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## FAMILY-OF-ORIGIN EXPERIENCE AND EMOTIONAL HEALTH AS PREDICTORS OF RELATIONSHIP SELF-REGULATION

by

Matthew Dean Brown

A thesis submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Master of Science

Department of Marriage and Family Therapy

Brigham Young University

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## BRIGHAM YOUNG UNIVERSITY

## GRADUATE COMMITTEE APPROVAL

of a thesis submitted by

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This thesis has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

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## BRIGHAM YOUNG UNIVERSITY

As chair of the candidate's graduate committee, I have read the thesis of Matthew Dean Brown in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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## ABSTRACT

## FAMILY-OF-ORIGIN EXPERIENCE AND EMOTIONAL HEALTH AS PREDICTORS OF RELATIONSHIP SELF-REGULATION

Matthew Dean Brown Department of Marriage and Family Therapy Master of Science

The general purpose of this study was to understand differences in one's ability to implement relationship self-regulation (RSR) based on the predictor variables of parental marital satisfaction, parent-child relationship quality, and neuroticism. Participants were 380 married couples (760 individuals) in their first marriage who completed the RELATionship Evaluation (RELATE) between 2006 and 2008. This sample was used to test a structural equation model of the study variables.

Results were mixed, indicating that proximal factors may have a larger effect on RSR than more distal family-of-origin factors. There was no direct relationship between perceived parental marital satisfaction and RSR for males or females. Likewise, there was no direct relationship between parent-child relationship quality and RSR, with the exception of female mother-child relationship quality and female RSR. Both perceived self-neuroticism and partner-neuroticism had statistically significant negative associations with self-RSR, with self-neuroticism being the strongest.

Additionally, male mother-child relationship quality and female father-child relationship quality had statistically significant negative associations with male and female self-neuroticism, respectively. The relationship between male mother-child relationship quality and male RSR was fully mediated by male neuroticism. The same was true for females, with female neuroticism fully mediating the relationship between female father-child relationship quality and female RSR. Implications for couple therapists and educators based on these findings are discussed.

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#### Chapter 1

## Introduction and Purpose of the Study

The general purpose of this study was to understand differences in one's ability to implement relationship self-regulation (RSR) based on the predictor variables of parental marital satisfaction, parent-child relationship quality, and neuroticism. The construct of RSR is defined as the ability of partners in an intimate relationship to both monitor and work on sustaining their relationship (Halford, Lizzio, Wilson, & Occhipinti, 2007) and consists of four meta-cognitive skills (Halford, 2001). First, self-appraisal involves being aware of the current state of one's relationship, as well as being aware of the influences on that relationship. Second, self-directed goal setting consists of identifying behaviors that influence one's relationship satisfaction. Third, self-change occurs when goalconsistent actions are implemented within the relationship. And finally, self-evaluation of change efforts provides the opportunity to examine whether or not one's actions actually improved his/her relationship.

The concept of RSR was first introduced by Halford, Sanders, and Behrens (1994), who suggested that increasing a couple's ability to implement RSR may lead to higher levels of relationship satisfaction. Couple education programs, such as the Couple Commitment and Relationship Enhancement (Couple CARE) and Self-Regulation Positive Relationship Education Program (Self-PREP), have since been developed using RSR principles as guideposts (Halford, Wilson, Dyer, & Farrugia, 2006). The aim of these programs is to teach couples the RSR skills they will need to develop in order to improve their relationships. The degree to which couples implement these skills within

their relationships has been shown to more strongly affect relationship satisfaction than communication skills (Halford et al., 2007; Wilson, Charker, Lizzio, Halford, & Kimlin, 2005).

Although RSR has been shown to positively affect relationship satisfaction, little is known about what factors affect one's ability to self-regulate in relationships. The research literature on individual self-regulation (ISR), which is defined as one's ability to monitor and adapt his/her own behavior in relation to other people or situations, demonstrates that factors such as early childhood experience (Volling, Blandon, & Kolak, 2006; Zimmerman, 2000) and emotional health (Kocovski & Endler, 2000) affect the development and implementation of self-regulatory functioning. One important difference between ISR and RSR is that the latter involves the monitoring of a relationship between two people in addition to monitoring one's own behavior. Despite this difference, the similarity of these two constructs lends to the idea that the same factors which predict ISR may also predict one's ability to use RSR.

A clearer understanding of what predicts one's ability to implement RSR in marriage holds several clinical implications for couple therapy. This study's attempt to identify such predictors will help couple therapists have a better idea of possible barriers to successfully teaching RSR to their clients. More specifically, if clients present with difficulty using RSR, the results of this study could provide important information about how their family-of-origin experience may contribute to this difficulty. Couple therapists may then better understand their clients' need to learn these skills as an adult in order to use them in their marriages. Additionally, a better understanding of the relationship between emotional health and RSR will provide couple therapists with more direction in

their work with clients who present with depression or anxiety. Interventions which are more self-directed or encourage the use of RSR may not yield positive outcomes until the client's emotional health has first improved. Finally, this study will seek to identify the predictive value of key early childhood experiences (i.e., perceived parental marital satisfaction and parent-child relationship quality) on adult use of RSR. This information will also be helpful to clinicians who work with couples and families. Having a clearer understanding of the relationship between family-of-origin experience and RSR may better equip them to teach couples ways in which their marriages may affect children's future use of RSR.

#### Chapter 2

Definition of Terms, Theoretical Context, Review of Literature, and Model to be Tested *Definition of Terms* 

Relationship self-regulation (RSR). Relationship self-regulation (RSR) is defined by the constructs of relationship effort and relationship strategies. Relationship effort refers to the level of work one puts into improving and maintaining his/her relationship. Relationship strategies refers to the ability to think of new ways in which one can contribute to the improvement and maintenance of his/her relationship. Both relationship effort and relationship strategies involve a process of appraising the relationship, setting self-directed goals to improve the relationship, carrying out those goals in the context of the relationship, and evaluating how those ideas and actions affect the level of satisfaction experienced in the relationship.

*Individual self-regulation (ISR).* Individual self-regulation (ISR) is defined as the ability to monitor and adapt one's own behavior in relation to other people or situations. Similar to RSR, the implementation of ISR involves a process of monitoring behavior, setting and carrying out goals, evaluating outcomes, and using self-reinforcing thoughts and behaviors when goals are achieved.

### Theoretical Context

In order to understand the importance of the present study, it is necessary to provide a theoretical framework from which the study variables can be explained. The two theories that inform the conceptualization of this study are social cognitive theory and family systems theory.

*Social cognitive theory*. Social cognitive theory (Bandura, 1986) postulates that much of our behavior is shaped by the models we observe from an early age. Because self-regulation is a skill that can be learned during one's family-of-origin experience, this theory is an important lens through which research has examined the development of such skills (Zimmerman, 2000). Likewise, the current study uses this theory as a framework to better understand the variables under investigation; specifically, the variables of parental marital satisfaction, parent-child relationship quality, and RSR.

*Parental marital satisfaction.* From a social cognitive theory perspective, relationship skills are learned through a process of observation and emulation of one's parents' marital behavior. The first romantic relationship many children observe is that of their parents. Thus, the interactions of parents in their own marriage serve as a model or blueprint for their children's marriages. According to Marks (1986, p. 13) we observe in our parents' marriage "a set of procedures for normal marital (or relationship) practice, complete with a vision of model problems and their typical solutions". Through observation and modeling, children grow and develop their own romantic relationships. Children whose parents have a high level of marital satisfaction will likely observe more positive relationship skills and, in turn, model those behaviors in their own romantic relationships. Thus, parental marital satisfaction becomes an important factor when considering offspring marriage.

