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## The Interpersonal Legacy of a Positive Family Climate in Adolescence

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### Abstract

This research evaluated how well overall levels of positive engagement in adolescents' families of origin, as well as adolescents' unique expressions of positive engagement in observed family interactions, statistically predicted marital outcomes approximately 20 years later. Data for family-of-origin positive engagement were drawn from approximately 400 families participating in the Iowa Youth and Families Project (IYFP) during three waves of data collection from 1989 to 1991. The primary outcomes were based on data from the IYFP in 2007 to 2008 and included marital behavior from 288 individuals and their spouses. Individuals' unique family-of-origin expressions of positive engagement were linked to the degree of positive engagement they exhibited towards their spouses. A positive family climate during adolescence for one partner was also associated with marital outcomes for both partners. Overall, the results suggest that a positive climate in the family of origin may have long-term significance for subsequent interpersonal relationships.

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Families are often considered an important context for the development of patterns of interacting in future intimate relationships (e.g., Amato & Booth, 1997; Bowlby, 1969/1997; Oriña, Collins, Simpson, Salvatore, Haydon, & Kim, 2011; Simpson, Collins, Tran, & Haydon, 2007; Sroufe, Egeland, Carlson, & Collins, 2005). Indeed, many relational characteristics such as aggression and divorce have demonstrated intergenerational continuity (e.g., Amato, 1996; Capaldi & Gorman-Smith, 2003; Riggs & O'Leary, 1996). In contrast to these negative attributes of relationships, however, the long-term correlates of *positive* interpersonal behaviors in the family of origin have received less attention from researchers (but see work on attachment security for a notable exception; e.g., Sroufe et al., 2005). This is unfortunate given that research has linked increased levels of self-regulation, empathy, prosocial behavior, and emotional development in children to a positive family climate (Davidov & Grusec, 2006; Eisenberg, Cumberland, & Spinrad, 1998; Eisenberg,

Zhou, Spinrad, Valiente, Fabes, & Liew, 2005; Thompson & Meyer, 2007). In short, experiences in the family may have important consequences for an individual's future close relationships such as marriage.

Accordingly, the goal of the current study is to evaluate the long-term significance of positive-engagement behaviors in the family of origin. Positive engagement refers to an interpersonal style characterized by transparent communication, warmth, and support (Ackerman, Kashy, Donnellan, & Conger, 2011). It entails conflict-resolution strategies that emphasize clear communication and cooperative problem-solving. In the present analyses, we evaluate the extent to which overall levels of positive engagement in adolescents' families of origin, as well as adolescents' unique expressions of positive engagement in observed family interactions, statistically predict these individuals' marital outcomes approximately 20 years later when they are adults.

The present work is informed by the Development of Early Adult Romantic Relationships (DEARR) model (Bryant & Conger, 2002). Of particular relevance, the model posits that the interactional characteristics of families influence the younger family members' later competencies in intimate relationships (Bryant & Conger, 2002). Bryant and Conger (2002) presented three routes through which behaviors in the family of origin may additively combine to affect later relationship outcomes: observational learning (Bandura & Walters, 1963), socialization (Maccoby & Martin, 1983), and behavioral continuity (Caspi, 1993). The observational learning perspective asserts that individuals imitate patterns of interpersonal behavior that were modeled and reinforced most frequently in their families of origin. The socialization perspective proposes that interpersonal patterns are acquired via the individuals' direct interactions with either their parents or their sibling(s) during adolescence. Finally, the behavioral continuity perspective states that individuals' interaction styles in adolescence persist into adulthood because they help to shape the environmental circumstances that individuals are exposed to across the life span (Caspi, Bem, & Elder, 1989). Whereas the first two mechanisms suggest that exposure to family-level dynamics contributes directly to outcomes in later romantic relationships, the latter implies that such outcomes are due to the stability of individuals' interaction styles across the life span.

In an early test of the DEARR model, Conger, Cui, Bryant, and Elder (2000) evaluated whether behavior among family members from adolescents' families of origin (i.e., when the focal individual was between the ages of approximately 13–16) predicted warmth in those adolescents' early-adulthood dating relationships (i.e., when the focal individuals were on average, 20.7 years old). This study used a subset of data from the Iowa Youth and Families Project (IYFP; Conger & Elder, 1994), a large ongoing longitudinal study of development from early adolescence to adulthood. Conger et al. (2000) found that observed levels of nurturing parenting by the adolescents' mothers and fathers were positively associated with the adolescents' expressions of warmth towards their dating partners during emerging adulthood. These effects held when controlling for qualities observed in parental marital interactions (i.e., interactions that did not involve the adolescent).

