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ABSTRACT

A review of the existing literature on marriage reveals a predominant focus on harmful processes that undermine marital satisfaction throughout months or years and may cause a relationship to suffer. In contrast, positive factors that may contribute to flourishing relationships are often neglected or overlooked in marital research. Such positive factors have been shown to be important to marriage, but are not as well understood (Gordon & Baucom, 2009). Gratitude is one positive factor that has been shown to possess inverse relationships with depression, and enhance subjective well being in individuals (Watkins, Woodward, Stone, & Kolts, 2003). It remains unclear whether and how gratitude may relate to well-being in marriage. The present study used a daily diary methodology to collect data via an online survey system from 50 married couples. Both husbands and wives completed questionnaires about their relationship each day for 14 days. Brief measures were designed to assess daily reports of intimacy and state gratitude (both expressed and received). In addition, daily relationship satisfaction was measured using the Couple Satisfaction Index (CSI-4; Funk & Rogge, 2007), and daily support was measured with the Daily Social Support Experiences Scale (Davila & Kashy, 2009). Hierarchical linear modeling was used to analyze the data. All hypotheses were supported. An individual's felt gratitude significantly related to higher levels of expressed gratitude. In addition, one individual's expressed gratitude is significantly related to his or her spouse's received support, felt intimacy, and marital satisfaction.

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DEDICATION

I would like to dedicate this to my grandparents, the late Mr. and Mrs. Harry and Nellie Grey Rackley. May the accomplishments I have achieved throughout my academic career so far serve to illuminate one of the many gifts they gave me in their time here on Earth.

INTRODUCTION

A number of studies within the field of psychology have discovered harmful processes that undermine marital satisfaction throughout months or years and may cause a relationship to suffer. Marriages may become distressed when that relationship houses abuse, infidelity, or anger. The expression of thankfulness between partners may often be neglected or overlooked. Such distress, however, may be prevented by searching for positives in the relationship and finding ways to increase positive affect in everyday moments (Driver & Gottman, 2004). Previous research has shown that positive variables such as gratitude have strong inverse relationships with negative states such as depression within individuals (Watkins, Woodward, Stone, & Kolts, 2003). Marriage researchers recognize the importance of studying negative processes in marriage, and continue to advance understanding of how negatives work in marital relationships. In addition, positives in marriage are also important to study, but are not as well understood (Gordon & Baucom, 2009). The present study examines positive variables in marriage and, more specifically, examines the relationships that exist between gratitude and marital happiness.

Cognitive and Behavioral Processes in Marriage

There is evidence to support the notion that positive processes are important in marriage. For instance, non-distressed marriages contain more positive exchange than distressed marriages (Gottman, Notarius, Markman, Bank, Yoppi, & Rubin, 1976) and positive exchange in marriage has been suggested as a key characteristic in flourishing marital interactions (Gottman & Notarius, 2002). In addition, past research has established that positives may effectively

counteract negatives in marital communication, albeit at a ratio of five positives to balance one negative exchange (Gottman, 1994). Expressing one's appreciation to his or her partner in a marital relationship may provide the relationship with more positive interactions, thus promoting the well-being of the relationship and nurturing positive reciprocity (Oatley & Jenkins, 1996). Therefore, gratitude may work as a resource for couples to enhance the well-being of their marriage. Yet, the relationship between gratitude and marital satisfaction has not been studied. Hence, the present study aims to examine the relationships between gratitude and marital satisfaction at the dyadic level.

In addition to assessing behavioral processes, it is also important to understand the role that cognitions play in marriage. An individual's cognitive appraisal of a partner's behavior as positive or negative will often lead to a reciprocated gesture with the same valence. Marital therapists have long recognized the importance of shaping a couple's cognitions in order to help alleviate their distress. For instance, Margolin and Weiss, (1978), performed a study in which distressed couples were assigned to one of three groups. The first group received a type of supportive counseling, the second group received communication skills training, and the third group received communication skills training along with "cognitive restructuring" to enable spouses "to abandon blaming attributions, to accept greater personal responsibility for relationship failure, and to be more accepting of their partner's positive efforts" (Margolin & Weiss, 1978, p. 1458). The couples who received communication skills training along with cognitive restructuring possessed increases in positive behaviors throughout the course of the study, and reported higher levels of satisfaction than the other groups in the study (Fincham, Bradbury, & Beach, 1990). Baucom and Epstein (1991) also explain that cognitive shifts can occur in marital relationships that impact the overall satisfaction of that relationship. In one

example, Baucom and Epstein (1991) describe how a wife shifted her negative attributions of the amount of hours her husband spent at work, thinking he was avoiding her to understanding he wants to take care of their family. This shift in attribution has the potential to help the wife experience an increase in satisfaction with the relationship because she now appraises her husband's late nights at work as positive and beneficial instead of negative and neglectful.

Unfortunately, cognitions in marriage have a propensity for emphasizing negative processes that can lead to relationship distress. For instance, partners may attend to more negative behaviors than positive behaviors displayed by one another, attribute each other's behavior to more negative than positive intentions, have fewer positive expectancies for their partner (e.g., "predicting that the partner will never take part in household chores"), have negative assumptions about the way partners should interact, and have standards that may place the marital environment in a more negative light (Baucom & Epstein, 1990; Baucom, Epstein, Sayers, & Sher, 1989; Kruger, Gordon, & Kuban, 2006). With many responsibilities and stressors in life, couples have a great deal to become stressed about. In many ways negative stressors are more pressing and require more immediate attention than positive observations in a marriage. As a result, couples can easily focus their attention on the negatives in the relationship, which may result in a de-emphasis of positives. Failing to attend to what is appreciated in a marital relationship may precipitate a decline in the gratitude that is felt between partners. Baucom and Epstein (1991) assert that positives incorporated into a negative way of thinking have the potential to bring about beneficial changes in the marriage where spouses think and feel more positively and hold an optimistic outlook for the future of the marriage. Thus, expressions of gratitude may provide individuals in a marriage with more adaptive ways of thinking,

therefore yielding positive results within the marriage and leading to a more optimistic view of the future of the marriage.

Broaden and Build Theory

Barbara Fredrickson (1998), states that “negative emotions function to narrow a person’s momentary thought-action repertoire” which work to enable an individual to call on his or her automatic fight or flight responses in stressful or harmful situations (p. 304). Fredrickson also purports that positive emotions may yield the opposite function, in that positive emotions may “broaden a person’s momentary thought-action repertoire” (1998, p. 304). In other words, positive emotions enable individuals to access a wider and more adaptive range of responses to a given situation than do negative emotions, which typically narrow a person’s behavioral repertoire toward defensiveness and other maladaptive responses. Fredrickson’s theory highlights four positive emotions: joy, contentment, interest, and love, with each emotion enabling individuals to engage in a broadened sense of connection with the people and places around them. When individuals experience these positive emotions they work to gather resources which they accumulate and can then pull from in future situations to combat negative events that may arise. Fredrickson (2004) maintains that recurrent experiences of positive emotions, such as gratitude, may work to build cognitive resources. Such resources could provide individuals, or couples, with the ability to think in more positive ways about their partner, or their relationship. Individuals in a marriage may attend to, elaborate on, and process more heavily the positive behaviors of each spouse, therefore storing those positive actions as a resource to reflect back on when encountering stressful events that may arise in the marriage. Gathering resources together in a marital relationship may provide an environment where marital

partners build more positive ways of thinking, which could have numerous benefits for the marriage. For instance, positive interactions between spouses may serve as resources each partner can draw upon when the relationship reaches a state of distress. If a husband and wife interact with one another in positive ways throughout their daily life, when they encounter a negative event in the relationship, such as getting behind on their mortgage, if they have this history of supporting one another and communicating in positive ways, then that positive recall of past relationship information will serve as a resource in which they can pull from to get through this negative situation together. Collecting these resources over time may also work to build a more positive outlook for the future of the couple as well as facilitating the opportunity for spouses to feel grateful for one another. Finally, positive emotions and processes also have the potential to alleviate the strain negative emotions may place on one's thinking (Fredrickson, 1998). Thus, daily expressions of gratitude may provide the couple with recurrent instances of positive exchange that help couples to build a positive environment in their marriage. Such an environment would likely result in adaptive cognitions, behaviors, and expectations for the future that may help buffer couples against distress. This potential benefit is evident in the research on gratitude in individuals.

Prior studies show that gratitude enables individuals to derive benefits from negative life events (Watkins, Cruz, Holben, & Kolts, 2008). By finding something positive in negative situations, individuals are able to experience higher levels of gratitude (Watkins et al., 2008), which helps to buffer them from the negative impact of their stressors. Thus, gratitude could have the potential to not only introduce positive cognitive and behavioral processes into the marriage, but it may also have the added benefit of serving as a resource to buffer the couple against the potentially detrimental impact of negative marital processes as well.