Another important factor is the level of satisfaction a child perceives in his or her parent's marriage. When offspring are forming adult romantic relationships, they may question to what extent they wish to pattern their relationships after that of their parents. For example, if a child perceives that his or her parents are satisfied in their marriage, he

or she may choose to pattern future relationships after their parents' marriage. Similarly, those who perceive low levels of satisfaction in their parents' marriage may not wish to be unsatisfied in their future relationships and thus choose not to model their own marriages after that of their parents. However, in the latter example, these individuals may find they lack an appropriate model of what makes a satisfying marriage.

In addition to the influence of parental marital satisfaction and its role as a model for offspring, there is another important consideration to be made. The children's attitudes about marriage can be greatly influenced by their perceptions of the level of satisfaction in the parents' marriage. If a child perceives that his or her parents are happy in their marriage, his or her attitudes toward marriage are more likely to be positive. The reverse can also be true, with low levels of perceived parental marital satisfaction contributing to negative perceptions and attitudes about marriage. This too may lead to another interesting phenomenon—that of repeating the errors of one's parents' marriage. When a child perceives that his or her parents are unhappy in their marriage, that child can then hypothesize about the causes of that unhappiness. This may then be followed by an attempt to find a remedy that, if applied, will produce happier future relationships for the child (Marks, 1986). However, the issue of not having a model of that remedy lends to the idea that it may be more difficult to learn and implement the necessary skills in adult romantic relationships.

*Parent-child relationship.* The interaction between parent and child is another context in which a relationship model is provided. Similar to parental marriage, the parent-child relationship is one of the first relationships a child experiences. These early models provide valuable information germane to the development of ISR and relational

skills. Specifically, monitoring of achievements and contingent interactions (e.g., use of rewards in parenting) have been shown to help foster the development of ISR in children (Brody, Stonemen, & Flor, 1996; Higgins, 1997; Manian, Papadakis, Strauman, & Essex, 2006). Additionally, reciprocal interactions (i.e., parental responsiveness and play) and shared positive affect between parent and child also facilitate the learning process of ISR by providing behaviors that can be observed and emulated (Lay, Waters, & Park, 1989; Volling et al., 2006).

*Relationship self-regulation.* Just as ISR is a skill that can be learned through observation and emulation of models of ISR, RSR theoretically may be attained in the same way. More specifically, the models of RSR provided to individuals from an early age will most likely affect the ability of those individuals to effectively learn and implement RSR in their adult romantic relationships. Two of the relationships in which a child is allowed an insider's perspective are the parents' marriage and the parent-child relationship (Marks, 1986). As a result, the skills (such as RSR) modeled in these relationships will be more observable, and thus more likely to be emulated. Those who have effective parental models of RSR at an early age will then be more likely to develop these skills themselves for use in their future romantic relationships. Therefore, the relationship interactions observed in one's parents' marriage and between parent and child will inform that person's ability to develop RSR.

*Family systems theory.* Zimmerman (2000) proposed that self-regulation involves the triadic interaction of the person, his or her behavior, and the environment. The interaction of these three variables influences and provides feedback for the individual. From a systemic perspective, these interactions also include the impact of the person's

behavior on his or her environment, and in turn, the behaviors of other members of the system. For example, if one partner puts little to no effort into the relationship (low RSR) it will not only influence the feedback that partner obtains form their partner, but will also influence the other partner's behavior.

This concept of circular causality also helps explain the relationship of neuroticism as a predictor of RSR. The negative cognitive patterns common to neuroticism, defined as depression or anxiety, inhibit the ability to effectively selfregulate on an individual level. Specifically, the areas of goal setting, self-monitoring, self-evaluation, and self-reinforcement have been shown to be negatively affected by poor emotional health (Endler & Kocovski, 2000). Cognitive patterns such as: Having unrealistic expectations for one's self; believing that others hold those same expectations; lacking confidence in one's ability to meet his or her expectations; negative patterns of self-appraisal and self-evaluation; and self-critical thoughts all lead to decreased ability to implement ISR (Boekaerts, Pintrich, & Zeidner, 2000; Hewitt & Flett, 1993; Kocovski & Endler, 2000; Martin, Flett, Hewitt, Krames, & Szanto, 1996). Because RSR adds one more component, that of monitoring the couple relationship, it is likely that individuals whose cognitive patterns negatively affect ISR will also experience difficulty implementing RSR. For example, one might believe not only that they are not meeting their own expectations for the relationship, but also perceive that his or her partner shares the same opinion regarding their behavior. This idea, coupled with persistent negative self-appraisals, might drain the person of the cognitive and emotional energy required in the relationship. As a result, both they themselves and their partner will likely perceive a

lack of RSR on the part of the depressed or anxious spouse (Beach, Sandeen, & O'Leary, 1990).

In addition, the existence of these patterns in the context of a relationship will not only affect the individual, but also the other partner and the relationship (Beach et al., 1990). The issue of inhibited ISR becomes a question of the relationship between neuroticism and both partners' abilities to exercise RSR. Family systems theory proposes that one partner's neuroticism would circularly influence the learning ability and implementation of RSR skills for both partners. Due to the neurotic partner's inhibited ability to use RSR, the non-neurotic partner may experience periods of overcompensating their own RSR to make up for what is lacking. These periods of overcompensation might then be followed by periods of RSR burnout in which the non-neurotic partner lowers his or her effort in the relationship. These alternating patterns and persistent low levels of RSR of the neurotic partner will, therefore, affect both partners circularly (Beach et al., 1990).

### **Review of Literature**

*Individual self-regulation.* Due to the similarity of ISR and RSR, it is helpful to examine the literature on ISR and use it as a framework in the conceptualization of the current study. Although it is still unknown whether the same predictors of ISR will also predict RSR, the current study will attempt to bridge this gap in the literature by investigating the predictors of RSR in marriage. ISR has been a topic of research interest for over three decades and has been assigned a number of differing definitions. For the purpose of this study, we use the definition provided by Karoly (1993):

Self-regulation refers to those processes, internal and/or transactional, that enable an individual to guide his/her goal-directed activities over time and across changing circumstances (contexts). Regulation implies modulation of thought, affect, behavior, or attention via deliberate or automated use of specific mechanisms and supportive meta-skills. The processes of self-regulation are initiated when routine activity is impeded, or when goal directedness is otherwise made salient (e.g., the appearance of a challenge, the failure of habitual action patterns, etc.) (Karoly, 1993, p. 25).

Karoly (1993) identifies several domains of research in which self-regulation has been an important topic. Among these are the areas of emotional health and developmental psychology research.

*Family-of-origin influences on individual self-regulation*. Many developmental issues stem from early life experiences and their impact on the individual. Likewise, the development of self-regulation has been shown to take place at an early age (Emde, Biringen, Clymen, & Oppenheim, 1991; Kochanska, 1993, Kopp, 1982). Social learning models provided through parent-child interactions have been shown to be an important factor in the development of ISR (Zimmerman, 2000). Specifically, parental responsiveness, play, shared positive affect (i.e., laughing together, singing happily), and the use of reward systems in parenting all foster the development of core components of ISR (Brody, Stoneman, and Flor, 1996; Higgins, 1997; Kochanska & Aksan, 1995; Lay, Waters, & Park, 1989; Manian et al., 2006; Volling et al., 2006).