The Conger et al. (2000) findings suggest that observed family interactions are related to future competencies in romantic relationships. However, the behavior observed in family interactions may reflect family-level, relationship-specific, and/or individual-level processes (Kenny, Kashy, & Cook, 2006). Therefore, an important next step is to clarify which of these processes account for associations between family-of-origin interactions and later experiences. The Social Relations Model (SRM; Kenny et al., 2006) provides a methodology for quantifying the relative importance of each of these processes. We recently revisited the IYFP data from 1989 to 1991 and used the SRM to partition the variation in

positive engagement behaviors in family interactions (Ackerman et al., 2011). In these analyses, we found that variability in positive engagement behaviors between family members was primarily a function of the family climate (i.e., in some families everyone exhibits high levels of engagement, but in other families they do not; this is referred to as the *family mean* in the SRM) and individual differences (i.e., some individuals are engaged with all other family members, but others are not; this is referred to as an *actor effect* in the SRM). This pattern of systematic variation suggests that family-level and individual-level factors are most likely to predict subsequent behaviors in adulthood.

Previous research (e.g., Caspi & Elder, 1988; Conger et al., 2000) has uncovered associations between children's treatment by their parents and their future adulthood outcomes. In SRM terminology, the unique aspects of parent-child interactions (net of family climate and individual differences) are called relationship effects. However, our research (Ackerman et al., 2011) found little evidence of variation in relationship effects for positive engagement between parents and their children. Instead, parents' positive engagement behaviors with their children were mostly a function of the family mean and the parents' actor effects. This suggests that the overall family climate may be responsible for at least part of the association between expressions of positive engagement in parent-child relationships and later outcomes in adulthood.

The research presented here uses insights from Ackerman et al. (2011) to extend Conger et al.'s (2000) findings much farther into adulthood. In doing so, we use the analytic framework provided by the SRM to derive our primary predictor variables. The majority of the focal individuals whose dating relationships were studied in Conger et al. (2000) are now husbands and wives in their early thirties. Thus, we can examine whether behavioral patterns in the family of origin are carried over to the adult role of marital partner. In addition, we can disentangle the effects of the average expression of positive engagement in the family of origin from adolescents' dispositional expressions of positive engagement. This allows us to quantify the relative contributions of family dynamics and behavioral continuity processes linking positive engagement in an adolescent's family interactions to his or her subsequent marital behavior (e.g., marital satisfaction and hostility). Evidence for the plausibility of either process would be indicated by the presence of a statistical link between the corresponding operationalization of the family-of-origin process and later marital outcomes. Because the DEARR model presumes that these processes should operate in an additive manner, however, evidence supporting one process does not necessarily rule out the operation of the other. Finally, because we have observational and self-report data from the focal adolescent's spouse, we can evaluate whether the family-of-origin experiences for the focal person are associated with relationship outcomes for her or his spouse.

## Method

### Participants

Data were drawn from approximately 400 families participating in the IYFP (Conger & Elder, 1994; Elder & Conger, 2000). The project began in 1989 when focal participants (hereafter referred to as the focal 'individuals') were recruited in the 7<sup>th</sup> grade (age:  $M = 12.61$ ,  $SD = 0.54$ ). All families in this initial sample were Caucasian, resided in Iowa, and included a father, a mother, the focal individual, and a sibling who was within four years of age of the focal individual. The primary predictors in this paper are based on family-of-origin scores for positive interpersonal behavior derived from videotaped conflict-resolution interactions that occurred during each of the first three years of data collection (i.e., 1989–1991).

The primary outcomes for this paper are based on data from a single wave of interviews conducted during 2007 and 2008. Outcomes include the marital behavior and reports of relationship satisfaction from the 288 focal individuals (along with their spouses) that were married at this wave of data collection.<sup>1</sup> Focal individuals' ages ranged from 30 to 33 years ( $M = 31.15$ ,  $SD = 0.44$ ), and their spouses' ages ranged from 23 to 53 years ( $M = 32.03$ ,  $SD = 4.05$ ). Of the 288 focal individuals, 56.3% were women and 83.7% reported being parents.