Gratitude

In the current investigation, it is proposed that experiences of gratitude are likely to correlate with marital satisfaction. To examine the relationship between marital satisfaction and each spouse's expressed gratitude toward the other, the dyadic level of gratitude must be explored. Previous research has defined gratitude as an affective response to what one has received (McCullough, Kilpatrick, Emmons, & Larson, 2001), a gain of something positive because of the actions of someone else (Solomon, 1983), a cognitive process where individuals (a) think about an outcome that has benefited them and (b) believe someone else is responsible for that positive outcome (Park & McCullough, 2006), and an awareness of and a thankfulness for the good things or events that are present in one's life (Seligman, Steen, Park, & Peterson, 2005).

Previous research has focused on gratitude at the individual level. Grateful individuals are described as those who "appreciate the common everyday pleasures of life" by Watkins and colleagues (2003, p.449). Furthermore, Watkins and colleagues (2003) also suggest that grateful individuals are more likely to appreciate the role others play in their well being, are more likely "to express gratitude to their benefactors and believe that expressing thanks to their benefactors is important" (2003, p. 436). In addition, those who are aware of the benefits they derive from others are more likely to engage in prosocial behaviors later in life (McCullough, Kilpatrick, Emmons, & Larson, 2001). Likewise, when individuals experience gratitude, they are more willing to help others than if they had not been thanked at all (McCullough, Kilpatrick et al., 2001). In a study done by Carey, Clicque, Leighton, and Milton (1976), customers received a phone call from a local jewelry store thanking them for their business. Carey and colleagues

(1976) found that those who had received the phone call expressing thankfulness made more purchases from that store in the upcoming month than did other customers who did not receive a phone call. Thus, gratitude may work as a motivator for other positive experiences.

Grateful individuals have been found to experience higher levels of a number of different variables, including happiness, satisfaction with life, optimism, empathy, religiousness, and hope (Emmons & McCullough, 2003; McCullough et al., 2004; Watkins et al., 2003). Previous research suggests that grateful individuals may experience higher levels of happiness because gratitude may enhance what one receives from positive events, provide effective ways to cope with negative events, and thwart negative states such as depression (Watkins et al., 2003). Furthermore, it has also been suggested that grateful individuals have three main characteristics; a sense of abundance, an appreciation of the normal everyday pleasures in life, and an attitude of thankfulness toward the way other people promote their well-being (Watkins et al., 2003). As such, individuals also spend more time and effort in finding ways to benefit others when they feel their actions will be met with gratitude from those they benefit (McCullough, Kilpatrick et al., 2001). Thus, grateful individuals not only appreciate the role others play in their well-being, but also are motivated by gratitude to make others happy. This may be particularly relevant to marriage because one spouse may be motivated to express gratitude to his or her partner. If an individual's expressions of appreciation are met with gratitude from his or her spouse that may, in turn, motivate that spouse to continue to express his or her gratitude, sparking a cycle of positive reciprocity within the marriage. McCullough, Kilpatrick, and colleagues (2001) suggest that gratitude may be reinforcing. When one spouse expresses appreciation to the other, the positive feelings that result may reinforce those positive expressions, therefore facilitating more expressions of thankfulness from one spouse to another.

In a study by Seligman and colleagues (2005), subjects were placed into one of three conditions, one of which was titled “gratitude visit” (p. 416). In this condition, subjects were instructed to write a letter, over the course of one week, to someone they felt grateful for but had never thanked. Seligman and colleagues (2005) found that at the end of the week, subjects in this condition showed increases in their levels of happiness and decreases in their levels of depression. Not only did levels of happiness increase, but the “gratitude visit” condition showed the highest levels of “positive changes in the whole study” (Seligman et al., 2005, p. 417), with the strongest relation to life satisfaction (Park, Peterson, Seligman, 2004). In addition, Watkins and colleagues (2003) found that subjects experienced increases in positive affect when their gratitude was expressed, such as through letter writing to someone they were grateful to, thinking about someone they were grateful for, or writing about a person that caused them to feel grateful. Grateful thinking improves individual levels of positive affect (Watkins et al., 2003) and one’s own affectivity is significantly related to marital satisfaction (Gordon & Baucom, 2009). In marital relationships, gratitude may supply the relationship with a positive environment where spouses are more aware of and thankful for the good things that exist in the marriage. This awareness will enable spouses to attend to the positive traits each possess, the positive ways in which they make the marriage work, the positive ways in which they care for one another, and the positive benefits they reap. Thus, elevated levels of positivity between spouses can relate to increases in marital satisfaction (Gordon & Baucom, 2009).

Although previous studies have begun to elucidate the links between gratitude and one individual’s well-being, how gratitude works within couples has not been examined. This may be an important gap in the literature because existing research would seem to indicate that incorporating gratitude into the everyday life of a relationship may have the potential to foster a

positive environment that could help the relationship flourish. Driver & Gottman (2004) pose that the ordinary moments spouses share throughout their daily lives together may serve as a facilitator for improving the marriage. A logical extension of this finding would indicate that perhaps integrating gratitude into the daily routine of the couple may provide couples with additional opportunities to flourish. For example, when both spouses are talking with one another over dinner, one spouse may thank the other for performing household chores such as folding the laundry and washing the dishes. This expression of gratitude may then enable his or her partner to feel appreciated, therefore potentially making the spouse feel as if his or her partner is aware of the good in the relationship, and thus may feel more satisfied with the relationship.

A study done by Seligman and colleagues (2005) indicates that “the most satisfied individuals” report higher satisfaction with life through “meaning”, “pleasure”, and “engagement” (p. 413). This is consistent with the notion that spouses could gain higher relationship satisfaction through gratitude-enhancing activities such as finding meaning in the relationship, enjoying doing something for the spouse, or actively engaging in those behaviors which elicit a positive response from the partner. Relationships are reported to have higher satisfaction when both husbands and wives feel their spouse is engaging in “higher quality relationship processing” (Sullivan & Baucom, 2005, p.31). Therefore, gratitude may have the capacity to create awareness within relationships on the individual as well as dyadic levels as to the good in one’s self, the good in one’s spouse, and the good in one’s relationship. As such, appreciating one’s partner by expressing gratitude to that partner may enhance the enjoyment of life together in a marital relationship. Specifically, expressing and receiving gratitude between

partners may help create a positive environment in which the marriage can thrive. Such benefits may be further examined within the context of intimacy and support processes in marriage.

Positive Aspects in Marriage

Received support is significant between spouses and is unmatched through any other type of support system, such as friends or family (Barry, Brock, Lawrence, & Bunde, 2009). Previous studies identify several different types of support (Cutrona & Russell, 1990; Barry et al., 2009), three of which are of particular relevance to the current study; emotional support (affection), instrumental support (help in solving a problem) and esteem support (validation). When people feel grateful, the perception that they have received something positive has occurred, and thus spouses may feel motivated to give something positive to their partner in response to their positive feeling. Expressing gratitude to one's partner may, in turn, work to validate and reinforce the partner's positive efforts in the relationship, thus leading to affection from the partner. When partners receive support from one another, they feel more secure in their relationship, exhibit higher levels of self-esteem, believe they have higher chances of achieving their goals, and show increases in positive mood (Feeney, 2004). Thus, expressing gratitude may have the potential to convey several benefits to the couple by bolstering the support processes in their marriage.

In life, couples experience strains on their relationship, both at the individual and dyadic levels. How couples respond to these strains will aid in determining their overall relationship satisfaction (Epstein & Baucom, 2002). Grateful individuals approach problems with "instrumental social support, emotional social support, positive reinterpretation and growth, active coping, and planning" (Wood, Joseph, & Linley, 2007, p. 1083). The positive resources

couples build over time have the potential to provide them with benefits regardless of what challenges they face. Specifically, gratitude may lead couples to draw from their resources to support each other in otherwise negative situations. Feeney (2004) found that individuals who showed support when communicating with their partner, were perceived by their partner as “encouraging, sensitive, and supportive”, while individuals who seemed to be “intrusive or controlling” were perceived by their partners as “rude and critical” (p.639). Therefore, it could be that when gratitude is present in the everyday life of a married couple, the associated positive state will allow each individual to approach and address these stressors together instead of retreating from the situation or withdrawing from the partner. This, in turn, can enhance a couple’s happiness with their relationship by promoting their marital stability.