*Neuroticism and individual self-regulation.* Much of the research that has examined the relationship of emotional health and self-regulation has focused specifically

on depression and anxiety. More specifically, the literature identifies the ways in which depression and anxiety negatively affect goal setting, self-monitoring, self-evaluation, and self-reinforcement. For example, goal setting is adversely affected by the combination of unrealistically high standards for achievement and low expectations of actually reaching the set goals (Alden, Bieling, & Wallace, 1994; Doerfler & Aron, 1995; Golin & Terrell, 1977; Hewitt & Flett, 1993; Kocovski & Endler, 2000; Martin et al., 1996; Wallace & Alden, 1991). Depressed and anxious individuals are also more prone to engage in persistent negative self-monitoring and self-appraisal (Boekaerts et al., 2000; Buss, 1980; Flett, Blankstein, & Boase, 1987; Lennox, 1984). Likewise, negative selfevaluations marked by self-criticism regarding expectations that are not met become negative self-reinforcement patterns that decrease the ability to use ISR (Alden et al., 1994; Beck, 1967; Endler & Kocovski, 2000; Jones, Briggs, & Smith, 1986; Kocovski & Endler, 2000; Lake & Arkin, 1985; Lewinsohn, 1974; Rehm & Marston, 1968).

*Relationship self-regulation*. Although the idea of self-regulated behavior has been well researched in individuals (Bandura, 1977; 1986; Catania, 1975; Karoly, 1993; Mahoney & Thoreson, 1974), this same phenomenon in the context of relationships is relatively new and under-researched. Halford, Sanders, and Behrens (1994), first proposed that behavioral couples therapy (BCT) implicitly promotes a partner-blaming attitude. Specifically, contingency contracting, a common intervention in BCT, involves one partner either rewarding or punishing the other partner's behaviors according to the former's preferences. Because of this, Halford and colleagues suggested an approach that would help partners in relationships focus on their own behavior (instead of their partner's) and ways in which they themselves could change for the improvement of the

relationship. Because individuals in distressed relationships have been shown to have low self-efficacy in influencing and changing their relationships (Notarius & Vanzetti, 1983), Halford and colleagues (1994) emphasized that shifting the focus of couple education and therapy from partner to self-change will promote more self-efficacy, personal responsibility, and more rapid increases in the well-being of the relationship.

The concept of working on the relationship involves attending to the relationship and carrying out actions aimed at improving relationship satisfaction (Halford, Wilson, Lizzio, & Moore, 2002). The concept of RSR is based on the assumption that individuals can act in ways which promote couple satisfaction. Interventions founded on the idea of RSR focus on this specifically by asking the individual what he or she might do to change the relationship. The creators of such interventions—namely Self-PREP and Couple CARE (Halford et al., 2006)—have operated under Karoley's (1993) definition of selfregulation while applying self-change to the context of an intimate couple relationship. Based on this definition, four meta-competencies of self-regulation have been developed as a framework for the implementation of this construct (Halford et al., 2002). They include: self-appraisal, self-directed goal setting, self-implementation of change, and selfevaluation of change efforts.

Self-appraisal requires an understanding of the current state of the relationship and the influences—both internal and external—which affect relationship satisfaction. This involves taking into account life events, personal characteristics, and contextual factors and understanding the effect these have on one's actions. For example, if one partner suffers from depression, this may cause additional stress in the relationship and thus affect the degree to which the other partner exercises RSR. This also lends to the

idea that important couple interactional processes such as these should be examined in the search for predictors of RSR. Lastly, being aware of one's individual contributions to relationship satisfaction through behaviors, cognitions and attitudes is especially important. This is primarily because self-regulation is based on the idea that self-directed change is a factor over which one has control.

Self-directed goal setting builds off the information obtained from self-appraisal by identifying specific goals to change one's behavior in a way that will improve relationship satisfaction. Self-implementation follows with each partner carrying out his/her planned behaviors. Self-evaluation provides the opportunity for partners to appriase the results of the change efforts made. Namely, did these actions improve the relationship in the intended ways? If they did not, the process is repeated, with each partner looking for new strategies to improve the relationship.

The first study that attempted to test the concept of RSR in the context of romantic relationships was conducted by Osgarby and Halford (1997, as cited in Halford et al., 2002). They found that individuals in non-distressed relationships were better able to identify or change relationship-enhancing behaviors than those in distressed relationships. Due to limitations in this study and the lack of an instrument with tested psychometric properties capable of measuring the construct of relationship self-regulation, Wilson and colleagues (2005) developed the Behavioral Self-Regulation for Effective Relationship Scale (BSRERS). Drawing from Kanfer's (1970) conceptualization of self regulation, a pool of 34 items was generated in order to generate both BSRERS-Self (the individual reports on his or herself) and BSRERS-Partner (the individual reports on his or her partner). Both forms of the scale measure the four meta-

competencies of relationship self-regulation: self-appraisal, self-directed goal setting, self-implementation of change, and self-evaluation of change efforts. The measures were then administered to two groups of newlyweds (measured one year apart) and one group of long-term married couples (n = 187, n = 97, n = 61, respectively) along with measures of relationship satisfaction and emotional health. An exploratory factor analysis was run on the responses and identified two factors, which were labeled relationship strategies and relationship effort. The construct of relationship strategies is defined as "the use of a range of behaviors to enhance relationship satisfaction" (Halford et al., 2007, p. 188). Relationship effort is defined as "persistence in attempting to enhance the relationship" (Halford et al., 2007, p. 188). Both the BSRERS-Self and BSRERS-Partner measures were shown to have moderate to high Chronbach's alpha coefficients ( $\alpha = .88$  and .81 for the self-report for Time 1 and Time 2, respectively; and  $\alpha = .89$  and .90 for the partnerreport for Time 1 and Time 2, respectively). The study also found moderate to high stability for the measure from Time 1 to Time 2.

This study was two-fold in that it also aimed to identify the relationship between RSR and relationship satisfaction. The results for this portion of the study showed that each partner's self-evaluated RSR was related to relationship satisfaction in the two groups of newlywed couples. For males, their BSRERS-Partner score (males rating females RSR) for relationship strategies accounted for more of the variance in male relationship satisfaction than relationship effort. The opposite was true for females. Overall, RSR accounted for 27% of the variance in relationship satisfaction for males, and 29% for females. The results for the long-term married couples were similar in that RSR accounted for 32% of male marital satisfaction and 22% of female marital

satisfaction. However, one important difference was that only men's BSRERS-Self score, and not men's BSRERS-Partner score (males rating females RSR) was related to male relationship satisfaction. Additionally, female's BSRERS-Partner score (females rating males RSR) for relationship effort, but not relationship strategies, was significantly related to female relationship satisfaction. Female's BSRERS-Self score was not significantly related to female relationship satisfaction. We can conclude from these results that there are differences in the way males and females use and perceive RSR, as well as its subsequent effects on male and female relationship satisfaction. Partner relationship effort seems to be the most important aspect of RSR for female relationship satisfaction, while males' own RSR, as well as their partners' relationship strategies, are most predictive of male relationship satisfaction.

A second study conducted by Halford and colleagues (2007) followed 191 newlywed couples over a five year period to assess the relationship between RSR and marital satisfaction. The BSRERS (Wilson et al., 2005) was used to measure both the relationship strategies and relationship effort constructs of RSR. In order to get a more accurate view of this relationship, RSR and marital satisfaction were measured each year for 5 years. The authors hypothesized that both actor and partner RSR would predict marital satisfaction in each wave of the study. Multilevel modeling analyses were conducted to investigate the predictive value of RSR on marital satisfaction.

