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Family-of-Origin, Relationship Self-Regulation, and Attachment in Marital Relationships

Darin J. Knapp¹ · Aaron M. Norton² · Jonathan G. Sandberg³

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Abstract Within the framework of the vulnerabilitystress adaptation model, we created an actor partner interdependence model to assess the relationships between negative family-of-origin experiences and relationship selfregulation, a type of relationship maintenance, and the mediating potential of partner attachment behaviors. We analyzed data from 261 heterosexual married couples in matched-pair sets from the Relationship Evaluation database (see www.relate-institute.org). Results indicated that negative family-of-origin experiences were positively associated with relationship self-regulation and secure attachment behaviors. We also found that attachment behaviors mediated the relationship between negative family-of-origin experiences and relationship self-regulation. These findings demonstrate particular clinical relevance for strengthening attachment in couples therapy.

Keywords Family-of-origin · Attachment · Relationship self-regulation · Relationship maintenance · Couples therapy

Darin J. Knapp darinjk@gmail.com; darink@ksu.edu

Aaron M. Norton anorton@mail.twu.edu

Jonathan G. Sandberg jonathan_sandberg@byu.edu

- ¹ Marriage and Family Therapy Program, School of Family Studies and Human Services, Kansas State University, 139 Campus Creek Complex, Manhattan, KS 66502, USA
- ² Texas Woman's University, Denton, TX, USA
- ³ Brigham Young University, Provo, UT, USA

Introduction

Negative family-of-origin experiences influence individuals' future romantic relationship trajectories in a number of ways. For example, the occurrence of stressors such as family conflict, violence, hostility, and parental divorce contributes to damaging couple stress responses in the future. Such responses to stressors may include negative self and partner attributions (Gardner et al. 2011), poor communication (Levy et al. 1997), physical aggression (Busby et al. 2008), marital hostility (Topham et al. 2005; Whitton et al. 2008) and, ultimately, marital discord and even divorce (Amato 1996; Amato and Booth 2001; Story et al. 2004). Married couples experiencing these negative responses to stress may be able to trace roots of these potential problems back to family-of-origin influences. As outlined in the vulnerability-stress adaptation (VSA) model of marriage (Karney and Bradbury 1995), individuals bring enduring vulnerabilities with them into marriage, many of which likely stem from their respective families of origin and related quality of family experiences; these vulnerabilities ultimately influence couple adaptive patterns and general marital health. Accordingly, it becomes important for clinicians to understand these factors and discover ways to intervene with maladaptive processes in couple relationships.

Within the VSA model (Karney and Bradbury 1995), the authors propose that enduring vulnerabilities originating within the family of origin contribute to marital health trajectories. Because of significant family-of-origin impact on the marital process, it remains an important task to understand how married couples deal with negative familyof-origin issues by successfully integrating adaptive processes (such as relationship maintenance skills) into their relationship processes. Guided by the VSA model, the purpose of this study is to explore the relationships between family-of-origin issues, attachment behaviors, and adaptive strategies within couple relationships in order to provide insight into the ways that family-of-origin issues affect couple adaptive strategies for maintaining healthy relationships. In particular, we aim to understand these factors in more detail between partners, in hopes of providing treatment options for clinicians working with couples whose relationship maintenance processes are negatively impacted by negative family experiences.

Theoretical Framing

As Karney and Bradbury (1995) suggest, enduring vulnerabilities often originate within the family-of-origin setting. These enduring vulnerabilities are conceptualized as individual factors brought into a couple relationship that affect the way a couple responds to stressful events and adapts accordingly within their relationship. These adaptive processes influence overall marital quality and stability. Similar to the idea that vulnerabilities originate in family background, attachment theory suggests that individual attachment processes, referred to as working models of attachment (see Mikulincer 1998 or Mikulincer and Shaver 2003) also begin forming in a family-of-origin context (Bretherton and Munholland 1999) and eventually impact future romantic relationship attachment formations (Busby et al. 2005). Additionally, working models of attachment in adulthood highlight the need for partners to respond to each other's needs (Mikulincer and Shaver 2003, 2007) and adapt to problems related to enduring vulnerabilities. Thus, it seems that clarifying the role of attachment in marital relationships may provide further insight into the link between family-of-origin-based vulnerabilities and couple adaptive processes.

One type of adaptive process that fits well with the VSA model is known as relationship self-regulation. Relationship self-regulation is the aptitude of romantic partners to observe relationship activity patterns and actively engage in sustaining a healthy romantic relationship (Halford et al. 2007). This process has particular significance for relationship outcomes (Meyer et al. 2012) and marital health (Wilson et al. 2005). Foundational relationship selfregulation scholars have suggested that augmenting couples' capabilities to utilize relationship self-regulation within their relationships leads to increased relationship satisfaction (Halford et al. 1994, 2007). Couples that actively use relational maintenance skills including relationship self-regulation report higher levels of commitment in their marriages (Weigel and Ballard-Reisch 1999). Thus, it seems that relationship self-regulation fits well within the VSA model: adaptive processes such as relationship selfregulation are empirically associated with relationship quality and stability as Karney and Bradbury (1995) originally theorized.