Being in a relationship where there is a great deal of support strengthens a couple’s sense of connection. Thus, gratitude may benefit intimacy as well as support. Being attentive to the needs, behaviors, and emotions of one’s partner are three components important to marital intimacy (Brehm, 1992). Algoe, Haidt, & Gable (2008) suggest, that this attentiveness is important in maintaining a healthy relationship through time. As such, continual practice of being grateful may serve as an ongoing resource for the couple by highlighting the importance of being attentive to the needs of others in the relationship. Furthermore, intimate relationships possess a sense of connectedness where couples feel close to one another through listening to and communicating with one another (Laurenceau, Rovine, & Barrett, 2005). In addition, it has been suggested that marital relationships develop intimacy through everyday moments where partners try to formulate emotional connections (Driver & Gottman, 2004). Such connections may be created when gratitude is expressed from one partner to another during daily marital interactions.

Responding positively to a partner's disclosure supports the development of intimacy in the relationship. Specifically, individuals who feel their partner is responsive to their feelings report higher levels of intimacy in their relationship (Laurenceau, Barrett, & Pietromonaco, 1998; Laurenceau, Barrett, & Rovine, 2005). Lippert and Prager (2001), agree with the finding that intimacy in relationships is evident when both partners display signs of disclosing, listening, and understanding. Additionally, marital relationships that contain "greater depth and frequency of intimate contact," show higher levels of relationship functioning (Lippert & Prager, 2001, p. 296). Furthermore, Lippert and Prager (2001) found that couples who "identify one another's private disclosures with experiences of intimacy are those whose relationships are most satisfying" (p. 296) and suggest that when couples attach value to these disclosures, their level of relationship satisfaction increases. Past research has defined self disclosure followed by positive responding as highly important to developing intimacy in marital relationships (Mirgain & Cordova, 2007). Expressing gratitude to one's partner is a specific way to disclose important positive feelings. Because these feelings compliment and demonstrate appreciation for the partner, the partner is likely to respond positively. Thus, expressions of gratitude likely facilitate the type of disclosure-followed-by-positive-response pattern that has been shown to build intimacy in marriage. As a result, a sense of security may be created by expressions of gratitude in marriage, which could generate a fertile environment for intimacy development.

This study examined a number of hypotheses all aiming to elucidate the relationship between gratitude and marital satisfaction at the dyadic level. First, felt gratitude was predicted to be associated with expressed gratitude. Second, one partner's expressed gratitude was expected to correlate with his or her spouse's received support. Third, an individual's expressed gratitude was hypothesized to relate to the partner's felt intimacy. Fourth, expressing gratitude

to one's partner was expected to be associated with increases in the partner's level of marital satisfaction. Finally, secondary analyses were conducted to examine changes between daily levels of felt and expressed gratitude and partner marital satisfaction across time.

Daily Diary Methodology

Daily diary methodologies are often used to gather longitudinal data aimed at elucidating the development of processes that may change over relatively short periods of time. This type of methodology is suggested to have clear advantages (Reis & Shaver, 1988; Reis & Wheeler, 1991) over other types of methodologies used to gather data regarding daily experiences. First, participants are able to rate their interactions in the same time frame that the actual interaction took place, allowing for an accurate report of one's feelings about the interaction. Second, daily diary methodology captures one's assessment of his or her routine daily experiences. Therefore, daily diary gathers accurate data from an experience that just happened, rather than relying on subjects to remember a time when they felt a certain way in the more distant past (DeLongis, Hemphill, & Lehman, 1992; Lippert & Prager, 2001; Schwarz & Oyserman, 2001).

Davila and Kashy (2009) performed a study in which married couples were given PDA technological devices to record their daily experiences for 14 days. They assert that this type of methodology is the most effective way "for understanding how support processes play out in everyday life and how [couples] are affected by relationship security" (p. 77). Laurenceau and Bolger (2005) concur with this observation, asserting that the daily diary methodology provides "insight into the microprocesses that ultimately shape the more generalized relationship experiences that can determine couples' trajectories and outcomes" (Laurenceau & Bolger, 2005; Davila & Kashy, 2009, p. 78).

Algoe, Haidt, and Gable (2008) examined gratitude and relationships in everyday life by asking members of three sororities to make daily reports for one week on their interactions with their sorority sister. Participants were sent a link in their email to complete an online questionnaire assessing the perception of their relationship with their sister. Algoe and colleagues (2008) argued that this type of methodology is uniquely capable of allowing respondents to report on interactions soon after they occurred. Numerous other researchers (e.g., Duck & Miell, 1986; Baxter & Wilmot, 1986; Reis, 1986; Kirchler, 1989) have long agreed that the daily diary methodology enables participants to report on actual instances in their daily life interactions after they happen, and before any emotion can place a prejudice on their true feelings during an occurrence. In a study done by Kirchler (1989), a total of 21 couples reported on and coded their interactions with their partner each day for four weeks. Kirchler (1989) argues that daily diary reporting allows partners the opportunity to describe the interactions with their spouse as no one else can. Furthermore, DeLongis and Lehman (1989) argue that “a barrier to understanding the role of these minor fluctuations in relationships is the difficulty in studying recurring, everyday marital events systematically” (p.338), and recognize daily diary methodology as the “ideal method of collecting data on these naturally occurring ‘ups and downs’ in intimate relationships” (p. 339).

Daily diary methodology not only has several strengths in the way it allows experimenters to collect data, but also in the way it allows experimenters to observe relationships among variables in their data. In a study done by Wood, Maltby, Stewart, Linley, and Joseph (2008) participants were asked to record each day for 15 days, an instance in which they were helped. This study examined trait and state levels of gratitude and found that the daily diary method “enabled the estimation of the proportion of the variance in state gratitude that was due

to within-person(situational) variability and the proportion of variance that was due to between-person (individual differences) variability” (p. 284).

In their study examining intimacy in marital relationships, Laurenceau and colleagues (2005) ask participants to complete a daily record each evening for 42 evenings. This method allowed experimenters to examine the under investigated linkages between daily levels of partner perceptions and global levels of marital intimacy. Similarly, Lippert and Prager (2001) underline the importance of interactions between partners and the ways in which daily experiences may influence such interactions. Given that daily experiences are ripe for interactions between spouses, a study involving daily diary methodology is suitable for capturing spousal perceptions tied to those experiences.

Obtaining reports from married couples regarding their daily interactions for 14 days allowed the present study to examine levels of gratitude over time and how those daily experiences are related to overall marital satisfaction. Given the monetary limits of the present study, 42 days or more (as used in some previous investigations), was predicted to result in an unacceptably high attrition rate. Similarly, a period of one week may not be long enough to capture fluctuations in the correlation between daily levels of gratitude and overall views of marital satisfaction in couples. Thus, for the purposes of this study, collecting daily diary data for 14 days enabled the observation of fluctuations in state gratitude over time without becoming overly burdensome to the participants.

METHOD

Design

Dyadic data were obtained through a 14 day daily diary methodology, consisting of daily self reports from each partner in a marital relationship. The daily reports consisted of self-report Likert-type scales that rate the extent to which each individual agrees with each of twenty statements designed to measure how he or she feels in the relationship that day. Measures were used to assess each spouse's daily levels of relationship satisfaction, intimacy, support, and state gratitude, with the overall goal of the study to conduct cross partner analyses to examine the correlation between one spouse's expressed gratitude and his or her spouse's marital satisfaction at the dyadic level. Participants also completed a demographics questionnaire, the Couples Satisfaction Index-16 (Funk & Rogge, 2007), and the Gratitude Questionnaire-6 (McCullough, Emmons, & Tsang, 2001) at the beginning and end of the study.

Participants

Seventy-three married couples were recruited for participation in this study from a list of parents who have children attending The University of North Carolina, Wilmington. Fifty-seven couples completed the pre-test measures. Seven couples were eliminated from the current investigation because at least one spouse in the couple failed to participate. Two couples contained at least one spouse who was a student at The University of North Carolina, Wilmington. In an effort to contact their parents, the students themselves were contacted and expressed interest in participating in the study with their spouse. Thus, the current investigation analyzed data from fifty couples. Exclusion criteria required that all participants were currently married, speak fluent English, and have access to a computer with their own email account. Both spouses in a couple were asked to complete the daily questionnaire independently of each

other. To encourage both spouses in each couple to participate, all participants were informed that those couples where both spouses completed all 14 days of the study would be entered into a drawing to win one of three gift cards valued at \$100 each. The winning couples also received a gift basket of assorted baked goods from a top bakery in Wilmington, NC to be delivered to their UNCW student during the week of final exams following the conclusion of the study.

