Partner Emotional Expression. Partner emotional expression was assessed using two measures. Participants rated their level of agreement (1 = strongly disagree; 7 = strongly agree) to three items (adapted from Gottman & Silver, 1999) asking about appraisals of their partner’s understanding (e.g., “Your spouse knows your current worries”). Another set of three items, adapted from Lambert and Fincham’s (2011) gratitude scale, assessed perceptions of how often (1 = never; 5 = always) their spouse expressed gratitude (e.g., “My spouse acknowledges me when I do something nice for him/her”). Mean scores were computed, with higher scores reflecting greater perceptions of partner understanding ($\alpha = .82$) and gratitude ($\alpha = .89$).

Marital Quality. Lastly, marital quality was examined using measures of commitment, satisfaction, and marital stability. A four-item subscale from The Commitment Inventory (Stanley & Markman, 1992) was used to assess relationship dedication (e.g., “I want this relationship to stay strong no matter what rough times we may encounter”). Responses ranged from (1) strongly agree to (7) strongly disagree. A single item was used to measure overall marital satisfaction (“All things considered, how happy are you with your marriage?”), with responses ranging from (1) extremely unhappy to (10) perfectly happy. Two items from the DAS (Busby et al., 1995) examined marital stability (e.g., “Do you ever regret that you married?”); responses ranged from (0) all of the time to (5) never. Mean scores were computed for dedication ($\alpha = .68$) and stability ($\alpha = .63$), with higher scores reflecting greater marital quality.

Controls. As previously mentioned, marital functioning and marital quality vary based on marital status (first order vs. higher-order marriages) (Mirecki et al., 2013) and gender (Roberts, 2000). As such, these variables were included as controls in this study. In addition, marital function and quality has been found to associate negatively with length of marriage (Van Laningham, Johnson, & Amato, 2001), positively with educational attainment (Heaton, 2002), and negatively with the presence of step-children (Schramm & Adler-Baeder, 2012). These variables were also included as controls in this study. These controls were also included based on the statistically significant association with study variables observed when preliminary analyses were conducted. .

Validity of Measures

The CES-D, DAS, CPQ, and Commitment Inventory are all established scales with established content validity, which confirms that items measure what they are intended to measure (Creswell, 2009). The item for marital satisfaction has face validity, as the item specifically examines how happy the respondent is with his or her marriage. Lambert and Fincham's (1999) Gratitude Scale and the items assessing partner understanding (Gottman & Silver, 2011) were both adapted to reference partner behavior. These scales also have face validity, as the items specifically examine the respondent's perception of partner's expressions of gratitude and understanding. To test construct validity, assessing whether items measure theoretical concepts (Creswell, 2009), a confirmatory factor analysis was conducted to examine loadings of variables onto their respective latent constructs.

Data Analysis

Preliminary descriptive analyses were run using SPSS Statistics 21 to examine participant demographic and item frequencies. Of the 512 respondents, 55 were missing data on one or more

of the computed scores. To determine if data were missing at random, independent samples t-test and chi-square analyses were conducted to compare the 457 with complete data to the 55 with missing data. No statistically significant differences were found in demographic characteristics, including age, race, gender, education, or income, suggesting that data were missing completely at random (Little, 1988). As such, the full sample was retained in the analyses and appropriate strategies for handling missing data were employed (described below). Next, bivariate correlations were examined to confirm the following assumptions of mediation (see Frazier, Tix, & Baron, 2004): (a) that there is a direct association between depressive symptoms and marital quality and (b) that depressive symptoms are associated with couple interactions and that couple interactions are associated with marital quality.

Lastly, structural equation modeling was used to analyze the proposed model. The measurement model, with no structural paths, was tested using confirmatory factor analysis to assess the loadings of the constructs (Brown, 2006). For the mediation model, indirect effects were estimated using 95% bias corrected confidence intervals from bootstrapping (MacKinnon, LockWood, Hoffman, West, & Sheets, 2002). Bootstrapping, the recommended method of testing mediation (MacKinnon et al., 2002), samples the dataset repeatedly and estimates the indirect effect in each dataset, providing an estimate of the indirect effect and 95% confidence intervals (Preacher & Hayes, 2008). The preferred method of handling missing data when using SEM, full information maximum likelihood estimation was used (Enders & Bandalos, 2001). Finally, model fit was assessed based on goodness of fit indices such as Root Mean Squared Error Approximation ($RMSEA < .05$ [good fit], $< .07$ [acceptable fit]), Comparative Fit Index ($CFI > .95$ [good fit], $> .90$ [acceptable fit]), and Tucker Lewis Index ($TLI > .95$ [good fit], $> .90$ [acceptable fit]) (Hu & Bentler, 1999; Browne & Cudeck, 1993).