We have designed our study in line with the VSA model, by specifically investigating the pathway between emerging vulnerabilities and couple adaptive processes. We hope to examine how enduring vulnerabilities (negative family-of-origin experiences) are associated with adaptive processes (relationship self-regulation) through couple attachment behaviors. Attachment behaviors begin in the family-of-origin setting (Bretherton and Munholland 1999) and working attachment models are thought to be helpful in adapting to multiple types of negative experiences (Mikulincer and Shaver 2003, 2007) associated with enduring vulnerabilities (Karney and Bradbury 1995). Because attachment processes are linked to both the enduring vulnerabilities and adaptive processes pieces of the VSA model, it seems that the couple attachment bond is worth exploring as a potential mediator between the enduring vulnerabilities stemming from negative family-of-origin issues and the adaptive processes of relationship selfregulation. If attachment and its associated behaviors mediate this relationship, the implications for couples therapy are important. Specifically, using therapy models that strengthen attachment within couple relationships may be effective in treating relationship self-regulation issues linked to family-of-origin dysfunction.

Review of Literature

Relationship Self-Regulation

Halford et al. (1994) first defined and conceptualized relationship self-regulation as the ability of intimate partners to monitor relational processes and work on maintaining the relationship (Halford et al. 2007). Relationship selfregulation consists of two main domains: relationship strategies and relationship effort (Wilson et al. 2005). Relationship strategies are self-change behaviors, implemented in order to benefit a relationship; for example, working to improve one's own self-expression in hopes of managing partner conflict in a better way. Relationship effort is the level or intensity of persistence used in the change process for those specific behaviors (Halford et al. 2007). Halford (2001) suggests that relationship selfregulation is demonstrated in relationships through processes of self- and relationship-awareness, relational goal setting, goal implementation, personal evaluation of effort, and examination of relationship improvement. Scholars have suggested that improving couples' utilization of relationship self-regulation in their marriages will lead to positive marital outcomes (Halford et al. 1994).

When couples use relationship self-regulation effectively in their relationships, they experience higher marital satisfaction (Halford et al. 2007) and higher levels of commitment in their marriages (Weigel and Ballard-Reisch 1999). Over time, couples that reported low relationship self-regulation showed declines in marital satisfaction for both partners (Halford et al. 2007). Within groups of newlyweds and long-time married couples, relationship self-regulation accounted for a quarter to a third of the variance in marital satisfaction for both partners (Wilson et al. 2005). Because relationship self-regulation yields such significant outcomes for couples, it is important to explore this concept in more detail in order to maximize our understanding of factors that contribute to healthy couple relationships.

Family-of-Origin and Relationship Self-Regulation

Behaviors related to self-regulation are developed in the family-of-origin system and carry over to impact later relationship health (Bowen 1978). As noted by Kochanska (1993), self-regulation begins to develop early in life when family-of-origin experiences are most influential, with parent–child interactions contributing particularly to children's self-regulation formation (Zimmerman 2000). During interactions, parental responsiveness and positive affect toward a child work to foster the development of personal regulatory abilities (Lay et al. 1989; Volling et al. 2006). Family levels of differentiation, which contribute to self-differentiation and regulation, strongly impact future romantic relationship quality (Holman and Busby 2011).

Family-of-origin experiences have a powerful effect on adult romantic relationships (Holman et al. 2001), including their impact on relationship self-regulation (Zimmerman 2000). Because of the integral role relationship selfregulation plays in marital satisfaction (Halford et al. 2007), family-of-origin and relationship self-regulation may each be connected to marital outcomes in some way. Other scholars have found that family-of-origin climate is related to relationship self-regulation and that relationship self-regulation acts as a mediator between family dysfunction and marital satisfaction/stability (Hardy et al. 2014). The VSA model provides context for this interpretation, as one of its tenets is that family-of-origin-based vulnerabilities influence the adaptive processes within marital relationships.

Certain variables may potentially mediate the relationship between family-of-origin and relationship selfregulation. In this study, we focused on attachment as a potential mediator because—like relationship self-regulation—it also develops primarily in family-of-origin (Bretherton and Munholland 1999) and has numerous connections to marital satisfaction (Alexandrov et al. 2005; Kirkpatrick and Davis 1994). In addition, working attachment models are most healthy in couple systems when both partners use adaptive behaviors and put significant effort into their relationship in order to meet partner attachment needs (Mikulincer and Shaver 2003, 2007). These aspects of healthy attachment working models coincide with the two facets of relationship self-regulation, relationship strategies and relationship effort (Wilson et al. 2005), thus making our inclusion of attachment behaviors in our study seem particularly salient.