Participants ranged from 24 to 63 years of age ($M=47.28$, $SD=9.23$). The majority of the sample was Caucasian: 92.9% of participants reported being Caucasian, 2% African American, and 1% Asian. Participants' yearly income ranged from under \$5,000 to between \$100,000 and \$249,999, with 69% of participants making \$25,000-\$34,999 per year or higher. Twenty-four percent of participants reported making \$24,999 per year or below, and seven percent did not provide information pertaining to their yearly income. The majority of participants (93%) reported having graduated from high school, with 43% of participants reporting 16 years of education or higher. Six percent of participants did not provide education information. Average months involved with spouse reported to be 266.84 ($SD=142.21$). Average months married to spouse reported to be 255.34 ($SD=135.45$). On average, couples completed 12.36 days ($SD=2.20$) out of the total 14 day duration of the study.

Materials

Survey Monkey, an online survey system, was used to record responses from participants. Statements from each measure were programmed into Survey Monkey in survey form. Each participant was sent a daily email containing a link to click on to complete each survey. Survey Monkey stored the data for each respondent in a Microsoft Excel spreadsheet. The date and time each participant completed a survey, along with their daily data, was tracked and documented by this system. The average time participants took to complete each daily

questionnaire ranged between two and four minutes each day. Data was then arranged using SPSS 16.1, a statistical software system, so that each individual's data was placed on a single line. Next, data were arranged using SPSS 16.1 in an Actor Partner Interdependence Model intended to measure the interdependence within relationships (Cook & Kenny, 2005). The data were arranged in accordance with the example provided by Campbell and Kashy (2002) in order to perform cross-partner analyses using the APIM.

Measures

Couples Satisfaction Index-16 item (CSI-16 - Funk & Rogge, 2007). The 16 item Couples Satisfaction Index assesses marital satisfaction. This measure is comprised of the 16 items most strongly related to satisfaction from the 32 item version of the Couples Satisfaction Index. These measures “provide markedly greater amounts of information than do the existing measures [of marital satisfaction] for all but the highest levels of satisfaction” (Funk, & Rogge, p. 577). The CSI-16 is found to possess higher effect sizes than other measures of satisfaction as well as higher levels of power and yielded a Cronbach's alpha of .98 (Funk & Rogge, 2007). The CSI-16 is a self-report measure which uses a Likert-type scale to allow participants to rate the degree to which they agree with each statement. This was administered to couples at the beginning and end of the study.

Couples Satisfaction Index-4 item (CSI-4 – Funk & Rogge, 2007). The four item Couples Satisfaction Index uses four items to assess marital satisfaction. This measure also comes from the CSI-32 and consists of the four most precise measurements of relationship satisfaction. Though this measure only contains four items it was found to be superior to other measures of marital satisfaction such as the 15-item Marital Adjustment Test and contends with the Dyadic Adjustment Scale (Funk & Rogge, 2007). The CSI-4 uses a Likert type scale (0=Extremely

unhappy, 6=Perfect for question 1; 0=not at all true, 5=completely true for question 2; 0=not at all, 5=completely for questions 3 and 4) to rate such statements as “In general, how satisfied are you in your relationship” and “I have a warm and comfortable relationship with my partner.” This measure holds strong convergent validity as well as high internal consistency and yielded a Cronbach’s alpha of .94 (Funk & Rogge, 2007). The sample acquired for this investigation yielded a Cronbach’s alpha of .967. This measure was administered daily for 14 days.

Gratitude Questionnaire-6 item (GQ-6 – McCullough et al.,2001). The six item Gratitude Questionnaire is used to assess “individual differences in the proneness to experience gratitude in daily life” (McCullough et al., 2001, p. 1). This measure uses a Likert-type scale format (1=strongly disagree, 7=strongly agree) to allow participants to rate the degree to which they agree with such items as; “I have so much in life to be thankful for” and “If I had to list everything that I felt grateful for, it would be a very long list.” Cronbach’s alpha ranges from .76 to .84 (McCullough et al., 2001). Scores on this measure also correlate significantly with felt gratitude in regards to events that enabled individuals to feel grateful ($r=.25$) as well as with the number of individuals they perceived as providing benefits to them in daily life ($r=.21$). This measure was used at the beginning and end of the study to establish each participant’s general trait levels of gratitude.

State Gratitude. Two subscales were developed as a global daily measure of state gratitude for the purposes of the present study. The subscales were designed to measure (1) felt gratitude (“I experienced a lot of gratitude today”, “Gratitude had a big impact on my day today”, “I experienced gratitude for my spouse today”, “My spouse expressed his/her gratitude to me today”, “My spouse really enjoyed showing me how much he/she appreciated me today”) and (2) expressed gratitude, (“I expressed gratitude to my spouse today”, “My gratitude for my

spouse impacted my marriage today”, “One thing I really enjoyed today was trying to show my spouse how much I appreciate him/her”). Participants were instructed to rate the extent to which they agree with each statement using a Likert-type scale (1=strongly disagree, 7=strongly agree) each day for the 14 day duration of the study. The current dataset yielded a Cronbach’s alpha of .931 for felt and .927 for expressed gratitude.

Intimacy. The intimacy scale was developed for the purposes of the current investigation from the larger 30-item scale used to measure the quality of intimate relationships, the Autonomy and Relatedness Inventory (ARI; Schaefer & Edgerton, 1982). The ARI has a Cronbach’s alpha of .90. Level of relationship intimacy in each couple was assessed using four items designed to capture closeness (“I feel close with my spouse”), security (“I feel safe in my relationship with my spouse”), connection (“I feel a sense of connectedness with my spouse”), and we-ness (“I feel like my spouse and I are on the same team”). Participants were asked to use a Likert-type scale to rate how much they agreed with each statement that day (1=strongly disagree, 7=strongly agree) for all 14 days. In the current dataset, I found a Cronbach’s alpha of .949.

Daily Social Support Experiences (Davila & Kashy, 2009). For the present study, statements were taken from the Daily Social Support Experiences measure to assess perception of received support (“My partner was supportive, reassuring, or comforting”, “My partner gave me tangible support or help”) and support provision (“I gave my partner support, reassurance, or comforting”, “I gave my partner tangible support or help”). Participants were asked to use a Likert-type scale to rate how much they agreed with each of these statements that day (1=not at all, 7=extremely) for the 14 day duration of the study. In the current dataset, I found a Cronbach’s alpha of .953 for received support.

Background Information. To gather demographic information, participants responded to a baseline background information questionnaire at the beginning of the study. The questions asked questions regarding, age, ethnicity, years of education, months involved, months married, and income level.

Procedure

Participants were randomly selected from a list containing 8,877 names made available by the Office of the Registrar. Each couple was then assigned random couple identification numbers using randomizing software located on the internet at www.random.org. First, 200 names were randomly selected from the list obtained from the Office of the Registrar and were mailed letters of introduction for this study via the U.S. postal service. From those two hundred names, twenty-three couples expressed interest in participating in this study. In effort to gain a higher number of participants a randomly selected list of four hundred and ten parents of UNCW students, from the same list obtained from the Office of the Registrar, were mailed letters of introduction. From those four hundred and ten names, fifty couples expressed interest in participating in this study. In total, seventy-three participants agreed to participate. After the initial questionnaires were administered, thirteen couples failed to participate at all, seven couples had one spouse who failed to participate at all, two couples could not complete the study due to a death in the family, and one couple said they were travelling separately and would not be interacting with one another daily. Thus, the current investigation collected data from fifty couples. The letter of introduction mailed to potential participants described to each spouse the purposes and procedures of this study and emphasized the need for their daily participation throughout a 14 day period. Second, after allowing five business days for the letters to reach the intended recipients, a follow up phone call was made by a research assistant, in order to ask the

couple if they would like to participate (and attained verbal consent). An explanation of the daily diary methodology was given, and contact information for the Marital Studies Lab was provided in the event a participant had a question, comment, or concern after the initial phone call. When a couple agreed to participate during this first phone call, they were asked for each of their email addresses and made aware that their initial three surveys would be emailed to them the next day, with their daily survey email beginning upon completion of the initial three surveys. If a couple could not begin the study the following day, they were asked to provide a more convenient time in which they would like to begin. The couples' questions, should they have any, were also answered at this time. The first email sent to couples, contained highlighted links to the initial three surveys; the demographic questionnaire, the Couples Satisfaction Index-16 item, and the Gratitude Questionnaire-6 item. This email also contained the daily diary instructions, as provided to them over the phone with the research assistant. This was to ensure that each participant understood the guidelines of the study. Participants were given participation identification numbers which they were instructed to enter into the daily diary online survey system each time they completed a survey. These identification numbers were given to them over the phone by a research assistant, and also given to them in the email they received with the initial three surveys to complete. When each participant began each survey, they entered their identification number (which was the same for both spouses), then the second question prompted participants to enter "0" indicating they were the wife, or "1" indicating they were the husband in the marital relationship.