The results showed that current actor RSR (both relationship strategies and relationship effort) was related to current marital satisfaction for both males and females. Current partner RSR (both relationship strategies and relationship effort) was also related to current male marital satisfaction. Only current partner relationship effort, and not

relationship strategies, predicted current female marital satisfaction. Additionally, only certain aspects of RSR were able to predict future marital satisfaction. Actor relationship strategies was related to future female, but not male, marital satisfaction. Actor relationship effort was related to future male, but not female, marital satisfaction. Only partner relationship effort was related to future female to future female marital satisfaction, with neither partner relationship strategies nor effort predicting future male marital satisfaction. Overall, relationship effort was more related to marital satisfaction than relationship strategies, with actor RSR being more predictive than partner RSR.

Another important finding was that overall RSR levels declined over the 5-year period. The authors suggest RSR may be influenced by major life events (e.g., family-oforigin experiences). They also posit that the relationship between high stress and declines in marital satisfaction may be mediated through lower RSR levels during those stressful times.

In addition to this research, three other studies have been conducted to test the effects of participation in Self-PREP and Couple CARE on marital satisfaction (Halford, Sanders, & Behrens, 2001; Halford, Moore, Wilson, Farrugia, & Dyer, 2004). Halford and colleagues (2001) looked at the effects of Self-PREP on marital satisfaction. The study involved 83 couples who were placed in one of four groups; high-risk couples who participated in Self-PREP, high-risk couples in a control group, low-risk couples who participated in Self-PREP, and low-risk couples in a control group. The results showed that four years after Self-PREP (which teaches RSR), the high-risk Self-PREP group had significantly lower negative communication and significantly lower erosion of relationship satisfaction and stability. However, the low-risk Self-PREP group showed

lower levels of relationship satisfaction than the low-risk control group four years later. They postulated that this may be due, in part, to the attrition of low-risk control group participants who had higher levels of relationship dissolution contemplation at the outset of the study.

Halford and colleagues (2004) also conducted a study to test the effects of Couple CARE on relationship satisfaction. This study involved one group (n = 27) of couples who participated in Couple CARE and a control group (n = 28). The authors hypothesized that Couple CARE group would see significant increases in both self and partner RSR, relationship satisfaction, and a significant decrease in negative communication. The results showed that only women reported statistically significant increases in partner RSR, as well as increases in self RSR, albeit not statistically significant. Additionally, statistically significant increases in relationship satisfaction and stability were observed in the Couple CARE group compared to the control group. However, Couple CARE did not produce a statistically significant decrease in negative communication.

The third study (Halford & Wilson, 2009) sought to identify predictors of sustained relationship satisfaction over four years after participation in Couple CARE. Participants were 66 couples who were stratified into high-risk (n = 35) and low-risk (n = 31) groups, with high-risk couples being those in which either the man reported interparental violence in his family-of-origin or the woman's parents had divorced. It was hypothesized that high actor and partner RSR would predict high sustained relationship satisfaction for both groups. They found that couples with low RSR had a decreasing trajectory for relationship satisfaction, while those with high RSR had a slightly

increasing trajectory for relationship satisfaction. At the end of the four years, those with high RSR had statistically significantly higher RSR than those with low RSR, and those with low RSR scored close to the clinical cutoff for distressed couples on the Dyadic Adjustment Scale (DAS; Spanier, 1976). More specific findings indicated that only female, and not male, RSR predicted relationship satisfaction trajectories. They suggest that this may indicate that there is shared variance of RSR between genders.

*Conclusions.* It is clear from the literature that RSR is an important predictor of marital satisfaction, and that RSR has been identified as a skill that can be taught through clinical interventions and couple education. Additionally, the core components of RSR are very similar to those of ISR. Research has established strong relationships between the family-of-origin variables (i.e., parent-child relationship quality), neuroticism, and the development of ISR. Yet little is known about the predictors of RSR development. Theoretically, this relationship should also exist between family-of-origin variables (e.g., parental marital satisfaction and parent-child relationship quality), the individual variable of neuroticism, and RSR. It is the purpose of this study to investigate these relationships in an attempt to better understand the contributing factors of successful RSR development and its later implementation in marriage.

### Theoretical Model Tested

The present study attempted to understand the relationship between parental marital satisfaction, parent-child relationship quality, neuroticism, and RSR by testing the theoretical model shown in Figure 1. The hypotheses, as illustrated in the model, are as follows:

- A higher level of perceived parental marital satisfaction will be related to a higher level of self-RSR.
- 2. A higher level of parent-child relationship quality with each parent will be related to a higher level of self-RSR.
- A higher level of self-reported neuroticism will be related to a lower level of self-RSR.
- 4. A higher level of partner-reported neuroticism will be related to lower levels of self-RSR.
- 5. The relationship between parental marital satisfaction and self-RSR will be partially mediated by neuroticism.
- 6. The relationship between parent-child relationship quality with each parent and self-RSR will be partially mediated by neuroticism.

In addition to answering these questions, this study will control gender by testing the model separately for males and females (see Figure 1.). Previous research has shown males and females may vary in their use of RSR (Halford et al., 2007).

Figure 1. Hypothesized Model of Study Variables



### Chapter 3

## Methods

## Description of Sample

Participants were 380 married couples (760 individuals) in their first marriage who completed the RELATionship Evaluation (RELATE) between 2006 and 2008. Dating, cohabiting, remarried, and homosexual couples were excluded as the purpose of this study was to identify predictors of RSR in heterosexual married couples. There were no inclusionary or exclusionary criteria for length of marriage. Table 1 provides more specific demographic information for the study sample.

The majority of the sample identified themselves as Caucasian (81.6% and 82.1% of males and females, respectively). Most of the participants had attended some college (40.2% and 39.3% of males and females, respectively), with roughly 50% of males and females having obtained either a Bachelor's or professional degree. Mean age was 32.12 for males and 30.78 years, with most couples having been married between 1 and 10 years.

## Table 1.

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	Male	Female
	M (SD)	M (SD)
Mean Age in Years	32.12 (17.72)	30.78 (13.23)
Education		
Less than high school	0.3%	0.5%
High school diploma	3.6%	4.0%
Some college	40.2%	39.3%
Associate's degree	6.7%	6.9%
Bachelor's degree	23.0%	23.8%
Graduate degree	26.2%	25.5%
Total	100%	100%
Race		
African (Black)	1.3%	1.8%
Asian	8.2%	7.4%
Caucasian (White)	81.6%	82.1%
American Indian	0.3%	0.3%
Latino	3.2%	3.7%
Mixed/Biracial	4.2%	3.7%
Other	1.3%	1.1%
Total	100%	100%
Length of Marriage		
0-3 months	5.8%	6.3%
4-6 months	6.6%	6.6%
7-12 months	9.5%	9.2%
1-2 years	23.7%	22.6%
3-5 years	16.1%	16.3%
6-10 years	15.0%	15.8%
11-20 years	13.4%	13.2%
21-30 years	8.2%	8.2%
31+ years	1.8%	1.8%

### Measures

The RELATionship Evaluation (RELATE: Holman, Busby, Doxey, Klein, & Loyer-Carlson, 1997) is a 271-item questionnaire designed to provide a comprehensive measurement of romantic relationships by assessing multiple variables that have been shown to be predictive of relationship satisfaction (Busby, Holman, & Taniguchi, 2001). Select scales from the RELATE were used to measure the variables in this study. The RELATE has been used in a variety of settings, including classroom and counseling settings, to help couples, couple educators, and couple therapists better understand the factors that contribute to relationship satisfaction. Participants were asked to answer items on a 5-point Likert-type scale (1=never/strongly disagree, 5=very often/strongly agree) for themselves as well as for their partner.