CHAPTER 4

RESULTS

Preliminary Analyses

Descriptive statistics and zero-order correlations for all study variables are reported in Table 1. On average, participants reported feeling sad or depressed less than once a week ($M = 0.59$). With regards to couple interactions, participants reported that they and their spouse were likely to engage in positive communication processes ($M = 7.42$), unlikely to engage in negative communication processes ($M = 7.11$), and spent time together once or twice a week ($M = 4.12$). In response to items measuring partner emotional expression, participants reported their spouses expressed gratitude often ($M = 4.25$) and agreed that they felt understood by their spouses ($M = 6.44$). Finally, in response to indicators of marital quality, participants agreed that they wanted their marriages to stay strong no matter what ($M = 5.62$), rarely discussed or considered divorce ($M = 6.50$), and were very happy with their marriages overall ($M = 8.99$). Post hoc analyses, examining gender differences revealed that both men and women reported high, positive marital quality, positive couple interactions, high partner emotional expressiveness, and low frequency of depressive symptoms. Both men and women responded similarly on all measures, with very little observable differences in means with one exception: an independent sample t-test revealed that male respondents reported experiencing depressive symptoms less frequently than female respondents ($M=0.47$ versus $M=0.66$, respectively; $t = -2.62$, $p<.01$).

Zero order correlations (see Table 1) among the measures of depressive symptoms, couple interactions, partner emotional expression, and marital quality were mostly statistically

significant and in the expected direction. Depressive symptoms were not significantly associated with gratitude or cohesion. Higher frequency of depressive symptoms were associated with less

Table 1

Descriptive Statistics and Correlations (n = 482)

Construct	Mean	SD	1	2	3	4	5	6	7	8
1. Depressive Symptoms	.58	.82	--							
2. Positive communication (CI)	7.42	1.86	-.106*	--						
3. Negative Communication(CI) ^a	7.11	1.79	-.215**	.206**	--					
4. Cohesion (CI)	4.12	.98	-.069	.235**	.313**	--				
5. Gratitude (P.E.)	4.25	.90	-.085	.352**	.320**	.512**	--			
6. Knowledge (P.E.)	6.44	1.03	-.130**	.256**	.225**	.413**	.451**	--		
7. Stability (MQ)	5.62	.81	-.238**	.189**	.266**	.274**	.365**	.470**	--	
8. Dedication (MQ)	6.50	.94	-.141**	.318**	.282**	.327**	.365**	.462**	.360**	--
9. Marital Satisfaction (MQ)	8.99	1.72	-.245**	.285**	.276**	.290**	.385**	.542**	.561**	.476**

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

CI = Couple Interactions, P.E. = Partner Emotional Expression, MQ = Marital Quality

^a Higher scores indicate low negative communication patterns

frequent positive communication patterns, more frequent negative communication patterns, lower perceptions of partner understanding, and lower marital satisfaction, stability and commitment. Higher reports of positive interactions (positive communication and cohesion) were associated with higher reports of marital satisfaction, stability, and commitment. Finally, higher reports of partner emotional expression were associated with higher reports of positive interactions and lower reports of negative communication. Post hoc analyses only revealed gender differences in the association between depressive symptoms and the other primary study variables (see Appendix B). Women's reports of depressive symptoms were significantly associated with less positive communication patterns, more negative communication patterns, lower partner understanding, and lower marital quality. In contrast, men's reports of depressive symptoms were only significantly associated with low marital satisfaction.

Zero order correlations between study variables and covariates (length of marriage, marital status, presence of stepchildren, education, and gender) were also examined, and are reported in Table 2. Length of marriage was significantly associated ($p > .05$) with partner understanding ($r = .113$), marital stability ($r = .094$), and marital satisfaction ($r = .134$). Marital status ($r = .129$), presence of stepchildren ($r = .151$), and gender ($r = .115$) were significantly associated with depressive symptoms. Finally, level of education was significantly associated with negative communication patterns ($r = .098$). Paths for which significant associations were observed between covariates and observed indicators of the latent constructs were specified in the models described below.