Family-of-Origin and Attachment

As attachment theory has been conceptualized, scholars suggest that healthy attachment style within the family system influences interpersonal relationship formation and success throughout individual development. Therefore, an individual's family-of-origin experience is thought to be predictive of future relationship attachments made by that individual (Bretherton and Munholland 1999).

Longitudinally, adult romantic attachment has been linked to previous negative experiences in family background settings. Negative life experiences within one's family of origin context (i.e. loss of parent, psychiatric disorder of parent, traumatic response to parental divorce) are significantly related to attachment style (Waters et al. 2000). Waters et al. (2000) found that attachment experiences in infancy were associated with adult attachment experiences, which supports original attachment theory perspectives regarding the developmental aspect of attachment-that the attachment phenomenon provides foundations from which relationships are built throughout the lifespan. Because attachment style seems to be generally uniform for individuals across time (Crowell et al. 2002), we infer that negative family experiences may steer individuals toward developing unhealthy attachment styles that could create problems in future relationships. Mikulincer and Shaver (2007) corroborate this inference by suggesting that early relationship experiences contribute to adult working models of attachment. Thus, further exploration of the relationship between family-of-origin experiences and attachment behaviors seems warranted, particularly within the framework of the VSA model; vulnerabilities lead toward couple responses to stress and to couple adaptive processes, and attachment plays a role in couple stress response and adaptation (Mikulincer and Shaver 2003, 2007).

Influence of Attachment on Marital Processes

Romantic partners displaying designated attachment behaviors such as accessibility, responsiveness, and engagement (Sandberg et al. 2012), report many benefits to their relationships. Securely attached couples experience more happiness, friendship, trust, endurance (Feeney 2008; Hazan and Shaver 1987), satisfaction, and commitment than relationships where other attachment behaviors are predominant (Alexandrov et al. 2005; Kirkpatrick and Davis 1994). Secure attachment has also shown high potential as a mediator between family-of-origin experiences and couple communication quality (Knapp et al. 2015). Other attachment types and associated behaviors yield different outcomes. Insecure or avoidant attachment in couples is linked to fear of intimacy, recurring emotional ups and downs, jealous feelings (Hazan and Shaver 1987), distrust of partner (Mikulincer 1998), low levels of affection (Ng and Smith 2006), disengagement (Leveridge et al. 2005) and increased relationship distress overall (Mondor et al. 2011).

Attachment behaviors have recently become a focal point of marital research (Sandberg et al. 2012). Recent researchers have demonstrated that despite the consistency of individual attachment style (Lewis et al. 2000), attachment security within couple relationships can change even when previous attachment experiences were damaging (Johnson 2004). Many positive outcomes are reported by couples that express healthy attachment behaviors as opposed to those couples that display less healthy attachment, including more happiness, friendliness, support (Hazan and Shaver 1987), higher relationship satisfaction (Alexandrov et al. 2005), higher commitment (Kirkpatrick and Davis 1994), more intimacy (Ng and Smith 2006), and more trust (Mikulincer 1998). Given the number of ways that attachment is associated with other marital processes and outcomes, it seems that these behaviors would also impact the development and integration of adaptive strategies within couple relationships.

In the context of our study, these aspects of attachment are vitally important. If secure attachment bond and behavior positively influences relationship self-regulation processes in the presence of negative family-of-origin experiences in the way it influences other marital processes, then strengthening couples' attachment bond in treatment may be a relevant and applicable therapeutic goal to pursue.

Hypotheses

Our study explored the relationships among the chosen variables in order to test the mediating potential of attachment behaviors between negative family-of-origin experiences and relationship self-regulation. We hypothesized that the actor paths from negative family-of-origin experiences to relationship self-regulation would be significant for both genders (Hypothesis 1): that is, higher reports of individual negative family-of-origin experiences would be associated with lower individual relationship self-regulation for both partners. We also hypothesized that partner paths would be significant for the relationships between negative familyof-origin experiences and relationship self-regulation (Hypothesis 2): higher female negative family-of-origin experiences would be negatively related to male relationship selfregulation and vice versa. We hypothesized that negative family-of-origin experiences would be associated with less positive attachment behaviors for both male and female partners in actor paths (Hypothesis 3) and in partner paths (Hypothesis 4). In addition, we hypothesized that positive attachment behaviors would mediate the relationship between negative family-of-origin experiences and relationship self-regulation for both male and female partners across actor paths (Hypothesis 5) and partner paths (Hypothesis 6).

If attachment behaviors have significant mediating influence between negative family-of-origin experiences and relationship self-regulation, then building and repairing couple attachment may become a successful and powerful treatment option for decreasing any negative impact from family background on relationship maintenance processes like relationship self-regulation within couple relationships. Accordingly, clinicians may want to include attachment-strengthening goals and/or intervention in couples therapy when treating couples facing these types of issues. We will discuss these important clinical implications as they pertain to the results of our analysis.