The scales of RELATE demonstrate high internal consistency (between .70 and .90), and have been shown to be both valid and reliable (alpha test and test-retest) (Busby et al., 2001). The current study made use of the following subscales: the parent's marriage scale; the father/mother-child relationships scale; the calmness scale; the happiness scale; the self-esteem scale; and the relationship self-regulation scale.

*Parental marital satisfaction*. The latent variable of parental marital satisfaction was constructed using the Parent's Marriage Scale of the RELATE. This scale is made up of three items assessing the participant's perception of the level of happiness both parents experienced in the marriage. Responses are given on a 5-point Likert-type scale ranging from (1) "strongly disagree" to (5) "strongly agree", with a "doesn't apply" response choice also provided. The items included are; "My father was happy in his marriage", "My mother was happy in her marriage", and "I would like my marriage to be like my parent's marriage". Total scale scores range from 3 to 15, with higher scores indicating a higher perceived level of parental marital satisfaction. This scale has been shown to have high internal consistency for males and females ( $\alpha = .91$ ) and high test-retest reliability ( $\alpha = .92$ ) (Busby et al., 2001).

Parent-child relationship quality. The latent variables of father-child relationship quality and mother-child relationship quality were constructed using the Father-Child Relationship and Mother-Child Relationship Scales of the RELATE. These scales are made up of three items each assessing the participant's perception of the quality of both father-child and mother-child relationships during his or her family-of-origin experience. Responses are given on a 5-point Likert-type scale ranging from (1) "strongly disagree" to (5) "strongly agree", with a "doesn't apply" response choice also provided. The items included in the Father-Child Relationships Scale are; "My father showed physical affection to me by appropriate hugging and/or kissing", "My father participated in enjoyable activities with me", and "My father and I were able to share our feelings on just about any topic without embarrassment or fear of hurt feelings". The items included in the Mother-Child Relationships Scale are; "My mother showed physical affection to me by appropriate hugging and/or kissing", "My mother participated in enjoyable activities with me", and "My mother and I were able to share our feelings on just about any topic without embarrassment or fear of hurt feelings". Total subscale scores range from 3 to 15, with higher scores indicating a higher parent-child relationship quality. The Father-Child Relationships scale has been shown to have high internal consistency for males and females ( $\alpha = .75$  and .77, respectively) and high test-retest reliability ( $\alpha = .86$ ). The Mother-Child Relationships scales has also been shown to have high internal

consistency for males and females ( $\alpha = .67$  and .71) and high test-retest reliability ( $\alpha = .84$ ) (Busby et al., 2001).

*Neuroticism.* The latent variable of neuroticism was constructed using the 11 items from the Calmness, Happiness, and Self-Esteem scales from RELATE. Responses are given on a 5-point Likert-type scale ranging from (1) "never" to (5) "very often". Participants use this scale to rate themselves using the following descriptors for anxiety (Calmness scale); "worrier", "fearful", "tense", and "nervous"; for depression (Happiness scale); "sad and blue", "feel hopeless", and "depressed"; and for self-esteem (Self-Esteem scale); "I take a positive attitude toward myself", "I think I am no good at all", "I feel I am a person of worth", "I am inclined to think I am a failure". Total scale scores range from 11 to 55, with higher scores indicating more neurotic traits. The Calmness, Happiness, and Self-Esteem subscales used in the Neuroticism scale have all been shown to have high internal consistency for males and females ( $\alpha = .72$  and .68;  $\alpha = .76$  and .82;  $\alpha = .75$  and .70;  $\alpha = .85$  and .84; respectively) and high test-retest reliability ( $\alpha = .70$ , .78, .78, and .79, respectively).

Relationship self-regulation. The observed variable of relationship self-regulation was constructed by taking the sum total of the items in the Relationship Self-Regulation Scale of the RELATE. This scale is made up of eight items assessing the participant's rating of their own RSR. This scale was developed using the Behavioral Self-Regulation for Effective Relationship Scale (BSRERS), which has been shown to have high validity for both self-RSR and partner-RSR ratings ( $\alpha = .88$  and .89, respectively) and high stability (Wilson et al., 2005). Responses are given on a 5-point Likert-type scale ranging from (1) "not at all" to (5) "very true". The items included are; "I try to apply ideas about effective relationships to improve our relationship", "If things go wrong in the relationship I tend to feel powerless", "I tend to fall back on what is comfortable for me in relationships, rather than trying new ways of relating", "I actually put my intentions or plans for personal change into practice", "Even when I know what I could do differently to improve things in the relationship, I cannot seem to change my behavior", "If my partner doesn't appreciate the change efforts I am making, I tend to give up", "I give my partner helpful feedback on the ways she/he can help me achieve my goals", and "If the way I'm approaching change doesn't work, I can usually think of something different to try". Total subscale scores range from 8 to 40, with higher scores indicating a higher level of RSR.

#### Chapter 4

### Results

### Statistical Analysis

Structural equation modeling (SEM: Jöreskog, 1973; Wiley, 1973) was used to test the relationships between the independent variables of perceived parental marital satisfaction, parent-child relationship quality, neuroticism, and the dependent variable of RSR. The use of SEM provided a more comprehensive test of the model under investigation than other analyses could (e.g., ANOVA, multiple regression, etc.) and controlled for confounding variables and measurement error (Hoyle, 1995).

*Construction of latent variables.* Latent variables were constructed for perceived parental marital satisfaction, parent-child relationship quality, and neuroticism, while RSR was an observed variable. Parental marital satisfaction, parent-child relationship quality (father and mother), and neuroticism were constructed using items from several RELATE scales. Factor analyses were conducted for the items of each latent variable. Analyses yielded single factors for each of the variables. The items used to construct latent variables all loaded satisfactorily for both males and females. Factor loadings ranged from .87 to .92 for parental marital satisfaction, .80 to .87 for father-child relationship quality, .79 to .88 for mother-child relationship quality, and .56 to .82 for neuroticism. Information regarding means, standard deviations, internal consistency, and factor loadings for each of the study variables is shown in Tables 2 and 3.

The mean scores show that overall males and females had very similar responses on all of the study variables. Participants reported relatively low neuroticism (M = 25.05and 25.89 for males and females, respectively), while reporting relatively high levels of

parental marital satisfaction and parent-child relationship quality. Mean scores for mother-child relationship quality was slightly higher than those for father-child relationship quality for males and females. Additionally, both males and females reported relatively high RSR.

*Indicators of fit.* In testing for goodness of fit we used three indicators: chi-square, the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). The chi-square statistic measures the degree to which the residuals from the unrestricted model differ from restricted model, with a difference of zero indicating a perfect model fit (Byrne, 2001). A model with a low chi-square together with a non-significant *p*-value (p < .05) indicates a good fit. The comparative fit index (CFI) compares the improvement of fit provided by the hypothesized or estimated model over the independence model (a model in which there are no relationships between the variables) (Hoyle & Panter, 1995). A CFI value of > .95 is considered representative of a well-fitting model (Hu & Bentler, 1999). The root mean square of approximation (RMSEA) is one of the most informative indexes in SEM (Byrne, 2001). It measures the error of approximation in the population, with values of < .05 indicating good model fit.