Third, after each couple completed the initial three surveys, each spouse began receiving daily emails containing a link to click on in order to complete the daily survey. At the start of each daily survey, participants were prompted to enter their participant ID number as well as to

start rating statements using a Likert-type scale format. Each day, participants rated the extent to which they agree with statements included in the Couples Satisfaction Index-4 item, statements assessing intimacy and support in their relationship, as well as statements regarding the presence or absence of gratitude in their interactions with their partner that day. Participants were instructed to complete their daily survey independently of their spouse each day.

When a spouse or couple missed a day, they were called by a research assistant to ask if they were experiencing any problems and reminded to complete the daily survey each day for 14 days. In the event that a spouse or couple missed another daily survey, they were sent a reminder email asking them to continue to complete their daily surveys, as well as to report any difficulties they are experiencing by calling the research lab or emailing the lab with their concerns. Finally, at the end of the 14 day study, participants once again received an email containing links for the Couples Satisfaction Index-16 item and the Gratitude Questionnaire-6 item measures. This design allows for in-depth examination of the relationship between daily reports of gratitude in a marriage and marital satisfaction at the dyadic level.

RESULTS

The data were collected via Survey Monkey, an online data collection system, which records responses from participants in a Microsoft Excel file. Data were then transferred from Microsoft Excel into the statistical software SPSS 16.1, for descriptive statistical analyses and arrangement for the Actor Partner Interdependence Model (APIM; Kashy & Kenny, 2000). The data were arranged in accordance with the example provided by Campbell and Kashy (2002) in order to perform cross-partner analyses using the APIM. The APIM is a data analytic strategy specifically designed to allow for the examination of the relationships between one individual's data (Actor) and the data provided by the individual's spouse (Partner). The structure of the APIM is intended to measure the interdependence within relationships (Cook & Kenny, 2005). In the present investigation, APIM analyses were conducted within the Hierarchical Linear Modeling (HLM) framework.

In order to use this analytic strategy, the data must be arranged such that data provided by both spouses is stored on a single line in SPSS. In addition, each individual's data must be represented twice; once as an actor and once as a partner. Thus, in the present investigation data provided by wives were first entered as actors with their husband's data entered as partners beside them on the same line. Then, data from husbands were entered as actors with the wife's data entered as partner beside them on the same line. This method for arranging data prior to conducting APIM analyses follows the example provided by Campbell and Kashy (2002). After arranging the data in this manner, statistical analyses were conducted using SAS version 9.1 (SAS, 2004) statistical software. Summary scores were calculated by tabulating all of the Likert-scale responses for each spouse across the 14 day duration to comprise each of the summary

variables of interest. These summary variables were used to test the hypotheses germane to this investigation. Descriptive analyses indicate a reasonable degree of variance for each of these variables. Means and standard deviations, along with Cronbach's alphas are reported in Table 2.

Table 2. *Means and standard deviations for each variable along with Cronbach's alphas.*

Variable	M	(SD)	Cronbach's alpha
Felt Gratitude	21.51	(4.89)	.931
Expressed Gratitude	15.64	(3.88)	.927
Received Support	10.31	(2.99)	.953
Felt Intimacy	24.08	(4.63)	.949
Marital Satisfaction	16.94	(4.28)	.967

It is important to note that both individuals within a marriage reported ratings of gratitude, intimacy, support, and marital satisfaction for this investigation. This means that the data were not comprised of independent observations. As such, Hierarchical Linear Modeling (HLM), or multi-level modeling was used to analyze these data. HLM is a statistical approach that is uniquely well suited to model the non-independence of the observations in this dataset (Raudenbush & Bryk, 2002), and it has been described as “the ideal choice” for studies with multilevel data (Laurenceau, Rovine, & Barrett, 2005, p.318).

HLM offers distinct advantages that are important in the present dataset. In particular it enables one to model non-independent data that is nested at multiple levels. This is particularly helpful because there are three levels of data in the present sample. In order to address the non-independence in the data, HLM enables one to model sets of individual observations that are “nested” within the larger groups to which individual observations belong. This nesting allows

data at one level of analysis to be examined at the next level of analysis. The current investigation contains three levels; Level 1 represents repeated measures across time, which are “nested” within each individual in the study, Level 2 represents each individual and is “nested” within the couple to which each individual belongs, and Level 3 is comprised of the married couple as a unit. Thus, all statistical models were estimated to include non-independence due to nesting in levels two (the individual) and three (couples).

Furthermore, HLM has the added benefit of being able to work effectively with missing data. This is important because given the 14 day enrollment of each participant in this study, it was anticipated that, in some cases, one or both spouses in a couple would fail to participate for one or more days. Though that occurred, HLM was still able to include all participants in the analyses, with the exception of seven couples taken out due to total lack of participation from one partner. Fifty couples completed the 14 day daily diary study. The average number of days couples completed was 12.36 ($SD=2.20$). Fifteen couples completed all 14 days, five couples completed 13 days, and one couple completed 12 days. The other 29 couples have an odd number of days completed by each spouse in the couple. The least number of days completed by one spouse was 3, and that only occurred with one individual in the study. Those couples with missing data from one or both spouses are not weighted as heavily in HLM as those couples who completed all 14 days in the study. Thus, when using HLM to analyze the data, researchers do not have to impute missing data. Accounting for missing data is one of the major strengths of HLM, and missing data is common in previous daily diary research.

Due to its numerous advantages that are relevant to the current data, HLM was used to statistically test the hypotheses for this study. All HLM analyses were conducted using SAS PROC MIXED. Significance levels for all analyses were set at $p<.05$. All data were mean

centered prior to investigating each model so that any interactions found to be significant could be properly probed (Aiken & West, 1991). The results indicate that all four hypotheses were supported. A statistical model was constructed to examine each hypothesis.

The first hypothesis used individual felt gratitude as a predictor for one's own expressed gratitude. As hypothesized, felt gratitude predicted expressed gratitude (.5179, $SE=.01092$, $p<.0001$). Thus, these data suggest that as an individual's experience of receiving gratitude increased, the tendency for that individual to express gratitude increased. When one spouse experienced gratitude, he or she was more likely to express that feeling. The second hypothesis predicted one individual's received support from his or her spouse's expressed gratitude. As hypothesized, increases in expressed gratitude from one individual were related to increases in received support from his or her spouse (.1382, $SE=.02083$, $p<.0001$). For example, when a husband expressed gratitude to his wife, she felt more supported in the relationship, and vice versa. The third hypothesis predicted one's felt intimacy from his or her spouse's expressed gratitude. This hypothesis was also confirmed. As one spouse reported expressing higher levels of gratitude, his or her partner reported increased levels of intimacy in the relationship (.1555, $SE=.02772$, $p<.0001$). Higher levels of expressed gratitude from one spouse related to higher reports from his or her partner of feeling close and connected in the relationship. Hypothesis four used one partner's expressed gratitude as a predictor for his or her spouse's marital satisfaction, and was also confirmed. As one individual reported expressed gratitude at higher rates, his or her spouse reported higher levels of marital satisfaction (.06552, $SE=.01714$, $p<.0001$). Expressions of gratitude from one partner to the other positively correlated with satisfaction in the marriage. When individuals express gratitude to their spouse, the spouse tends

to report being happier in the relationship. Table 1 displays each model with predictor variables and significance.

Table 1. *Fixed effects for models predicting one's own expressed gratitude, and his or her spouse's received support, felt intimacy, and relationship satisfaction.*

Variable	Model 1	Model 2	Model 3	Model 4
Fixed effects				
Intercept	0.0139(0.1060) ^a	-0.0550(0.2480) ^a	0.04898(0.3991) ^a	0.0330(0.4026) ^a
FG	0.5179*(0.0109)			
EG		0.1382*(0.0208)	0.1555*(0.0277)	0.06552*(0.0171)

Note. Standard errors are in parentheses. FG = Felt Gratitude. EG = Expressed Gratitude. Model 1 = One's own expressed gratitude predicted by reports of one's own felt gratitude. Model 2 = One's partner's received support predicted by one's own expressed gratitude. Model 3 = One's partner's felt intimacy predicted by one's own expressed gratitude. Model 4 = One's partner's relationship satisfaction predicted by one's own expressed gratitude.

^aNot significant.

* $p < .0001$.