Methods

Procedure and Sample

The Relationship Evaluation (RELATE) questionnaire, developed in 1997, contains over 300 items about couple relationships and related factors (Holman et al. 1997) and has been utilized as a thorough measurement tool for relationships since its inception. The questionnaire is completed individually online by both partners (http://www. relate-institute.org), and they pay \$40.00 to view their couple results-a 13 page self-interpretative, responsebased, merged analyses of their relationship characteristics. This report can be used as an assessment of overall relationship quality. RELATE evaluates relationships in four main areas: individual, couple, family, and social. Participants provide self-reported answers to assessments of these four areas and also indicate their perceptions of their romantic partners in those four domains. Participants are frequently recruited from college courses or websites and are often referred to RELATE by clinicians, researchers, and family life educators. Data for the present study was drawn from RELATE over a 2-year period, from 2009–2011 and was approved for analysis by appropriate regulatory and ethical bodies including university institutional review boards.

Secondary data from the RELATE data set was evaluated for this study (see www.relate-institute.org), using matched-pair responses of 261 couples (see Table 1). The average age for male participants was 32.59 years old (SD = 9.03, Range 18-63). For female participants, average age was 30.79 (SD = 8.44, Range 19-63). Marriage length was varied, with 8 % of couples reporting length of marriage as 20 years or longer, 14 % as 11–20 years, 18 % as 6-10 years, 29 % as 1-5 years, and 30 % married under 1 year. The couples had less than one child on average (.56). The vast majority of participants (94 %) were from the United States or Canada. Among the sample, the majority of participants reported Caucasian ethnicity (males = 81.2 %, females = 79.7 %). Both genders reported similar religious demographics, with 64.1 % of male participants reporting a specific religious preference and 65.2 % of females reporting specific religious preference (but religious involvement was not measured). Both the male and female majority reported completion of some higher education, with 56 % of males and 54.4 % of females having earned at least a bachelor's degree. The current sample represents both a highly educated and religious population that potentially includes unknown effects and differences when compared to a more general sample. We chose to analyze married heterosexual couple data in order to provide details for a specific subset of romantic relationships.

Measures

The present study focuses on the RELATE items that measure partner experiences and interpretations of familyof-origin characteristics, relationship self-regulation, and attachment behaviors (see Table 2).

Negative Family-of-Origin Experiences

Negative family-of-origin experiences were measured with three scales assessing family-of-origin quality (male Cronbach's alpha = .84; female Cronbach's alpha = .90), influence (male Cronbach's alpha = .82; female Cronbach's alpha = .83), and parental marital quality (male Cronbach's alpha = .94; female Cronbach's alpha = .90). Respondents examined statements from these three subscale and selected one option from a six-point scale (1 = strongly disagree to 5 = strongly agree) according to their level of agreement with each statement. Some sample items from these scales are as follows: "From what I experienced in my family, I think family relationships are safe, secure, rewarding, worth being in, and a source of comfort (reverse coded)," "There are matters from my family experience that I'm still having trouble dealing with or coming to terms with", and "I would like my marriage

Variables	Men $(N = 261)$				Women $(N = 261)$			
	М	SD	Range	α	М	SD	Range	α
Family influence	6.73	2.89	3-15	_	7.53	3.21	3-15	_
Parental marital quality	8.36	3.80	3-15	_	8.56	3.93	3-15	-
Family relationship quality	7.96	3.10	4-18	_	8.18	3.78	4-20	_
Relationship strategies	13.95	2.67	5-20	-	14.86	2.20	8-20	_
Relationship effort	12.98	2.53	5-19	-	13.19	2.61	5-20	_
Attachment behaviors	24.74	3.66	13-30	.83	25.71	3.52	16-30	.82

Table 2Intercorrelations for
observed study variables(N = 261 for Men, N = 261 for
Women)

 Table 1 Descriptive statistics

 for age, relationship length,

 independent variables, and

 dependent variables

Variables	1	2	3	4	5	6
1. Family influence	_	.62**	.74**	16*	27**.	27**
2. Parental marital quality	.50**	_	.68**	07	13*	31**
3. Family relationship quality	.67**	.61**	_	15*	25**	45**
4. Relationship strategies	14*	10	22**	_	.44**	.37**
5. Relationship effort	22**	09	19**	.55**	_	.48**
6. Attachment	37**	24**	45**	.51**	.48**	_

Lower half of the diagonal represents men, whereas upper half represents women * p < 0.05; ** p < 0.01

to be like my parents' marriage (reverse coded)." Items were coded so that higher scores on these subscales indicated more negativity in family background. Factor loadings for these three subscales demonstrated adequate values, with sample items ranging from .74 to .93 for the women and .66 to .92 for the men; thus, the variable negative family of origin experience held together well.