In order to conduct the SEM analysis, we first calculated correlations for the study variables. Results from the correlations are shown in Table 4. There was a small, significant association between male parental marital satisfaction and male RSR (r = .11, p < .05) and a non-significant association between female parental marital satisfaction and female RSR (r = .07, p = .20). Male father-child and mother-child relationship quality also had small, significant associations with male RSR (r = .15, p < .01 and r = .18, p < .001, respectively). The same was true for female father-child and mother-child

relationship quality and female RSR (r = .12, p < .05 and r = .19, p < .001, respectively). Both male and female neuroticism had large negative relationships with both male and female RSR (r = -.53, p < .001 and r = -.45, p < .001, respectively). Likewise, partner neuroticism was negatively associated with self-RSR for males and females (r = -.24, p < .001 and r = -.20, p < .001, respectively).

Additionally, all family-of-origin variables had statistically significant negative associations with male and female neuroticism. Male parental marital satisfaction had an association of r = -.14, p < .01 with his neuroticism, with male father-child and mother-child relationship quality showing similar associations (r = -.17, p < .001 and r = -.23, p < .001, respectively). Likewise, female parental satisfaction had an association of r = -.18, p < .001 with her neuroticism, with female father-child and mother-child relationship quality showing similar associations (r = -.21, p < .001 and r = -.15, p < .01, respectively). These results demonstrated that the strongest correlations existed between one's own neuroticism and his/her own RSR. There were no correlations that were large

enough to indicate any colinearity problems.

## Table 2.

Mean Scores, Standa	ard Deviations, Al	phas, and Factor I	Loadings fo	or Mal	e Variables
---------------------	--------------------	--------------------	-------------	--------	-------------

	M(SD)	Chronbach's Alpha	Factor Loading
Parental Marital Satisfaction	9 62 (4 03)	89	
Scale	y.o <u></u> (1.05)		
PMS-1			.92
PMS-2			.91
PMS-3			.90
Father-Child Relationship	0.76 (2.62)	87	
Quality Scale	9.70 (3.02)	.02	
FCRQ-1			.87
FCRQ-2			.88
FCRQ-3			.82
Mother-Child Relationship	11.07 (2.02)	00	
Quality Scale	11.27 (3.03)	.80	
MCRQ-1			.84
MCRQ-2			.83
MCRQ-3			.88
Neuroticism Scale	25.05 (6.71)	.91	
Depression Subscale	6.98 (2.31)	.87	
DEP-1			.75
DEP-2			.82
DEP-3			.80
Anxiety Subscale	10.84 (2.66)	.78	
ANX-1		-	.67
ANX-2			.60
ANX-3			.69
ANX-4			.65
Self-Esteem Subscale	7.23 (2.75)	.86	
SELF-1			.77
SELF-2			.74
SELF-3			73
SELF-4			.77
Relationship Self-			
Regulation Scale	27.17 (4.64)	.77	
RSR-1			N/A
RSR-2			N/A
RSR-3			N/A
RSR-4			N/A
RSR-5			N/A
RSR-6			N/A
RSR-7			$N/\Delta$
PSP_8			N/A

## Table 3.

mean scores, standard Dertanons, mprias, and racior Doudings for remaine variable.	Mean S	Scores, Stan	dard	l Deviations	, Alphas,	and Fac	tor Load	lings f	for Femal	le Varia	bles
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	M (SD)	Chronbach's Alpha	Factor Loading
Parental Marital	9 71 (3 76)	88	
Satisfaction Scale	J. (1 (J. / U)	.00	
PMS-1			.92
PMS-2			.92
PMS-3			.87
Father-Child Relationship	9.96 (3.38)	.77	
Quality Scale	· · · ·		20
FCRQ-1			.80
FCRQ-2			.8/
FCRQ-3			.81
Mother Child Relationship			
Quality Scale	11.27 (3.08)	.78	
MCRO-1			86
MCRO-2			79
MCRO-3			88
Werg-5			.00
Neuroticism Scale	25 89 (5 98)	88	
Depression Subscale	7 12 (2.05)	83	
DEP-1	7.12 (2.00)	.05	70
DEP-2			76
DEP-3			74
Anxiety Subscale	11 51 (2 50)	74	. / •
ANX-1	11.01 (2.00)	., .	56
ANX-2			59
ANX-3			65
ANX-4			61
Self-Esteem Subscale	7 26 (2 58)	84	
SELF-1	, (		.75
SELF-2			.71
SELF-3			.66
SELF-4			.73
Relationship Self-	27.12(4.0)	79	
Regulation Scale	27.12 (4.09)	./8	
RSR-1			N/A
RSR-2			N/A
RSR-3			N/A
RSR-4			N/A
RSR-5			N/A
RSR-6			N/A
RSR-7			N/A
RSR-8			N/A

Table 4.

## Correlations Between Parental Marital Satisfaction, Father-Child Relationship Quality, Mother-Child Relationship Quality, Neuroticism, and RSR for Males and Females

		1	2	3	4	5	6	7	8	9	10
1	Male PMS										
2	Male F-CR	.61***									
3	Male M-CR	.34***	.41***								
4	Male Neuro.	14**	17***	23***							
5	Male RSR	.11*	.15**	.18***	53***						
6	Female PMS	.13**	.14**	.14**	16***	.21***					
7	Female F-CR	.11*	.15**	.13*	16**	.17***	.60***				
8	Female M-CR	.07	.14**	.12*	13**	.17***	.39***	.50***			
9	Female Neuro.	06	13*	12*	.10*	24***	18***	21***	15**		
10	Female RSR	.11*	.15**	.07	20***	.23***	.07	.12*	.19***	45***	

*Note:* \* p < .05. \*\* p < .01. \*\*\* p < .001.

## Structural Equation Modeling Results

Although the current model resulted in a chi-square of 309.41 (p =.005, df = 248, N = 760), the CFI (.987) and RMSEA (.026) indicated that the model was a good fit. Because the chi-square statistic is sensitive to sample size, with larger samples usually yielding a significant  $\chi^2$  (Keiley, Dankoski, Dolbin-MacNab, & Liu, 2005), it is reasonable to assume that the large sample size in this study contributed to a significant chi-square. Thus, the addition of the CFI and RMSEA provided a clearer picture of the model fit.

Figure 2 shows the results from the SEM analysis. Results indicated that there was mixed support for the study hypotheses. It was hypothesized that higher levels of parental marital satisfaction and parent-child relationship quality would be related to higher levels of self-RSR, and that higher levels of self and partner neuroticism would be related to lower levels of self and partner RSR. Additionally, it was hypothesized that the relationship between family-of-origin variables (i.e., parental marital satisfaction and parent-child relationship quality) and RSR would be partially mediated by one's own neuroticism.

Hypothesis 1, which was that higher levels of parental marital satisfaction would be related to higher levels of self-RSR, was not supported by the data. Neither male nor female parental marital satisfaction had any significant relationships with male or female RSR.

Hypothesis 2, which was that higher levels of parent-child relationship quality would be related to higher levels of self-RSR, was only partially supported by the data. The only significant direct effect was the relationship between female mother-child

relationship quality and female RSR. This relationship was positive, yielding a standardized path coefficient of .14 (p < .01).

The data did support Hypothesis 3, which was that higher levels of selfneuroticism would be related to lower levels of self-RSR. Higher levels of both male and female self-reported neuroticism were related to lower levels of male and female RSR. Male neuroticism had a strong negative association (-.56, p < .001) with male RSR. Likewise, female neuroticism also had a strong negative association (-.53, p < .001) with female RSR.

Hypothesis 4, which was that higher levels of partner-neuroticism would be related to lower levels of self-RSR, was also supported by the data. Higher levels of both male and female partner-reported neuroticism were related to lower levels of self-reported RSR for males and females. Male partner-reported neuroticism had a negative association with male RSR (-.20, p < .001). Similarly, female partner-reported neuroticism had a negative association with female RSR (-.17, p < .001).