Table 2

Correlations between Study Variables and Covariates (n = 482)

	Marriage Length	Marital Status	Stepchildren	Education	Gender
1. Depressive Symptoms	.000	.129**	.151**	-.069	.115*
2. Positive communication (CI)	.030	.005	.057	.032	-.011
3. Negative Communication(CI)	.071	-.048	-.030	.098*	.021
4. Cohesion (CI)	.041	-.059	-.007	.047	.032
5. Gratitude (P.E.)	.015	.068	.066	-.029	-.036
6. Knowledge (P.E.)	.113*	-.039	-.029	-.014	-.023
7. Stability (MQ)	.094*	-.031	-.082	.080	-.045
8. Dedication (MQ)	.029	-.069	-.061	.028	-.075
9. Marital Satisfaction (MQ)	.134**	-.039	-.081	-0.80	-.057

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

CI = Couple Interactions, P.E. = Partner Emotional Expression, MQ = Marital Quality

Measurement Model

Before examining the mediation and full model, the measurement model (with no structural paths) was tested using confirmatory factor analysis. Results indicated acceptable fit (CFI/TLI=.94/.90; RMSEA=.09). Standardized factor loadings ranged from .46 to .79, indicating high construct validity, and were all significant indicators of the latent constructs ($p < .001$).

Mediation Model

Correlations examined previously indicate support for mediation, thus the mediation model and direct effect between depressive symptoms and marital quality were tested. Results indicated acceptable model fit: CFI/TLI=.95/.92; RMSEA=.07. The results of the model are reported in Table 3. The direct effects between depressive symptoms and marital quality and depressive symptoms and couple interactions were examined. The direct effect between depressive symptoms and marital quality was marginally, statistically significant ($\beta = -.13, p = .062$). The direct effect between depressive symptoms and couple interactions was statistically significant ($\beta = -.25, p < .001$). The results also indicated a statistically significant indirect effect between depressive symptoms and marital quality through couple interactions ($\beta = -.18, p < .01$, 95% CI = [-.74, -.31]). These results support the hypothesis that couple interactions mediate the association between depressive symptoms and marital quality. When the mediation model was run with the covariates (see Table 3), model fit was slightly improved (CFI/TLI=.95/.93; RMSEA=.04), and model paths remained significant. Overall, depressive symptoms and couple interactions accounted for 57.7% of the explained variance in marital quality.

Moderated Mediation Model

Lastly, partner emotional expression was added to the model to test its moderating effect on the association between depressive symptoms and couple interactions. The results of the model are reported in Table 3. A significant interaction effect indicated that the association between depressive symptoms and couple interactions is moderated by partner emotional expression ($\beta = .26, p < .001$). To further probe this significant interaction, simple slopes were plotted using ± 1 SD from the mean (Aiken & West, 1991) and are presented in Figure 2. As

Table 3

Model Estimates with and without Covariates

Paths	No covariates			Covariates*		
	β	SE	p	β	SE	p
Mediation Model						
Depressive Symptoms → Couple Interactions	-.245	.047	.000	-.252	.045	.000
Couple Interactions → Marital Quality	.716	.336	.000	.695	.326	.000
Depressive Symptoms → Marital Quality	-.133	.118	.062	-.126	.119	.084
Moderated Mediation Model						
Depressive Symptoms → Couple Interactions	-.068	.044	.120	-.017	.054	.293
Depressive Symptoms x Partner Emotional Expression → Couple Interactions	.264	.074	.000	.262	.069	.000
Couple Interactions → Marital Quality	.928	.220	.000	.903	.224	.000

Note: Marriage Length → MQ; Marital Status, Gender, Stepchildren → DS; Education → CI

shown, individuals who reported experiencing higher depressive symptoms were more likely to report more frequent positive couple interaction when they perceived high emotional expression from their partners ($\beta = .25$; $t = 7.07$, $p < .001$). Conversely, individuals who reported experiencing high depressive symptoms reported more negative couple interactions when they perceived low emotional expression from their partners ($\beta = -.28$; $t = -8.05$, $p < .001$). This model was also run with covariates and retained the significant interaction effect ($\beta = .26$, $p < .001$).