## Procedures and Measures

**Family-of-origin sample**—In each of the first three waves of data collection (1989–1991), the focal individuals were observed with three other family members (their mother, father, and close-aged sibling) as they engaged in a 15-minute conflict-resolution task that was videotaped. Family members discussed issues that caused conflict within the family, with the goal of finding possible resolutions. Independent coders evaluated these interactions on five indicators of what we term *positive engagement* using the Iowa Family Interaction Rating Scales (Melby & Conger, 2001): listener responsiveness, assertiveness, prosocial behavior, effective communication, and warmth/support. Each rating was made on a 5-point scale that ranged from 1 (*Not at all characteristic*) to 5 (*Mainly characteristic*). Coders provided a score on each dimension for every dyadic combination within the family, resulting in 12 scores for each indicator. For example, coders rated the focal individual's effective communication toward the father (IF), the mother (IM), and the sibling (IS). Likewise, separate ratings were provided for the other dyadic combinations: FM, FI, FS, MF, MI, MS, and SF, SM, SI. A composite score for positive engagement for each of the 12 dyadic combinations was computed by averaging across the five rated dimensions.

Following the logic of the SRM and based on results in Ackerman et al. (2011), our two key predictor variables were created from these dyadic scores. To provide a conservative test of the family dynamics path, we computed the family mean omitting any scores involving the focal individual. Thus, the family mean was the average of the FM, FS, MF, MS, SM, and SF scores.<sup>2</sup> The *individual's actor effect*, representing the focal individual's unique tendency to be engaged with all of his/her family members over and above the family mean (i.e., the behavioral continuity path), was computed by averaging the positive engagement expressed by the focal individual towards his/her family members (i.e., IF, IM, and IS), adjusting this value to control for the fact that the focal individual never has him or herself as a partner (i.e., the missing partner bias), and then removing the family mean to provide an estimate of the focal individual's unique expression of positive engagement that is not confounded with the normative level of positive engagement in his/her family (for an exact formula, see Cook & Dreyer, 1984; see also Kenny et al., 2006, p. 255). These variables were computed for each of the three waves and then averaged across waves.<sup>3</sup>

**Married Sample**—From 2007 to 2008, married focal individuals and their spouses completed self-report questionnaires measuring conflict and relationship satisfaction, and they engaged in a 25-minute videotaped interaction task in which they discussed qualities of

<sup>1</sup>Focal adolescents who were married ( $M = 2.19$ ,  $SD = 0.32$ ;  $n = 288$ ) were not significantly different from those who were not married ( $M = 2.17$ ,  $SD = 0.37$ ;  $n = 118$ ) on the family mean,  $t(404) = 0.74$ ,  $p = .461$ . Focal adolescents who were married ( $M = -0.25$ ,  $SD = 0.25$ ;  $n = 288$ ) were also not significantly different from those who were not married ( $M = -0.27$ ,  $SD = 0.24$ ;  $n = 118$ ) on the actor effect,  $t(404) = 0.66$ ,  $p = .511$ .

<sup>2</sup>The pattern of results with the individuals' behaviors included as part of the family mean were very similar and are available upon request from the first author.

<sup>3</sup>The six dyadic scores for positive engagement were used to compute the alpha for the modified family mean at each wave: wave 1 ( $\alpha = .83$ ), wave 2 ( $\alpha = .84$ ), and wave 3 ( $\alpha = .82$ ). The three scores depicting the focal individuals' expressions of positive engagement towards their mothers, fathers, and siblings were used to compute the alpha for the individuals' actor effects at each wave: wave 1 ( $\alpha = .90$ ), wave 2 ( $\alpha = .91$ ), and wave 3 ( $\alpha = .91$ ). Stability coefficients for the modified family mean from 1989 to 1991 ranged from .27 to .39; stability coefficients for the individuals' actor effects from 1989 to 1991 ranged from .27 to .41. Note that analyses conducted separately by wave yielded largely similar results.

their romantic relationship (i.e., its history and status), problems in their relationship, and future plans. The self-reported *Negative Behavioral Interactions* questionnaire included eight items assessing the frequency of negative interpersonal behaviors during the past month. Sample items included “Get angry at him/her” and “Criticize him/her or his/her ideas.” Ratings were made on a 7-point scale (1 = *Always*; 7 = *Never*) and were scored such that higher scores reflected more negative interactions; average scores were computed for focal individuals ( $\alpha = .89$ ) and their spouses ( $\alpha = .89$ ).