Relationship Self-Regulation

Items used for measuring relationship self-regulation include the Relationship Strategies Scale (male Cronbach's alpha = .80; female Cronbach's alpha = .71) and the Relationship Effort Scale (male Cronbach's alpha = .68; female Cronbach's alpha = .70, examining the two dimensions of relationship self-regulation as noted by Wilson et al. (2005). Both of these scales require participants to report on the truth of statements relating to either effort or strategies in their relationships on five-point scales (1 = never true to 5 = always true). Sample items from these scales include "I actually put my intentions or plans for personal change into practice", "I give my partner helpful feedback on the ways she/he can help me achieve my goals", "I tend to fall back on what is comfortable for me in relationships, rather than trying new ways of relating (reverse coded)", and "If my partner doesn't appreciate the change efforts I am making, I tend to give up (reverse coded)." These two scales held together well with factor loadings ranging from .48 to .72 for men and .40 to .65 for women.

Attachment Behaviors

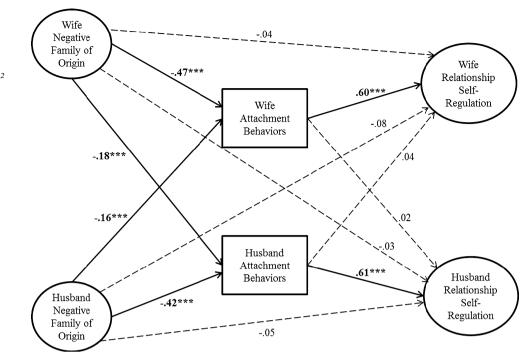
RELATE contains the Brief Accessibility, Responsiveness, and Engagement Scale, referred to as the BARE (Sandberg et al. 2012), which was used to measure attachment behaviors. The BARE demonstrates high reliability, with test-retest scores ranging from .60 to .75. The behaviors measured with the BARE include accessibility (mutual spousal availability physically and emotionally domains), responsiveness (mutual spousal attentiveness/listening), and engagement (mutual spousal connectedness and togetherness). Higher scores indicate more secure attachment behaviors evident in the relationship. Participants responded to statements on five-point scales selected personal responses to statements pertaining to each of the three attachment behaviors from five-point scales. Responses ranged from "Never True" to "Always True." Sample statements from this scale are as follows: "It is hard for me to get my partner's attention," "It is hard for me to confide in my partner," and "I listen when my partner shares her/his deepest feelings." We used the sum of BARE scores (male Cronbach's alpha = .83; female Cronbach's alpha = .82) to measure both self and partner attachment behaviors. Reported BARE scores ranged from 13 to 30 for men and from 16 to 30 for women.

Analysis

We created an Actor Partner Interdependence Model (APIM), a type of structural equation modeling (SEM) for analysis, using the statistical software package MPLUS 7.11 (Muthén and Muthén 2012). Because SEM can model latent variables and control for measurement error, it seemed the most appropriate type of analysis. In addition APIM allows the couple to be used as the unit of analysis (Kenny et al. 2006), which yields unique interpretation capabilities about the associations between actor effects (how individuals' personal variables impact their own outcomes) as well as partner effects (how partner variables impact each other's outcomes). To test for model fit, we used indices including the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the root mean square error of approximation (RMSEA), and Chi-square analysis with recommended cut-off scores implying appropriate model fit. Standards in the field are such that the CFI and TLI should each be above .95, the RMSEA less than .05, and the Chi-square value should be insignificant (Hu and Bentler 1999; McDonald and Ho 2002). We constructed our APIM to test the relationship between predictor variables (negative family-of-origin experiences) to outcome variables (relationship self-regulation) as mediated by couple attachment behaviors (BARE scores) for both males and females individually and across partnerships (see Fig. 1).

Results

The SEM model showed good model fit $[\chi^2 (45) = 78.05,$ *p* < .01; TLI = .96; CFI = .97; RMSEA = 0.05, 90 % CI 0.03-0.07; SRMR = .05] according to typical guidelines generally used in social science (Kline 2011). Our initial examination revealed that negative family-of-origin experiences were associated with lower levels of relationship self-regulation for both husbands ($\beta = -.27$, p < .001) and wives ($\beta = -.17, p < .001$). In other words, family of origin dysfunction was associated with less relationship effort and fewer relationship strategies implemented in these relationships. We also found significant partner paths between negative family-of-origin experiences and the mediating variable, attachment behaviors, where greater negative family-of-origin experiences for wives were predicted by greater insecure attachment behaviors for husbands and vice versa. Significant actor paths were found from negative family-of-origin experiences to secure Fig. 1 Actor-partner interdependence structural equation model (N = 261 Couples). Note: Emphasis added to highlight significant paths. Model fit indices are: χ^2 (45) = 78.05, p < .01; TLI = .96; CFI = .97; RMSEA = 0.05, 90 % CI 0.03–0.07; SRMR = .05. * p < 0.05; ** p < 0.01; **** p < 0.001



attachment behaviors ($\beta = -.42$, p < .001 for husbands; $\beta = -.47$, p < .001 for wives) and from secure attachment behaviors to relationship self-regulation ($\beta = .61, p < .001$ for husbands; $\beta = .60$, p < .001 for wives). Partners reporting more accessible, responsive, and engaged attachment behaviors reported more relationship effort and strategies, even in the presence of negative family background. As such, attachment behaviors appear to be the mechanism through which negative family-of-origin experiences affect relationship self-regulation in these couple relationships. The model accounted for 42 % of the explained variance in relationship self-regulation for husbands and 43 % for wives (see Fig. 1). In our analysis, we controlled for age and length of relationship for these couples, as relationship length has been previously linked to relationship self-regulation levels (Halford et al. 2007); however, our examination revealed that controlling for these factors did not change any significance among relationships in the model.