No support was found for Hypothesis 5, which was that the relationship between parental marital satisfaction and self-RSR would be partially mediated by neuroticism. There were no significant paths between parental marital satisfaction and RSR, or parental marital satisfaction and neuroticism, indicating that there was no mediation.

Hypothesis 6, which was that the relationship between parent-child relationship quality and self-RSR would be partially mediated by neuroticism, was not supported. Only fully mediated relationships were observed between these variables. The relationship between male mother-child relationship quality and male RSR was fully mediated by male neuroticism. The path between male mother-child relationship quality

and male neuroticism yielded a coefficient of -.20 (p < .01). The indirect effect of male mother-child relationship quality on male RSR was -.11. The same was true for female father-child relationship quality and female RSR. The path between female father-child relationship quality and female neuroticism yielded a coefficient of -.22 (p < .05), while the indirect effect of female father-child relationship quality on female RSR was -.12. Male father-child relationship quality had no relationship to self-RSR or neuroticism. Female mother-child relationship quality had a significant direct effect on female RSR, but no significant association with female neuroticism, indicating that there was no mediation.

Gender was also controlled for by running the model separately for males and females. It was expected that there would be differences between males and females with regards to what variables would be associated with RSR. The final model showed little difference between genders. Both male and female RSR had essentially identical associations with predictor variables. The only variable upon which we found any differences in associations was parent-child relationship quality. For males, the motherchild relationship was related to his neuroticism, with no association between the fatherchild relationship and neuroticism. Conversely, female father-child relationship was related to her neuroticism, with the mother-child relationship being directly associated with her RSR, but not neuroticism.

Figure 2. Model of Study Variables with Standardized Path Coefficients



*Note:*  $\chi^2(248) = 309.41$ , p = .005. CFI = .987. RMSEA = .026. \* p < .05. \*\* p < .01. \*\*\* p < .001.

#### Chapter 5

## Discussion

The purpose of this study was to identify select family-of-origin and emotional health factors that may predict one's ability to use RSR. The importance of RSR in the context of marriage has been demonstrated by several studies (e.g., Halford et al., 2001; Halford et al., 2004). It was hypothesized that higher levels of parental marital satisfaction and parent-child relationship quality would predict higher levels of RSR, and that higher levels of self and partner neuroticism would predict lower levels of self-RSR. Further, we hypothesized that the relationships between family-of-origin variables (i.e., parental marital satisfaction and parent-child relationship quality) and self-RSR would be partially mediated by neuroticism. It is also important to mention that this is the first study that has explored predictors of RSR, though others have identified predictors of ISR. The literature on ISR was used as a guidepost for the hypotheses in the current study.

The strongest association we found was that of self-neuroticism and self-RSR, with higher levels of self-neuroticism predicting lower levels of self-RSR for both males and females. These findings are consistent with those related to the successful implementation of the ISR (Alden et al., 1994; Endler & Kocovski, 2000; Jones et al., 1986). Specifically, the scales used in this study to assess RSR identify behaviors that are similar to the processes of goal setting, self-monitoring, self-evaluation, and selfreinforcement, which are behaviors that have been shown to be inhibited by depression and anxiety in the ISR literature (Alden et al., 1994; Doerfler & Aron, 1995; Golin & Terrell, 1977; Hewitt & Flett, 1993; Kocovski & Endler, 2000; Martin et al., 1996;

Wallace & Alden, 1991). This may lend support to the idea that some similarities exist between ISR and RSR, and that some of the same factors that predict ISR also predict RSR.

In addition, the finding that higher levels of partner-neuroticism are related to lower levels of self-RSR supports the existing literature on the relationship between self and partner depression and marital satisfaction. Beach, Sandeen, and O'Leary (1990) discuss a similar dynamic in which partners in relationships with depressed partners eventually become worn out by their partner's complaining and negativity, and thus, put forth less effort in improving the relationship. Our findings support this notion. Specifically, it may be more difficult for both spouses to put work into a marriage when one spouse is dealing with depression or anxiety, and perhaps as a result not working hard on the marriage themselves or giving-up on changes easily.

These findings also support research that has identified the systemic nature of depression within a marriage (Beach et al., 1990, Sheffield, 2003). For example, one partner's depression coupled with his/her partner's withdrawing or negative behavior in response to the depression may contribute to a cycle in which both partners lose motivation to work on their marriage. Additionally, while past research has clearly demonstrated the relationship between depression and marital discord, our findings provide a key piece of the puzzle in understanding this relationship. Namely, depression may lead to lower levels of RSR, which is associated with lower levels of marital satisfaction (Halford et al., 2001; Halford et al., 2004).

Another interesting aspect of our findings of the relationships between self and partner neuroticism and self-RSR is that despite the low mean scores and variability of

neuroticism and RSR in the study sample, these relationships still yielded large, statistically significant coefficients. This highlights the importance of emotional health in carrying out RSR in marriage.

Additionally, the items used to measure both self and partner neuroticism refer to both cognitive and emotional experiences. While neuroticism has typically been conceptualized as dysfunctional cognitive processes, this construct also refers to a deregulation of emotions. It may be that inhibited emotional regulation leads to an inability to carry out RSR behaviors in an intimate relationship.

Contrary to the literature on ISR, which demonstrates a strong relationship between parent-child relationship quality and the development of ISR (Zimmerman, 2000), our findings showed that only female mother-child relationship quality had a direct effect on her RSR. One possible explanation may be that the measures of parentchild relationship quality in the present study were analyzed separately (i.e., father-child relationship quality and mother-child relationship quality). This may have decreased the size and significance of some associations with RSR. Additionally, our measures focused on physical affection, enjoyable activities, and positive sharing of feelings, which are more attachment-based aspects of the parent-child relationship. Previous research that has identified links between the parent-child relationship and the development of ISR has emphasized more skill-based aspects of parenting—namely, the use of reward systems in parenting (Brody et al., 1996; Higgins, 1997; Kochanska & Aksan, 1995; Lay et al., 1989; Manian et al., 2006; Volling et al., 2006). It may be that the parent-child measures used in this study did not adequately capture the aspects of the parent-child relationships that lead to the development of ISR and RSR. The inclusion of measures similar to those

used in the studies cited above, which focus more specifically on teaching ISR skills through parenting, may yield stronger associations between parent-child relationships and RSR.

Despite there being only one significant path between parent-child relationship quality and RSR (i.e., female mother-child relationship quality and female RSR), our findings do lend support to those of Holman and Birch (2001). They found in sample of married couples that the association between wives' parent-child relationship quality and her marital satisfaction was twice that of husbands'. Additionally, Wamboldt and Reiss (1989) suggest that within the context of marital relationships, wives are the "chief architects", deriving much of their relational abilities from the parent-child relationship. Because RSR has been overwhelmingly identified as one of the strongest predictors of relationship satisfaction (e.g., Halford & Wilson, 2009), it seems that female parent-child relationship quality would be similarly related to her RSR.

Similarly, perceptions of one's parents' marriage quality were not related to RSR in the way we hypothesized. This may be consistent with what Marks (1986) posited. That is, we tend to be unaware of the blueprints we carry of our parents' marriage that affect the way we interact in our own marriages. Because RSR requires a high level of self-awareness, it is possible that observations of one's parents' marriage do not involve children making note of specific behaviors that contributed to their parents' marital happiness.