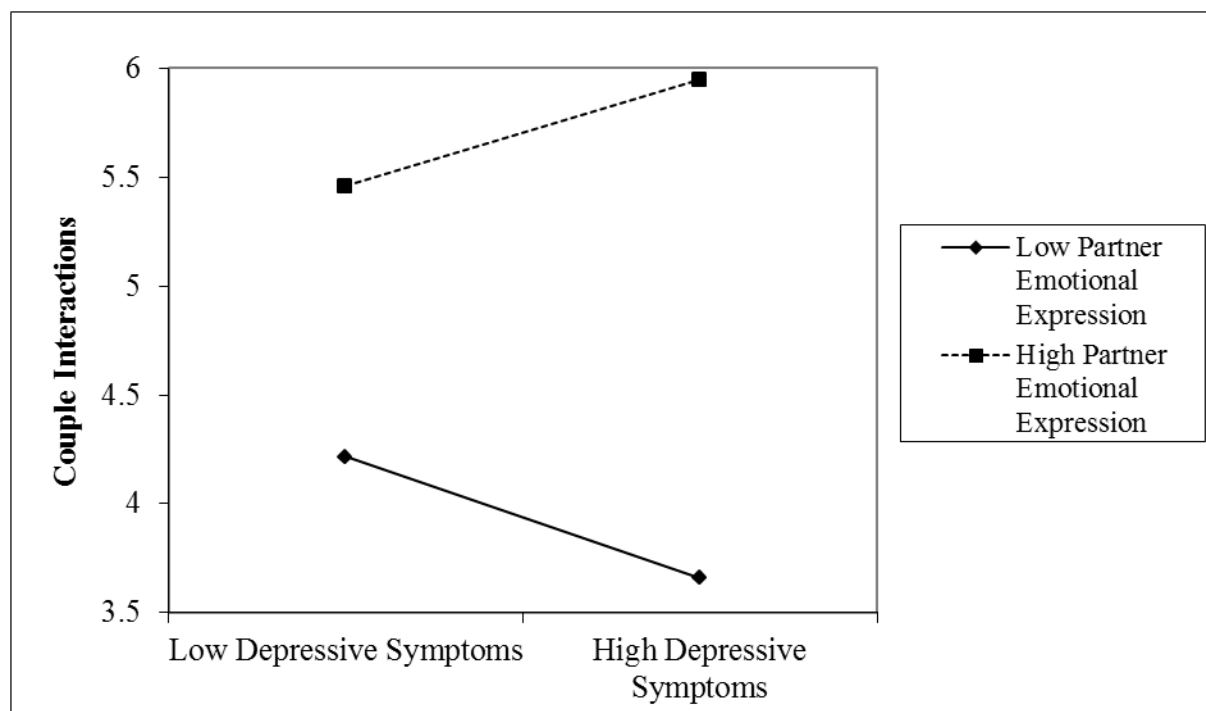


Figure 2. Interaction of Simple Slopes. Associations between depressive symptoms and couple interactions as a function of partner emotional expression. Based on unstandardized regression coefficients. Low scores reflect one SD below the mean. High scores reflect one SD above the mean.

CHAPTER 5

DISCUSSION

The present study examined the association between depressive symptoms and marital quality. Specifically, the aim of the study was to assess the role of couple interactions and partner emotional expression in this association. The results indicated that depressive symptoms indirectly affected marital quality through couple interactions. Further, partner emotional expression moderated the association between depressive symptoms and couple interactions. These findings, and their implications for future research and practice, are addressed below.

It was hypothesized that depressive symptoms would be negatively associated with couple interactions. Consistent with previous literature (Sandberg et al., 2002; Papp et al., 2009), the results of this study indicated that there is an association between the two variables. Specifically, more frequent depressive symptoms were significantly associated with reports of more negative and less positive communication patterns. Interestingly, when examining the bivariate correlations, the association between depressive symptoms and time spent together, or couple cohesion, was not statistically significant. Further, it was posited that couple interactions would be associated with marital quality. This hypothesis was also supported with positive communication and spending frequent time together being significantly associated with high marital satisfaction, high commitment, and high marital stability. Conversely, negative communication was associated with low satisfaction, low commitment and low marital stability.