Secondary Analyses. Although not germane to the present hypotheses, this dataset allows for secondary exploratory analyses to examine change in gratitude over time. Results suggest that as time progressed throughout the study, levels of felt and expressed gratitude increased across the 14 days. Partner gratitude was positively associated with actor gratitude, and both actor and partner gratitude increased over time. Secondary analyses also were conducted to test for demographic variables as possible moderators in each of the statistical models. Previous research has identified age as having an effect on how husbands and wives view each other (Story, Berg, Smith, Beveridge, Henry, & Pearce, 2007). Secondary analyses were conducted to determine whether age was a possible moderator and found that the hypotheses remained significant when controlling for age. In addition, there was no significant

interaction between age and any of the variables of interest in the current investigation. Gender may influence one's likelihood of expressing gratitude due to gender role norms, thus secondary analyses also were conducted to determine whether gender was a possible moderator as well. The hypotheses remained significant when controlling for gender. There was no significant interaction between gender and the variables of interest in the current investigation. Other tests were conducted to control for months together and months married. It may have been that the amount of time couples have been together leads to a lesser or greater amount of gratitude experienced and expressed between partners. Longer marriages may have spouses who are more thankful toward and grateful for one another. When controlling for months together and months married, all four hypotheses remained significant. There was no significant interaction between months married or months together and any of the variables of interest in the current investigation.

DISCUSSION

Positives in marriage have been shown to contribute uniquely to marital satisfaction, but are not as well understood as negative processes in marriage (Gordon & Baucom, 2009). The present investigation adds to the growing literature on positivity in couples by examining gratitude in marriage, and also adds to our understanding of married couples by examining the relationships between gratitude and other aspects important to marriage such as support, intimacy, and marital satisfaction. Whereas gratitude has been shown in previous research to relate to numerous beneficial outcomes for individuals, how it operates at the dyadic level with married couples has not been previously studied. This investigation helps lay the foundation for further exploration of gratitude in marriage by establishing that it is positively related to a number of important dyadic constructs.

In the current investigation, all hypotheses were supported. First, when one spouse experienced a grateful state, or felt gratitude, he or she was more likely to express gratitude to his or her spouse. This could occur for a number of reasons. Specifically, when people feel grateful they perceive that they have received something positive, and thus may feel motivated to give something positive to their partner in response to their positive feeling. Previous research has found that those who are aware of the benefits they derive from others are more likely to engage in prosocial behaviors later in life (McCullough, Kilpatrick, Emmons, & Larson, 2001). Likewise, when individuals experience gratitude, they are more willing to help others than if they had not been thanked at all (McCullough et al., 2001). Thus, gratitude may be seen as a motivator for other positives. Previous studies have identified gratitude as a mechanism for improving subjective well being in individuals, elevating levels of happiness in individuals, and increasing one's positive outlook for the future (Watkins et al., 2003). Moreover, Frederickson

(2004) suggests that an individual's thoughts and actions may be broadened by his or her experience of positive emotions. It may be that in couples when one individual experiences a grateful state he or she views the relationship in a broader sense, seeing the positive interactions that are present in the daily life of the marriage and thus wants to express that feeling to his or her spouse. Furthermore, when grateful individuals experience gratitude, they feel happiness, are more aware of the role others play in their well being, and are more likely to express their appreciation to the ones who have benefited them (Watkins et al., 2003). It may be that when individuals in a marriage experience gratitude they become aware of the role their spouse plays in their happiness in the relationship. As one attends to the positive events in the marriage he or she may be more likely to express appreciation for the presence of those positive day to day moments, as they make the individual feel good about the relationship. Thus, when one spouse experiences a grateful state, that felt gratitude seems to motivate him or her to express thankfulness to his or her marital partner.

Findings from the second hypothesis confirmed that expressed gratitude is significantly related to received support. When an individual expressed gratitude to his or her spouse, the spouse reported experiencing higher levels of received support in the relationship. Previous research has discovered different types of support that exist in marriage; emotional (affection), esteem (validation), and instrumental (help with solving a problem) (Cutrona & Russell, 1990; Barry et al., 2009). In couples, gratitude may serve as a type of support where expressing gratitude to an individual in the relationship makes that individual feel validated, as if his or her spouse understands the good that person adds to the relationship. Increased support leads to increased security, self-esteem, belief in achieving one's goals in life, and positive mood. As such, it is not surprising that increases in expressed gratitude are related to increased received

support. In addition, it may be that when partners express gratitude to their spouse, this makes partners feel validated in the relationship, like they have received something positive, thus in turn making them feel more secure in the relationship. Thus, expressed gratitude may facilitate couple flourishing by providing a positive marital environment in which one partner feels assured and comforted by his or her spouse, and feels comfortable seeking help or reassurance from the spouse when facing a negative situation. Lack of support in a relationship can cause an individual to feel anxious or fearful about upcoming interactions with his or her spouse because of the negative thoughts associated with the interactions. Feeling as if one's spouse is going to abandon an important issue, or not provide support in some way allows little room for hope in the outlook of the marriage (Davila & Kashy, 2009; Levenson & Gottman, 1985). Integrating positives into negative ways of thinking will enable couples to have hope for the marriage (Baucom & Epstein, 1991). Therefore, it may be that if the marital relationship is full of positive interactions, then the individuals in the relationship will more likely look forward to upcoming interactions with the spouse because of the positive thoughts associated with those interactions. Expressing gratitude to one's spouse may make the spouse feel as if his or her partner is there for them no matter what situation may arise in the relationship. Therefore, incorporating expressed gratitude into the everyday interactions of the couple may influence not only the thought processes for each spouse, but may increase each spouse's ability to think positively about the future of the relationship. Thus, gratitude may have the potential to not only buffer couples against distress, but to also work as a positive mechanism facilitating an optimistic outlook for the future of the couple (Gordon & Baucom, 2009).

Third, as individuals reported expressing gratitude at higher rates, reports of felt intimacy from his or her spouse also increased. It has been suggested that marital relationships develop

intimacy through everyday moments where partners try to formulate emotional connections (Driver & Gottman, 2004). The positive relationship the current investigation found between expressed gratitude and reports of felt intimacy suggests that awareness of what one's spouse adds to the relationship (as expressed through gratitude) elicits a positive response that allows both spouses to feel a sense of connectedness with each other. For example, a husband and wife are taking a walk together one night when the wife notices her husband acts sad or depressed. She asks him if there is something distressing he is going through that he would like to discuss. He hesitantly informs her he just lost his job. If his wife tells him he is a failure and expresses her worry about how they will receive income, then the husband will experience a decrease in his levels of closeness, connectedness, and "we-ness" with his wife. He is more likely to feel his wife does not understand him. If after his self-disclosure, his wife places her arms around him, lets him know they will get through that hardship together, and expresses her thankfulness for the good he brings into her life, then the husband will experience increases in his levels of felt intimacy, as he is more likely to believe he and his wife are close to one another, are connected, and are on the same team after her positive response to his vulnerable disclosure. The wife may also experience increases in her levels of felt intimacy as she interprets his self-disclosure as a sense of trusting her and feeling close to her. Lippert and Prager (2001) found that the most satisfying marriages contain moments where partners recognize each other's self-disclosures, listen to and communicate with each other, and experience heightened levels of feeling connected to each other. Feeling connected to one's spouse leads to a heightened sense of security in the relationship, as well as the perception that your partner understands you and is responsive to your needs (Laurenceau et al., 1998; Laurenceau et al., 2005; Lippert & Prager, 2001). Gratitude is one way to disclose positive thoughts or feelings to one's partner, and

responding to that positive expression fosters a more positive marital environment where intimacy can grow and flourish. Attentiveness to the behaviors, emotions, and needs of the partner are also important factors in intimacy within couples (Algoe et al., 2008). Expressing gratitude to one's spouse may make the spouse feel a higher level of attentiveness to his or her needs in the relationship, thereby strengthening the intimate connection. This type of intimacy development has been shown to be important to highly satisfied marriages (Mirgain & Cordova, 2007). When an individual in a marriage expresses gratitude to his or her spouse, this appreciation may make the partner feel as if he or she understands the efforts they put into the relationship. For example, if a couple are watching a movie one night and the husband looks over at his wife and simply tells her "I am really glad you went by the grocery store today; this is my favorite kind of popcorn", that husband feels like his wife understands him as a person and is attending to his wants and needs. Likewise, the wife will feel appreciated and also feel like her husband is attending to the "little" things she does in the relationship. This level of attentiveness will therefore lead each spouse to feel closer together, and to experience a sense of connectedness, thereby increasing their levels of intimacy within the relationship.