The *Quality of Marriage Index* (QMI; Norton, 1983) assessed participants’ satisfaction with the marriage using a 5-point scale (1 = *Strongly agree*, 5 = *Strongly disagree*). Example items included “We have a good relationship” and “Our relationship is strong.” All items were reverse coded and composites were computed by averaging across the five items, such that higher scores indicated greater marital satisfaction (Individuals:  $\alpha = .96$ ; Spouses:  $\alpha = .97$ ).

Videotaped interactions between focal individuals and their spouses were rated by trained coders on scales from 1 (*Not at all characteristic*) to 9 (*Mainly characteristic*) using the same five positive engagement dimensions used in the family of origin. Composite scores of *positive engagement* for the focal individual and his/her spouse were generated by taking the average of their corresponding five dimensions (Individuals:  $\alpha = .91$ ; Spouses:  $\alpha = .91$ ). Coders also rated the degree to which focal individuals and their spouses expressed hostility, angry coercion, and antisocial behaviors towards each other, and the mean of these three dimensions was used to create an index of *behavioral hostility* for the focal individual ( $\alpha = .87$ ) and spouse ( $\alpha = .82$ ).

## Results

Table 1 presents descriptive statistics for the study variables. Altogether, four marital outcomes were assessed for focal individuals and their spouses: (a) observed positive engagement behaviors; (b) observed behavioral hostility; (c) self-reported frequency of engagement in negative interactions; and (d) self-reports of relationship satisfaction. Multilevel modeling (MLM) analyses were used to evaluate how well positive interpersonal behavior expressed by adolescents and their family members in 1989 to 1991 predicted the adolescents’ interpersonal outcomes around 20 years later. We used MLM because the focal individuals’ and their spouses’ outcomes were substantially correlated (range between .55 to .70 for the four variables). Two predictor variables were included in the primary analyses: the focal individuals’ unique interpersonal style during adolescence (i.e., the individuals’ actor effect for positive engagement), and the overall family climate (operationalized as the family mean for positive engagement). Note that unlike many dyadic analyses in which both partners supply data for the predictors as well as the outcomes (e.g., the Actor-Partner Interdependence Model or APIM; Kenny et al., 2006), in the current analyses we only had predictor information from the focal individuals.

Table 2 shows the MLM results. As can be seen, the family mean and the individuals’ actor effect were both significant predictors of individuals’ expressions of positive engagement in their marital relationships. Moreover, these effects were also significant predictors of the spouses’ positive engagement (which is a partner effect in APIM terms). Thus, there was evidence to support the plausibility of both family dynamics and behavioral continuity processes as explanations for an association between family-of-origin positive engagement and later positive engagement behavior in romantic relationships.

Table 2 also shows that focal individuals who came from families characterized by higher positive engagement expressed less hostility towards their spouses and their spouses

displayed less hostile behavior towards them. This same pattern extended to questionnaire reports of negative behaviors in marital interactions. The family mean also statistically predicted greater relationship satisfaction for both partners. Finally, the individuals' actor effect predicted their spouses' relationship satisfaction as well. In sum, these results show that positive interpersonal behavior in the family of origin is associated with functioning in committed romantic unions across substantial intervals of time.<sup>4</sup>

## Discussion

The present study assessed the degree to which observed expressions of positive engagement in individuals' families of origin statistically predict characteristics of their future adult marital relationships. At a most basic level, our findings highlight the association between an individual's positive family climate during adolescence and the quality of his or her subsequent marriage. The current results are therefore consistent with the DEARR model with respect to the developmental significance of experiences in the family of origin.