In addition, depressive symptoms were hypothesized to be directly and indirectly associated with marital quality. Consistent with previous research indicating that there is a

reciprocal association between depressive symptoms and marital quality (Gustavson et al., 2012), bivariate correlations did reveal a statistically significant association between depressive symptoms and indicators of marital quality such that more frequent depressive symptoms were associated with low commitment, low marital satisfaction, and low marital stability. However, in contrast to research suggesting that depressive symptoms are directly associated with marital quality (Burns et al., 1994; Gordon et al., 2013), multivariate analyses did not show a direct and statistically significant association between depressive symptoms and marital quality when couple processes were taken into account. Consistent with past arguments (Whisman, 2001), these results suggest that the influence of depressive symptoms on marital quality may instead operate through other mechanism related to couple functioning. In fact, support was found for the indirect association between depressive symptoms and marital quality through couple interactions. These results have implications for practitioners focused on strengthening marital relationships. These results indicate that the negative processes (e.g., conflict management behaviors) that practitioners often target in efforts to strengthen and stabilize marital quality may be symptomatic of the individual's mental health and well-being. Pre-screening clients or program participants for signs of depressive symptoms, for example, may be helpful information in identifying individual needs that may require attention prior to meeting couple-related needs.

While many studies have examined the association between depressive symptoms, couple interactions, and marital quality, this study is unique in its approach of investigating the role of partner emotional expression in linking individual and couple well-being. Consistent with a social functionalist perspective, it was hypothesized that partner's emotional expression – operationalized as perceived gratitude and partner understanding – would moderate the association between depressive symptoms and couple interactions. The results supported this

hypothesis, with individuals reporting high depressive symptoms and high partner emotional expression being likely to also report more frequent positive couple interactions. Emotions have been found to facilitate social interactions and build personal resources that endure even when the emotions are no longer felt (Fredrickson, 2004; Hutcherson & Gross, 2011). Gratitude and partner understanding have been shown to facilitate positivity within relationships, fostering feelings of connectedness, feeling supported, and feeling satisfied with their partner and the relationship (Algoe, Gable, & Maisel, 2010; Riediger & Rauers, 2010). In this study, partner's expressions of gratitude and understanding served as a resource for individual's experiencing depressive symptoms. For example, when individuals reported experiencing frequent depressive symptoms and high levels of partner emotional expression, their reports of couple interactions were positive, despite their depressive symptoms. However, when individuals reported experiencing frequent depressive symptoms and low levels of partner emotional expression, they reported more negative couple interactions. While individual feelings of gratitude have been found to encourage positive relationship building (Bartlett et al., 2012) and maintenance behaviors (Gordon et al., 2012), the present study adds to the current literature by showing how perceptions of receiving gratitude facilitate positive marital functioning as well.

These results highlight the benefits in being intentional in engaging in emotional expressive behaviors that strengthen relationship functioning (Schoebi, Karney, & Bradbury, 2011). As demonstrated in the literature, and suggested in the results, expressions of gratitude and understanding make individuals feel valued, cared for, and validated (Derlega et al., 2008; Gordon et al, 2012). For individuals experiencing depressive symptoms, this may be of great importance to how they interact with their partner. Encouraging couples to express their appreciation for and understanding of one another can help facilitate more pro-relationship

behaviors, especially when one partner may be struggling with mental health problems. Therefore, in addition to teaching skills that foster more positive and less negative communication patterns as well as greater couple cohesion, practitioners can also promote healthy couple relationships by reinforcing skills and practices to regularly demonstrate appreciation and intimacy.

Limitations, Future Directions, and Conclusion

The contributions of the present study to both practice and research must be tempered with the limitations of the study. First, due to the cross-sectional nature of the data, this study was limited in its ability to determine directionality. The ordering of the constructs examined in the present study was consistent with past research (Burns, Sayers, & Moras, 1994) and a social functionalist perspective (Keltner & Haidt, 1999) (The current findings provide a foundation for future studies to further assess the association between depressive symptoms, couple interaction, partner emotional expression, and marital quality with longitudinal data.