Lastly, expressed gratitude from one spouse was positively correlated with his or her spouse's marital satisfaction. When gratitude is present between partners in their everyday life together, it may be that the positive state of feeling grateful, and the positive benefits of receiving gratitude from one's partner allow couples to build positive resources such that when they encounter negative events in the relationship they can reflect on the positive ways in which they have interacted before and therefore combat the negatives that may arise in the relationship (Frederickson, 2004). Thus, incorporating gratitude into the everyday moments of a marital relationship seems to provide couples with resources which they can use to uplift the satisfaction

levels of both spouses. When investigating positive illusions in marriage, Fowers and Pomerantz (1992) observed a satisfaction maintenance pattern in marriage where positive actions from one partner elicit positive actions from his or her spouse, generating a positive view of the spouse, and of the relationship, which fed into more positive behaviors elicited by both spouses toward one another. In addition, the positive exchange that exists when partners express their gratitude to one another increases positive affect, thereby adding positivity to the everyday moments shared by couples (Driver & Gottman, 2004) and positive exchange in marriage has been suggested as a key characteristic in flourishing marital interactions (Gottman & Notarius, 2002). Moreover, the ability to draw on past positive experiences within the relationship when couples encounter stressful situations may enable couples to see the good in the relationship and therefore exhibit higher levels of satisfaction with the marriage (Frederickson, 1998). As mentioned earlier, expressing one's appreciation to his or her spouse in a marital relationship may provide the relationship with more positive interactions, thus promoting the well being of the relationship and nurturing positive reciprocity (Oatley & Jenkins, 1996). Gratitude could be the facilitator for creating positive experiences in the relationship, thereby becoming a resource couples use to draw on when they encounter negative events in their relationship (Frederickson, 2004).

In relationships, individuals make cognitive appraisals about their partner's actions such that one partner's actions influence upcoming actions by his or her partner (Baucom & Epstein, 1990). Thus, what one individual does in a relationship is appraised by his or her partner as good or bad, positive or negative, and then yields a result from that partner. When partners appraise a situation or behavior as positive, they may be more likely to give something positive back. As stated earlier, an individual's cognitive appraisal of a partner's behavior as positive or negative

will often lead to a reciprocated gesture with the same valence. Thus, expressions of gratitude toward a spouse are likely to foster positive reciprocity in the marriage. What's more, marital therapists have long recognized the importance of shaping a couple's cognitions in order to help alleviate their distress (Margolin & Weiss, 1978). Cognitive shifts, as previously discussed, can occur in marital relationships that impact the overall satisfaction of that relationship. (Baucom & Epstein, 1991). With the current investigation's finding that gratitude significantly relates to higher levels of marital satisfaction, it could be that when gratitude is expressed in the relationship partners shift their attributions from blaming to a more positive attribution such as taking personal responsibility for one's own actions, accepting the partner's positive efforts, and looking toward a happier future rather than toward a past with negative events. Distress may be prevented by searching for positives in the relationship and finding ways to increase positive affect in everyday moments (Driver & Gottman, 2004). Moreover, couples who have few negatives present within the relationship may use expressions of gratitude to generate greater amounts of positive exchange, thereby increasing levels of satisfaction in the relationship to levels of happiness. Incorporating additional positive factors into a relationship that is built on positivity may allow that relationship to flourish for sustained periods of time.

This could be the case in the current investigation. Expressions of gratitude from one individual to his or her spouse may provide the relationship with more positive interactions, nurturing positive reciprocity and increasing levels of relationship satisfaction. Gratitude has been suggested to be reinforcing (McCullough, Kilpatrick et al., 2001). It may be that in couples, when an individual expresses gratitude to his or her spouse, if that expression is met with a positive response, the individual will be more inclined to offer additional expressions of appreciation in the future. Furthermore, when one spouse expresses gratitude to his or her

partner, this positive interaction may allow the couple to build positive resources that each can draw on throughout the course of the marriage. Moreover, these resources over time may also work to build a more positive outlook for the future of the marriage. Assimilating positives into the daily moments marriages possess have been suggested as one way to facilitate positive change in the marriage (Driver & Gottman, 2004). For example, if the wife arrives home and finds her husband has taken the garbage out and thanks him for doing that, he may feel more satisfied in the marriage than if he took the garbage out and she arrived home, did not notice, and did not say anything at all. Over time, as these small expressions of gratitude accumulate, the couple will experience higher levels of marital satisfaction. In addition, after the wife thanks the husband for taking the garbage out, he may express his own appreciation to her over dinner for something positive she did that day, thus creating a cycle of positive reciprocity that promotes relationship well-being. Seligman and colleagues (2005) indicate potential areas that yield increases in levels of satisfaction as those instances when individuals felt a sense of meaning, experienced pleasure, and were actively engaged. Finding meaning in one's relationship, enjoying doing something for the spouse, or actively engaging in those behaviors which elicit a positive response from the partner may enable couples to achieve higher levels of relationship satisfaction. For example, consider a husband who is on his way home from work. His wife calls and asks him to pick up a few things from the grocery store before coming home. While in the grocery store, he sees a bouquet of freshly cut flowers with a small card that reads "thank you for being you". Upon seeing the flowers, he envisions his wife's joy when he gives them to her. This thought brings a smile to his face. He checks out, flowers in hand and arrives home. When his wife sees him holding the flowers, she smiles, hugs him and thanks him for the thoughtful gesture. The husband found enjoyment in doing something nice for his wife, engaged in doing

something to elicit a positive response from his partner, and this in turn elevated the wife's levels of satisfaction with the relationship. Both spouses experienced gratitude, which increased their levels of happiness and sharing this happiness with each other created a happy couple. A number of previous studies have suggested that the examination of behaviors presented by each partner is effective in assessing relationship satisfaction (Gottman, 1994; Jacobson & Margolin, 1979; Thibaut & Kelley, 1959). Expressing gratitude to one's partner may serve as an indicator of one's own appreciation for the good in the spouse and the good in the relationship, leading to reports of highly satisfied marriages. The positive correlation between expressed gratitude and marital satisfaction indicates that gratitude may work as a mechanism for couples to experience happiness from the awareness and appreciation they derive from gratitude in the relationship.

Limitations. While the current investigation presents novel results that add to the marital field, some limitations need to be considered. This study garnered a sample of 50 couples while offering compensation for participation in the form of a drawing for one of three gift cards and an additional gift basket for the winning participant's child. Past research which has collected data from over one hundred couples used monetary reward for participation (Barry et al., 2009; Davila & Kashy, 2009; Feeney, 2004). Thus, the sample size could have been much higher if monetary rewards were available for each participant. While data were collected from parents of UNCW students, it was thought that the parents may be motivated to contribute to their child's educational institution. Thus, the chance to win a \$100 gift card along with a gift basket for the student was thought to be reasonable compensation for all participants, however, participation may have been increased with more available funding.

The current investigation was also developed to ensure convenience for participants. Each individual received a daily link in his or her email to the questionnaire which was

constructed so that each participant could complete its entirety in a matter of minutes. While convenience was a goal of the current study, some individuals failed to complete one or more daily questionnaires. Thus, monetary reward for participation may not only increase sample size for future studies but may also encourage participants to complete the questionnaires for the duration of the study without missing any of the 14 days of data collection. Although missing one or more daily questionnaires was considered a weakness in the current investigation, a statistical analysis (HLM) was chosen that helped minimize the detrimental impact of the missing data.

Another potential weakness of the study involves generalizing to couples around the nation. The majority of individuals in this study were Caucasian (93%), thus future investigations would be needed to examine these hypotheses among more ethnically diverse samples. While the sample size did contain a majority Caucasian sample, this was not the intent. The recruitment list received from the Office of the Registrar contained names of parents of UNCW students, thus the ethnic diversity represented among campus is also what is represented in the current investigation. Furthermore, while participants were encouraged to complete their daily questionnaires independently of their spouse, we are not sure if each spouse complied. Thus, one participant's ratings could have been influenced by his or her spouse if the couple did not ensure privacy from one another while completing the surveys. Ratings could have been higher for questions regarding happiness with the relationship, feelings of intimacy, and feelings of received support if an individual's spouse was present while completing the questionnaire. Whereas this is a significant concern, it should be pointed out that this is no more of a weakness in the present investigation than it is in any study utilizing self-report survey data collection strategies.