In order to examine the potential mediating effects of secure attachment behaviors on the relationships between negative family-of-origin experience and relationship self-regulation, bootstrapping procedures were used with 2000 bootstraps. Bootstrapping is a nonparametric, computationally intensive method that estimates indirect effects for multiple mediators simultaneously by repeatedly sampling—2000 times in this analysis—from the data set and estimating the indirect effect in each resampled data set (Preacher and Hayes 2008). The primary benefits of bootstrapping are that it does not require normality, can

estimate confidence intervals, has accurate Type 1 error, high power, and has been well validated in small samples (Little et al. 2007; Kline 2011; Preacher and Hayes 2008). No significant direct effects were found between negative family of origin and relationship self-regulation while significant indirect actor and partner effects were found for attachment behaviors. In other words, attachment behaviors were found to fully mediate the relationship between negative family of origin and relationship self-regulation. Specifically, for every 1 standard deviation unit increase in husbands' negative family-of-origin experiences, their own relationship self-regulation was predicted to decrease .25 (CI - .35, -.15, p < .001) standard deviation units and for every 1 standard deviation unit increase in wives' negative family-of-origin experience, husbands' relationship selfregulation was predicated to decrease .10 (CI -.17, -.04, p < .001) standard deviation units, via its previous effect on husbands' secure attachment behaviors. For wives, every 1 standard deviation unit increase in their negative family-of-origin experiences was predicted by a .28 (CI -.39, -.17, p < .001) standard deviation unit decrease in their relationship self-regulation while husbands' negative family-of-origin experience was predicted by a .09 (CI -.16, -.03, p < .001) unit decrease in wives' relationship self-regulation, via its previous effect on wives' secure attachment behaviors.

To detect the possibility of stronger relationships between male or female partner paths, we conducted a Chisquare difference test of significance. The test was run for both partner paths to assess for possible differences in each pathway's strength. After we constrained both partner pathways, there appeared to be no significant diminution in model fit, thus indicating no difference in strength between partner pathways in the model. We ran similar diagnostics to test for differences in effect strength between actor paths; however, our tests yielded similar results demonstrating no significant differences between actor paths in regards to strength of association.

Discussion

In the present study, family-of-origin, relationship selfregulation, and attachment behaviors were associated in distinct relationships. First, for both husbands and wives, it appeared that partners with negative family-of-origin experiences were less likely to demonstrate positive relationship self-regulation skills in their marriages, which supported Hypotheses 1 and 2. Additionally, partners with negative family-of-origin experiences were less likely to demonstrate secure attachment behaviors in their marriages, which supported Hypotheses 3 and 4. Overall, partners with high levels of family-of-origin dysfunction reported lower levels of relationship self-regulation, unless they also reported higher levels of secure attachment behaviors. This finding supported Hypotheses 5 and 6, indicating that attachment behaviors fully mediated the relationship between negative family-of-origin experiences and relationship self-regulation across both actor and partner paths.

Previous research has demonstrated that partners who deal with negative family-of-origin experiences struggle to demonstrate secure attachment in future relationships (Larson et al. 2001; Waters et al. 2000). Our findings add support for these conclusions, as we discovered significant relationships between negative family-of-origin experiences and secure attachment behaviors for both husbands and wives. It seems that individuals who experience family-of-origin negativity (conflict, parenting troubles, etc.) are less likely to demonstrate secure attachment behaviors within their relationships. Our results fit with the VSA model, further implying that the enduring vulnerabilities from negative family-of-origin experiences influence stressful events and adaptation within the relationship.

Spouses who reported negative family background events were less likely to implement adaptive, relationshipimprovement strategies and/or show forth effort in strengthening their marital relationships via relationship self-regulation strategies. Kochanska (1993) and Zimmerman (2000) each highlighted the profound influence of family experiences upon self-regulation behaviors, and our study reaffirms their insights, connecting poor family-oforigin quality to less adaptive relationship self-regulation within a marital setting. These insights again coincide with the VSA model, outlining that enduring vulnerabilities and stressful events impact adaptive processes including relationship self-regulation, which influence couple trajectories of relationship quality and stability.