In addition, data were collected from a homogenous sample. The majority of participants were White (74.6%) and educated (62% having at least a Bachelor's Degree). Hence, results may not be generalizable to the larger population, thereby threatening external validity (Creswell, 2009). Replication of this study with a more representative and larger sample could facilitate determining whether these associations are generalizable across groups that vary in race and education as well as marital status (first vs. second-order marriages) and the presence of children (e.g., biological and step).

Next, data were collected from only one spouse. Though not necessarily salient for this study, dyadic data gives researchers the opportunity to examine the interdependence of couples' emotions and behaviors (Cook & Kenny, 2005). It also allows researchers to assess similarities

and differences in how spouses evaluate the same phenomenon. In this study, collecting data from one spouse allowed for the examination of the individual evaluation and perception of marital functioning, which was salient for this particular study. However, it may be beneficial, in future studies, to analyze data from both spouses to assess the association of the study variables and the interdependence of the spouses' reports.

Finally, the majority of participants reported low frequency of depressive symptoms, high partner emotional expression, high frequency of positive interactions, and high marital quality. This may be a result of selection bias, which occurs when the sample is not sufficiently random (Creswell, 2009). It is possible that individuals experiencing higher frequencies of depressive symptoms chose not to participate in the study. However, approximately 20% of participants reported experiencing depressive symptoms once a week or more. This is in alignment with findings suggesting that one in five adults in the general U.S. population experience mild depressive symptoms (Shim et al., 2011). Therefore, there is support that the participants from the present study are representative of the general public on indicators of mental health.

Despite its limitations, this study provides insight as to how depressive symptoms are associated with marital quality. The findings illustrate how depressive symptoms are indirectly associated with marital quality and highlight how partner emotional expressions contribute to this association. This emphasizes the need for marriage and relationship education (MRE) programs to shift their focus from targeting only communication and marital interactions to also target responsiveness to partners' needs, showing appreciation, and understanding to improve marital quality. As Karney and Bradbury (2005), stated, it is important to recognize that context influences marital interactions. For example, if depressive symptoms are causing negative couple interactions, focusing solely on interactions will only address the superficial problem. However,

marriage and relationship educators and researchers are noting the need to take a more holistic approach to MRE, addressing taking care of the individual in the relationship (focusing on individual mental, physical, and emotional health) and promoting individual and couple behaviors and processes that could ultimately improve future interactions (Futris & Adler-Baeder, 2013). In sum, these results advocate moving from a model of marriage and relationship education that emphasizes couple interactions to a model that encompasses the contextual factors that influence marital functioning and quality.

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APPENDICES

Appendix A: Measurement Scale and Item Descriptives**Table A1: Individual Well-being**

	N	M	SD	Range	Scale alpha if item deleted
Individual Well-being					
Depressive Symptoms (0 = Never, 3 = three or more days)					
Computed Mean Score (alpha = .86)	462	0.58	0.82	0-3.00	-
I felt sad that I could not shake off the blues even with the help from my family and friends.	456	0.51	.91	0 – 3.00	0.82
I felt depressed.	460	0.51	0.89	0 – 3.00	0.75
I felt sad.	460	0.75	0.97	0 – 3.00	0.85

Table A2: Couple Interactions

	N	M	SD	Range	Scale alpha if item deleted
Couple Interactions					
Positive Interactions (1=very unlikely; 9=very likely)					
Computed Mean Score (alpha = .64)	482	7.42	1.86	1.00 – 9.00	-
You and your spouse both try to discuss the problem.	480	7.52	2.44	1.00 – 9.00	0.56
You and your spouse both express your feelings to each other.	478	7.60	2.34	1.00 – 9.00	0.52
You and your spouse both suggest possible solutions and compromises.	473	7.14	2.54	1.00 – 9.00	0.56
Negative Interactions (1=very unlikely; 9=very likely)					
Computed Mean Score (alpha = .77)	480	2.89	1.79	1.00 – 9.00	-
Your spouse tries to start discussion, you try to avoid	474	3.12	2.83	1.00 – 9.00	0.77
You try to start a discussion, spouse tries to avoid	474	3.34	2.88	1.00 – 9.00	0.77
Your spouse nags/demand, you withdraws	469	2.52	2.40	1.00 – 9.00	0.72
You nag/demand, your spouse withdraws	469	2.65	2.45	1.00 – 9.00	0.73
Your spouse criticizes, you defend	468	2.84	2.57	1.00 – 9.00	0.71
You criticize, your spouse defends	470	2.83	2.50	1.00 – 9.00	0.73
Cohesion (1=never; 6= more often than once a day)					
Computed Mean Score (alpha = 0.66)	473	4.12	0.98	1.00 – 6.00	-
Have a stimulating exchange of ideas	465	4.13	1.23	1.00 – 6.00	0.53
Work together on a project	469	3.44	1.34	1.00 – 6.00	0.63
Calmly discuss something	470	4.78	1.21	1.00 – 6.00	0.55