Another possible explanation may be an issue of measurement. Similar to the measures of parent-child relationship quality, the measure we used for parental marital satisfaction may not have been specific enough to identify behaviors observed in one's

parents' marriage. According to Marks (1986), we observe specific behaviors in our parents' marriage related to conflict resolution and positive interaction. Perhaps a measure which included questions about one's perceptions of specific RSR behaviors in his/her parents' marriage would help give a more accurate understanding of the relationship between parental marriage and RSR.

Whereas parental marital satisfaction and parent-child relationship quality were hypothesized to contribute to the learning of RSR skills during one's family-of-origin experience but were assessed retrospectively, neuroticism was assessed prospectively. This may indicate that the obstacles which most strongly inhibit couples from learning RSR may be the issues they are currently dealing with rather than family-of-origin influences from the past. Because RSR is a skill that can be learned within the context of marriage (Halford, 2001), it may be that the parent-child relationship and parental marriage play rather minimal direct roles in how well someone uses RSR in his/her marriage. While important skills may be learned during the family-of-origin experience regarding relationships in general, perhaps the parent-child relationship is not similar enough to a marriage relationship to contribute significantly to the learning and implementation of RSR within marriage. Likewise, parental marriage may provide a blueprint for offspring marriage, but that blueprint might lack the observation and emulation of specific skills the parents used in changing their relationship. Additionally, there may be individuals who did not learn these skills in their family-of-origin but have since developed and used them in their marriages.

The finding that parent-child relationship quality was related to male and female neuroticism lends support to extant research which has shown that parent-child

relationship quality has an indirect effect on marital satisfaction through individual characteristics such as self-esteem (Holman, Larson, & Olsen, 2001). Our findings differ slightly from those of Holman and colleagues (2001) in that only female mother-child relationship quality was directly related to female RSR. However, the indirect effects observed between mother-child (for males) and father-child (for females) relationship quality and RSR through male and female neuroticism closely resemble the relationships observed by Holman and colleagues (2001). It is also important to note that RSR may play a mediating role between family-of-origin and individual factors and marital satisfaction.

## Limitations

One of the major limitations of the study was the inability to determine causation due to fact that data used was cross-sectional. Thus, it is impossible to understand whether high neuroticism leads to low RSR, or low RSR contributes to high neuroticism. Were the data collected longitudinally, we would be able to determine the nature of the relationship between the study variables.

Another limitation is that the analyses did not control for the length of marriage. Halford and associates (2007) demonstrated that RSR seems to change across time and differ for males and females. While the current study did control for gender by separating the male and female variables in the SEM model, there was no control for length of marriage (most couples had been married 1-10 years). A better understanding of how RSR may change over time may have important clinical implications and clarify the developmental process of RSR over the marital life course.

Additionally, there was an overrepresentation of highly-educated Caucasians in the sample. Because we used convenience sampling, we were unable to obtain a nationally representative sample. This may prevent the results from being generalizable to all married couples. There may be important educational and cultural differences in the way individuals learn and implement RSR that were not addressed in this study.

Finally, there may be other important family-of-origin variables that were overlooked in this study that may contribute more significantly to RSR. Namely, the inclusion of a measure of the perceived use of RSR in one's parents' marriage may yield a more direct relationship to one's own RSR. While the family-of-origin variables included in our analysis are supported predictors of ISR, they did not directly predict RSR as well in this study.

### Future Research

Our results seem to indicate that current (proximal) factors have a larger direct effect on RSR than more distal family-of-origin factors. Future research should investigate how other current relationship factors, such as stress, length of marriage, and personality characteristics contribute to RSR. In addition, measuring the current impact of one's family-of-origin experience on his/her current intimate relationship is a necessary next step to understanding the relationship between distal factors and current RSR. Understanding the obstacles that prevent couples from using RSR may also facilitate the therapeutic and educational process, allowing practitioners to sequentially address those obstacles and eventually teach couples the RSR skills needed to improve their relationships. In order to obtain such an understanding, longitudinal research is needed to determine whether or not these proximal factors are indeed causal.

Future endeavors should also explore the possible mediating role of RSR between proximal and distal factors and marital or relationship satisfaction. Our results are similar to those of other studies which have examined the relationship between similar predictor variables and marital satisfaction. It is now necessary to understand whether or not RSR mediates some of those relationships.

Finally, the use of a clinical sample in such endeavors will more clearly identify factors which inhibit RSR. Because the sample of the current study was relatively securely attached to their parents, and had lower levels of neuroticism, there may be important effects not shown by our results that could be demonstrated with a clinical sample. For example, those who are less securely attached to their parents may also experience more inhibited emotional regulation, and thus have a harder time using RSR in their intimate relationships.

### Clinical Implications

The findings of the present study hold several implications for clinical practice with couples. Therapists who work with couples may have noticed that the process of helping couples shift from a blaming stance to taking responsibility for their own contributions to the issues is complicated and difficult (Halford, 2001; Jacobson & Christensen, 1996). Furthermore, many of the current couple therapy models emphasize this shift from personalizing marital problems to externalizing them (e.g., Emotionally Focused Therapy: Johnson, 2004; Integrative Couple Therapy: Jacobson & Christensen, 1996). This process parallels that of shifting from a blaming attitude to one of selfchange, a key element of RSR. These models further stress the importance of this shift as being a key component for increasing of marital satisfaction. Our findings indicate that

this process may be further complicated if one or both of the partners in the relationship are dealing with lower levels of emotional health. Attachment-based interventions which allow couples to express their emotions freely to one another while being validated and accepted by their partner may facilitate increased regulation of those emotions and help both partners feel more securely attached (Johnson, 2004). This may, in turn, make it easier for partners to accept and change their own behaviors that are contributing to their relationship distress.

Couple therapists may also use psychoeducational material to teach partners of depressed and anxious clients ways in which they can communicate and interact with their partners that will not increase symptomology. Beach, Sandeen and O'Leary (1990) suggest that marital therapy is an effective treatment modality for depression. Thus, in the context of marital therapy, partners of depressed clients can learn skills that will enable them to better cope with their partner's depression, rather than contributing to it through negative communication and behaviors. Through this process both partners will be engaged in setting goals and monitoring their progress, which will prime them for future efforts to learn RSR skills to improve their marriage.

Additionally, according to our findings, family-of-origin factors may only be indirectly related to RSR. Thus, couple therapists may choose to spend less time on such issues in therapy, focusing more time on current issues and emotional health. According to Halford (2001), the therapeutic process of RSR involves teaching couple skills to modify their behavior, indicating that whether or not an individual learned RSR skills in his/her family-of-origin, these skills can be obtained as an adult.

However, due to the indirect relationships between male mother-child relationship quality and male RSR, as well as that between female father-child relationship quality and female RSR, couple therapist may choose to explore any current contributions (e.g., internalized criticisms, current negative interactions) these parent-child relationships have on neuroticism. Such issues may be a key component to the treatment of one's neuroticism prior to their transition to learning RSR skills.

The findings of the current study also apply to family life and couple educators. Couple education programs that use RSR as a framework for intervention and education (e.g., Couple CARE and Self-PREP) are largely delivered by couple educators. The results of this study highlight that these programs may be of more benefit to those who are free from any psychopathology.

Additionally, programs such as Couple Communication (Miller & Sherrard, 1999) focus on the development of caring for oneself by becoming more self-aware. It may be difficult for clients who are dealing with depression and anxiety to reach the level of selfawareness necessary to engage in such a process. Our finding may also apply to couple educators who are looking to help couples engage in more self-directed change efforts. They may consider referring certain clients to couple therapy to address depression or anxiety issues before any major gains are seen in such programs.

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