Perhaps the most important result of our study, we found that partners that reported consistent secure attachment behaviors were more likely to positively use relationship self-regulation in their relationships. Negative family background events contributed to poor use of relationship self-regulation for both husbands and wives, which is associated with lower marital satisfaction and lower commitment within romantic relationship contexts (Halford et al. 2007; Weigel and Ballard-Reisch 1999). However, if partners demonstrated more secure attachment behaviors including accessibility, responsiveness, and engagement, the damaging relationship between negative family-oforigin experiences and relationship self-regulation was insignificant. Thus, secure attachment behaviors completely mediated the relationship. It appears that secure attachment behaviors were the mechanism through which the association between family-of-origin negativity and poorer relationship self-regulation was mediated.

This conclusion fits with themes of broader research supporting notions that secure attachment connection in romantic relationships leads to increased happiness, trust, friendship (Feeney 2008; Hazan and Shaver 1987), communication quality (Domingue and Mollen 2009), commitment, and overall relational satisfaction (Alexandrov et al. 2005). If couples are experiencing the benefits of secure attachment behaviors-such as increased trust, commitment, communication quality, etc.-then it seems natural that they would demonstrate higher relationship self-regulation (i.e., implementing personal strategies to enhance relational quality, exemplify significant effort in maintaining relational quality). Previous findings confirm this inference, indicating that byproducts of secure attachment are associated with better relationship maintenance behaviors and strategies (Etcheverry et al. 2013).

Again, these conclusions coincide with the VSA model. First, attachment behaviors are part of working attachment models that are responses to stressful events (Mikulincer and Shaver 2003, 2007). In the VSA model, enduring vulnerabilities may lead toward stressful events, which then lead to adaptive processes. One possible interpretation of our findings is that a secure attachment bond built through healthy attachment behaviors helps couples respond well to stressful situations stemming from enduring vulnerabilities, which then positively influences their adaptive processes.

Limitations

This study contains various limitations that warrant consideration during application of its findings. First, the married couples within the sample chose to take RELATE as a relationship-building tool and paid for the analysis of their results themselves. Likely, these couples were motivated to strengthen (or at least educate themselves about) their relationships and were economically advantaged enough to pay for online enrichment tools. As such, this sample represented a group of couples with online access, adequate financial means, and at least a moderate level of desire for relationship insight; however, our analysis may have excluded distressed couples or couples that did not actively seek relationship-enhancement resources. The couples in the analysis seemed to demonstrate a relatively relationally-healthy sample, and greater insight may have been gained if we had analyzed a sample of couples who were experiencing a clinical level of distress. Second, the majority of sample couples reported higher end socioeconomic statuses, had completed higher education and indicated somewhat high religiosity. Most of the sample reported Caucasian ethnicity. These demographic factors combine in a way that limits this study's generalizability to a broader population and should be noted when interpreting our findings. Third, we only examined one time point in our analysis and it would have been ideal to follow these couples across time, measuring the same variables, in order to examine these relationship processes longitudinally. Fourth, there is a possibility that secure attachment behaviors are actually a form of adaptive processes, which would alter the interpretation of these findings within the VSA model. However, the definitions and explanations for attachment behaviors and relationship self-regulation we have used lend themselves to conceptualizing attachment behaviors as a separate, distinct construct from relationship self-regulation. Additionally, the correlations between these two variable constructs signify distinction between constructs (see Table 2). As such, we feel that our use of the VSA model is justified, although there may be other viable theoretical interpretations of these variables as well.

Implications

Even with its limitations, the present study's results yield valuable implications for couples therapy. Couples may face relationship issues that begin from personal vulnerabilities stemming from negative family-of-origin experiences (Tilden and Dattilio 2005), thus impacting relationship maintenance processes; these issues may either drive them to seek therapy, or at least play a part in the therapeutic process. Partners bring vulnerabilities into relationships, and clinicians must determine how to work with these vulnerabilities to help the relationship overcome any associated problems. The results of our study provide clinicians with implications for using different treatment options for working with couples facing issues related to the variables in our study. First, we infer from our findings that working on family-of-origin issues may be helpful for couple relationship maintenance processes. Second, building the attachment bond between couples may be another way to address problems related to relationship maintenance. With these inferences in mind, clinicians may rely on several models to conceptualize working on these issues with couples, depending on their clinical style, judgment, and theoretical orientation.

One option may be for clinicians that operate from an intergenerational perspective to rely on intergenerational therapy models in order to address relationship problems (Framo 1976) and help couples learn and integrate positive relationship maintenance skills into their partnerships. Our results suggest that those with less family-of-origin negativity may experience more positive relationship maintenance processes. It is possible that addressing family-oforigin issues directly in intergenerational models may be effective in working with couples experiencing relationship self-regulation issues as family background problems are addressed and dealt with by partners in therapy.

Additionally, clinicians working from a behavioral approach may also find their methods effective in treating problems related to relationship maintenance, as behavioral couples therapy has demonstrated effectiveness for treating couple issues overall (Christensen et al. 2010). Not only has behavioral therapy shown effectiveness in general, but some scholars suggest that the integrative behavioral couples therapy modality (IBCT; Christensen et al. 1995) benefits couple attachment as well (Benson et al. 2013). In the context of our study, we have found that attachment behaviors are an important part of addressing relationship self-regulation problems. Using behavioral therapy in couples treatment for these issues could be effective due to the overall relationship benefits of IBCT and its impact on couple attachment processes.