Table A3: Partner Emotional Expression

	N	M	SD	Range	Scale alpha if item deleted
Partner Emotional Expression					
Gratitude (1 = never; 5 = always)					
Computed Mean Score (alpha = .90)	468	4.25	0.90	1.00 – 5.00	-
My spouse expresses appreciation for the things I do for him/her.	467	4.14	1.00	1.00 – 5.00	0.85
My spouse lets me know that he/she values me.	465	4.25	0.99	1.00 – 5.00	0.85
My spouse acknowledges me when I do something nice for him/her.	466	4.36	0.95	1.00 – 5.00	0.86
Partner's Knowledge (1 = strongly disagree; 7 = strongly agree)					
Computed Mean Score (alpha = .82)	466	6.44	1.03	1.00-7.00	-
Your spouse is familiar with your major aspirations and hopes in life.	462	6.40	1.27	1.00-7.00	0.74
Your spouse knows your major current worries.	462	6.36	1.26	1.00-7.00	0.73
Your spouse knows you pretty well.	466	6.59	1.05	1.00-7.00	0.79

Table A4: Marital Quality

	N	M	SD	Range	Scale alpha if item deleted
Marital Quality					
Marital Stability (0 = all of the time to; 5 = never)					
Computed Mean Score (alpha = .63)	474	5.62	0.81	1.00 – 6.00	-
How often do you discuss or have you considered divorce, separation, or terminating your relationship?	472	5.56	0.99	1.00 – 6.00	-
Do you ever regret that you married?	469	5.68	0.86	1.00 – 6.00	-
Dedication (1 = strongly agree; 7 = strongly disagree)					
Computed Mean Score (alpha = .68)	473	6.50	0.94	1.00 – 7.00	-
My relationship with my spouse is more important to me than almost anything else in my life.	470	6.30	1.28	1.00 – 7.00	0.61
I may not want to be with my spouse a few years from now	469	6.46	1.57	1.00 – 7.00	0.69
I like to think of my spouse and me more in terms of "us" and "we" than "me" and "him or her".	467	6.49	1.35	1.00 – 7.00	0.60
I want this relationship to stay strong no matter what rough times we may encounter	472	6.75	0.96	1.00 – 7.00	0.56
Overall Marital Satisfaction (1 = extremely unhappy; 10 = perfectly happy)					
All things considered, how happy are you with your marriage?	464	8.99	1.72	1.00 – 10.00	-

Appendix B

Female and Male Correlations (n = 482)

Construct	1	2	3	4	5	6	7	8	9
1. Depressive Symptoms	--	.090	-.144	-.025	-.041	-.101	-.134	-.073	-.156*
2. Positive communication (CI)	-.194**	--	.103	.301**	.313**	.279**	.209**	.273**	.123
3. Negative Communication(CI) ^a	-.252**	.286**	--	.361**	.363**	.251**	.178*	.249**	.246**
4. Cohesion (CI)	-.100	.213**	.293**	--	.541**	.432**	.287**	.405**	.209**
5. Gratitude (P.E.)	-.101	.374**	.297**	.496**	--	.425**	.358**	.436**	.280**
6. Knowledge (P.E.)	-.138*	.246**	.199**	.422**	.468**	--	.470**	.455**	.466**
7. Stability (MQ)	-.277**	.185**	.319**	.292**	.366**	.473**	--	.404**	.393**
8. Dedication (MQ)	-.165**	.342**	.287**	.309**	.322**	.459**	.366**	--	.348**
9. Marital Satisfaction (MQ)	-.277**	.367**	-.294**	.346**	.442**	.575**	.643**	.540**	--

Note. ** Correlation is significant at the 0.01 level * Correlation is significant at the 0.05 level

Female correlations are reported below the diagonal, males above

^a Higher scores indicate low negative communication patterns