In addition, some individuals in the study who missed one or more daily questionnaires completed each day they missed in one day. For example, if an individual missed days six, seven, and eight, that individual then completed each day's questionnaire on day nine. In doing this, individuals may not have remembered certain events that occurred or affective states they experienced on days six, seven, and eight, and thus responded to each question according to the interactions that individual had with his or her spouse or states that individual experienced on day nine, yielding responses that may not have been an accurate descriptor of the missed days. Nonetheless, such instances would generally lead to a constricted range in the participants' report of the relevant variables. This would mean that it would be harder to attain significant results among the present data thus suggesting that the current significant findings may actually be somewhat conservative estimates of the psychological processes being studied. Although these are important limitations that must be taken into account when considering the present data, these are not weaknesses that are unique to this study, rather they represent weaknesses of survey methodologies in general. Thus, future studies in this area would benefit from using varying methodologies in order to balance the strengths and weaknesses of each methodological approach.

Secondary Analyses and Future Research. Although not germane to the present hypotheses, this dataset allows for secondary exploratory analyses to examine change in gratitude over time. Results indicate levels of gratitude increased across the 14 days that participants rated their gratitude in this study. Partner gratitude was positively associated with actor gratitude, and both actor and partner gratitude increased over time. Taken together with the primary results, these findings point to a number of future directions for gratitude research with couples. The simple act of being aware of existing levels of gratitude for one's partner or for

one's relationship through a daily questionnaire may have increased the couples' experience of gratitude during the study. If couples are more mindful of the positive processes that exist in their marriage, they may be more likely to attend to the positive behaviors elicited by the spouse, thus enhancing levels of positive affect in the everyday moments couples share. This finding could be an avenue best explored in couples therapy. Daily records of felt and expressed gratitude could be documented by each spouse in a marital relationship. At the end of each week, couples could report to their therapist and read their daily reports of gratitude from that week. This could give each spouse the advantage of understanding what his or her spouse perceives from the daily routines of the week. If the actor understands how the partner feels based on each day's actions, then that could give couples insight into the microprocesses that exist in their marriage. Illuminating these microprocesses may provide couples with tools to help their marriage flourish. Future research is needed to examine gratitude interventions in marriage. Through this correlational investigation, we do not know whether expressed gratitude causes received support, felt intimacy, or marital satisfaction, or if received support, felt intimacy, or marital satisfaction cause gratitude. Therefore, a gratitude intervention could explore these links. Watkins and colleagues (2003) suggest that gratitude may "cause positive affect" and gratitude and happiness are a "cycle of virtue" whereby gratitude and happiness are enveloped and work together to increase levels of subjective well being in individuals (p. 49). Further research is needed to determine the causal and reciprocal relationships among these variables.

Another route for future investigation could involve gratitude and religiosity. Individuals, who believe good things in life come from a higher power, God, tend to possess higher levels of gratitude. Those individuals who believe they receive benefits from God are

more likely to feel grateful and appreciate what they have received (Watkins et al., 2003). Thus, future research could explore the relationships between gratitude and received support, felt intimacy, and marital satisfaction in religious married couples as compared to non-religious samples. Furthermore, a gratitude intervention could take place in Church populations to investigate the links between these variables. Future research also is needed to examine the current investigation's variables of interest in ethnically diverse samples. Cross-culturally, expressions of gratitude may differ in their meaning and interpretation. Different cultures may also have differing religious views. If couples in other cultures are more appreciative to a higher power for the benefits they receive, that may translate to their interpersonal relationships as well. Thus, a future study could explore these links.

Finally, future investigations are needed to examine gratitude in distressed versus non-distressed couples. It is quite reasonable to suspect that gratitude processes in marriage may work differently within a context of negativity and interpersonal injury than it would in a satisfied and secure relationship.

Conclusion

The current investigation adds to the marital field in that gratitude was investigated as it pertains to couples. While gratitude has been studied by past researchers as it pertains to the individual, how gratitude works at the dyadic level has never been explored. Thus, this study presents novel findings that advance conceptualizations of positivity in marriage. Past researchers have highlighted the need for more in depth study of positive variables and the benefits couples may derive from experiencing them (Driver & Gottman, 2004). As negative processes in marriage are well understood, how couples can prosper in the absence of negatives is not well understood. This work represents a step toward better understanding positive

processes in marriage that may buffer couples against distress, and that may one day help clinicians to assist couples in achieving and maintaining flourishing states.

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APPENDIX

Appendix A.

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July 2009

Dear Parents,

We are contacting families of UNCW students and we would like to invite you to participate in a non-profit research study that will examine daily interactions between spouses and how they relate to marital happiness. As researchers in the field of marriage, we believe this study will provide vital data that will help us advance our knowledge about marital happiness.

We have compiled a brief list of 20 questions related to both marital and individual happiness and we are seeking all types of married couples who would like to complete this brief questionnaire via an online survey daily for 14 days (approximately 5 minutes per day). The questionnaire is brief and has been designed specifically to avoid asking intrusive or uncomfortable questions.

Because this study is intended to advance the understanding of marital relationships, you are valuable to the study as a couple who can give your expert opinion on your own relationship. We believe your participation in the study might be beneficial to you as well because taking the questionnaires can further the knowledge that a couple has about themselves, as well as adding important discoveries to the science of relationships. Couples who have participated in similar studies often report enjoying the process a great deal. **In addition, those who complete the study will be entered in a drawing to win 1 of 3 Amazon.com gift cards for \$100 each. Also, the winners' UNCW student will receive a gift basket of assorted items from Apple Annie's, a top bakery in Wilmington, to be delivered to them during the week of final exams. We anticipate collecting data from approximately 100 couples.**

Each couple that chooses to participate will be given an ID number to use in order to ensure confidentiality on the questionnaires. Within the next two weeks, a research assistant from the Marital Studies Lab at UNCW will contact you to see if you and your spouse would like to participate in this study as well as to answer any questions you may have. If you like, we would be pleased to share the overall results of the study with you once it is completed. Thank you very much for taking the time to consider joining us in this very important project.

Sincerely,

Cameron Gordon, Ph.D.
Director, Marital Studies Lab
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Appendix B.

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Intimacy

Use the following scale to rate how much you agree with the following statements today (1=strongly disagree, 7=strongly agree).

“I feel close with my spouse”

“I feel safe in my relationship with my spouse”

“I feel a sense of connectedness with my spouse”

“I feel like my spouse and I are on the same team”

Appendix C.

State Gratitude

Rate the extent to which you agree with each statement using the following scale (1=strongly disagree, 7=strongly agree).

(1) Felt gratitude:

I experienced gratitude today

Gratitude impacted my day today

I experienced gratitude for my spouse today

My spouse expressed his/her gratitude to me today

My spouse really enjoyed showing me how much he/she appreciated me today”

(2) Expressed gratitude:

I expressed gratitude to my spouse today

My gratitude for my spouse impacted my marriage today

One thing I really enjoyed today was trying to show my spouse how much I appreciate him/her

Appendix D.

Daily Social Support Experiences, Davila & Kashy, 2009

Use the following scale to rate how much you agree with each statement today, (1=not at all, 7=extremely).

Received support:

My partner was supportive, reassuring, or comforting

My partner gave me tangible support or help

Appendix E.

Couples Satisfaction Index (CSI-4)

1. Please indicate the degree of happiness, all things considered, of your relationship.

Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect
0	1	2	3	4	5	6

	Not at all TRUE	A little TRUE	Some- what TRUE	Mostly TRUE	Almost Completely TRUE	Completely TRUE
2. I have a warm and comfortable relationship with my partner	0	1	2	3	4	5
	Not at all	A little	Some- what	Mostly	Almost Completely	Completely
3. How rewarding is your relationship with your partner?	0	1	2	3	4	5
4. In general, how satisfied are you with your relationship?	0	1	2	3	4	5

Appendix F.

ID # _____

Baseline Biographical Data

Please tell us about yourself. This, and all information you give us, will be kept confidential.

1.) What is your age? _____

2.) What is your gender? Male or Female

3.) What is your ethnic background? (Circle one)

White (Non-Hispanic) Black Hispanic Asian or Pacific Islander
Native American Other (Please specify) _____

4.) How many years of education have you had? _____

5.) What is your approximate individual (not including your spouse's) yearly income?

- | | | |
|------------------------|------------------------|--------------------------|
| 1. under \$5,000 | 2. \$5,000 - \$9,999 | 3. \$10,000 - \$14,999 |
| 4. \$15,000 - \$24,999 | 5. \$25,000 - \$34,999 | 6. \$35,000 - \$49,999 |
| 7. \$50,000 - \$74,999 | 8. \$75,000 - \$99,999 | 9. \$100,000 - \$249,999 |
| 10. \$250,000 and over | | |

6.) How many months have you and your spouse been romantically involved? _____

7.) How many months have you and your spouse been married? _____