Clinicians operating from an attachment-based theoretical perspective may also find their conceptualizations and treatment for these issues effective. Our results demonstrate that a healthy attachment bond mediates the relationship between family-of-origin issues and relationship self-regulation. Thus, attachment-based therapy may prove a viable treatment for clinicians working from this perspective. One of the most prominent models of attachmentbased couples therapy is Emotionally Focused Therapy (Johnson 2004), which strengthens couple secure attachment bond and helps partners meet the basic attachment needs of the other. In the EFT modality, Johnson (2004) highlights the need for partner recognition of personal roles played in negative relationship cycles. As partners learn to recognize their own contributions to these damaging cycles, they learn how to change their approaches to meet both personal and partner attachment needs. This process coincides with the two main components of relationship self-regulation noted by Wilson et al. (2005): strategies aimed at self-improvement in hopes of improving one's romantic relationship and effort put forth in the implementation of those strategies. EFT helps partners understand what to improve and how to do it, and helps them feel secure enough in the relationship to demonstrate the effort necessary to do so. Overall, the EFT model seems to inherently augment the foundational components of healthy relationship self-regulation implementation for relationship maintenance.

Our results support the connection of treatment modalities that build attachment, including IBCT (Benson et al. 2013) and EFT (Johnson 2004). In our findings, secure attachment behaviors are related to positive relationship selfregulation behaviors-an integral part of relationship maintenance (Wilson et al. 2005). Partners who experience a secure attachment within their relationships are more likely receiving the benefits associated with that secure attachment, including a warmer emotional climate (Hazan and Shaver 1987), which contributes to higher degrees of selfcompassion (Wei et al. 2011). In turn, amplified individual self-compassion has been found to be associated with higher motivation to correct relational mistakes, improve problemsolving behaviors, and build relationship accommodation behaviors (Baker and McNulty 2011), all of which are part of relationship self-regulation (Wilson et al. 2005). It seems that couples that build or strengthen a secure attachment bond through demonstrating appropriate attachment behaviors may be more motivated to maintain their relationships via relationship self-regulation and its associated processes. Accordingly, treatments that strengthen the couple attachment bond may be very effective treatment options for couples dealing with relationship maintenance problems resulting from family-of-origin negativity.

Future Research

Future studies may benefit from examining the relationships between family-of-origin experiences, relationship self-regulation, and attachment behaviors in ways that expand the findings from our study. Foremost, it would be appropriate to analyze these variables in the context of a more diverse, clinically distressed sample in order to maximize generalizability. It may also prove insightful to delineate negative family-of-origin experiences into separate categories (i.e. traumatic divorce, death/loss, addictions, abuse, etc.) in order to distinguish how each distinct type of negative experience impacts relationship selfregulation within marriages and to learn if attachment behaviors impact couple relationships in similar ways depending on the type of family background negativity. Another recommendation for expansion on the present results could include using attachment behaviors as the outcome variable and testing relationship self-regulation as a mediating variable. This would help us to understand more about directionality between relationship self-regulation and attachment behaviors, which could greatly inform clinical approaches in terms of understanding the relationships between these variables in other ways. We would also recommend that future research examines how therapy might strengthen both the attachment bond and relationship self-regulation, in order to determine effectiveness of different treatment modalities for these issues.

Conclusion

Overall, this study has provided valuable insights into couple relationship processes. With the Karney and Bradbury (1995) VSA model as a framework, we have constructed our study according to the theory that enduring vulnerabilities influence the ways couples respond to stress and use adaptive strategies in their relationships. By using an APIM as analysis, we anticipated discovering more about how negative family experiences contribute to married couples' reports of relationship self-regulation in their relationships and tested for a potential mediating impact of attachment behaviors on that relationship. We found that negative family of-origin experiences were associated with less positive relationship self-regulation usage in these marriages, as well as lower rates of secure attachment behaviors. However, secure attachment behaviors were found to significantly mediate the relationship between negative family-of-origin experiences and relationship selfregulation, indicating that when secure attachment behaviors are present between spouses, they can still display positive relationship maintenance behaviors despite having experienced negativity within family background. This finding may prove especially relevant to clinicians working with couples in therapy. Treatments that impact the attachment bond, such as IBCT and EFT, may be effective methods for treating couple issues that are interfering with positive relationship maintenance practices. Our study offers insightful implications for clinical work and future research and provides valuable contributions to the understanding of couple relationships.

Conflict of interest The authors declare that they have no conflicts of interest.

Ethical standard The secondary data obtained for analysis in this study was approved through institutional review boards of all authors'

institutions, and that approval included ensuring that participants had received appropriate informed consent. All ethical principles highlighted in the journal's instructions to authors have been followed.

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