Although the DEARR model specifies that two mechanisms – observational learning and socialization - underlie the connection between exposure to family dynamics in the family of origin and later relationship outcomes, the current analyses cannot definitively distinguish between them. Indeed, we believe that these two mechanisms are unlikely to be independent as observational learning is almost certainly a part of socialization.<sup>5</sup> Despite this inability to distinguish observational learning from socialization, we were able to investigate the relative contributions of processes involving exposure to family dynamics in the family of origin and those related to behavioral continuity in the statistical prediction of marital outcomes. In so doing, we found that family-level factors are related to aspects of adult marital relationships over and above the continuity of individual differences. It is especially noteworthy that the family mean showed robust links with all of the marital outcomes that we examined. This is not to say, of course, that behavioral continuity processes were not in operation. Indeed, the current study also provides evidence for the continuity of individual differences given that the actor effect for the focal adolescent predicted some (but not all) of the relationship outcomes we investigated. In particular, there was an association between the focal individuals' unique family-of-origin expressions of positive engagement and the degree of positive engagement that they exhibited towards their spouses 20 years later. This finding converges with other research demonstrating continuity in interactional styles such as shyness and explosive temperaments (Caspi et al., 1989). The current results extend this literature by using observational data to measure the continuity of positive engagement behaviors.

Perhaps one of the most striking results from this work was that a positive family climate during adolescence for one partner is associated with marital outcomes for the *other* partner. Recall that the family climate variable does not include any data from the focal individual. Therefore, it is somewhat remarkable that it was correlated with the behavior and satisfaction of that individual's spouse approximately 20 years in the future. Individuals who grew up in warm, supportive, and engaged families expressed more positivity and less

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<sup>4</sup>We performed additional analyses to investigate whether the gender of the focal individual moderated any of the effects of the family mean or the individual's actor effect on the outcome variables and found no evidence of such moderation.

<sup>5</sup>One particular debate concerns whether marital discord itself is related to adult relationship dynamics above and beyond parent-child interactions (Conger et al. 2000). To evaluate this possibility, we included an additional variable in each of our analyses that reflected the average of the Mother-to-Father and Father-to-Mother relationship effects from 1989 to 1991. This variable representing the unique elements of the marital relationship as defined by the SRM did not predict many adult relationship outcomes. However, there was one exception: focal individuals who came from families in which their parents were especially positively engaged had spouses who reported less frequently engaging in negative behavioral interactions with them. This finding is somewhat surprising given that the parental marital relationship should predict the targets' outcomes rather than the spouses' outcomes (see Amato & Booth, 1997).

negativity towards their spouses, and their spouses did likewise. It is possible that family dynamics foster a supportive interpersonal style that later evokes similar behavior from a spouse. Alternatively, individuals who grew up in families with a positive and warm climate may have sought out partners who provide a similar relationship environment. We suspect that both selection and evocative processes may account for the connection between one individual's experiences in her or his family of origin and a spouse's thoughts, feelings, and behaviors. Investigation of these possibilities constitutes an important direction for future research.

Despite our use of a multi-method prospective longitudinal design, this study was not without limitations. One limitation was the use of a primarily Caucasian sample from rural communities. It remains to be seen whether the same results would generalize to samples of other ethnicities and geographical locations. Another limitation entails the restriction to families of origin that included a mother, a father, and at least two children. We based the derivation of our predictor variables on results that were observed for families with this structure (Ackerman et al., 2011), and it is possible that single-parent families and other family structures have different interpersonal dynamics. Finally, we must emphasize that this is an observational study and we cannot claim that experiences in the family of origin truly cause later marital outcomes. Experimental evidence (perhaps in the form of intervention studies) would be needed to make such claims. Nevertheless, the temporal ordering diminishes the plausibility of common alternative explanations (i.e., relationship satisfaction in 2007–2008 cannot cause family dynamics in adolescence). Likewise, the multi-method design and the length of time elapsed between assessments makes a shared-method variance explanation for the findings less tenable.

In sum, past research has consistently shown that growing up in a family characterized by an aversive emotional climate is associated with a host of negative interpersonal outcomes later in life (e.g., Amato, 1996; Bernard & Bernard, 1983; Riggs & O'Leary, 1996). The current research provides evidence that growing up in a warm, supportive, and interpersonally engaged family is associated with positive marital outcomes for both the individual and his or her partner approximately 20 years later. Thus, the current study provides compelling evidence for the interpersonal legacy of a positive family climate.

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**Table 1**

Means, standard deviations, and zero-order correlations between variables

| Variable                                   | 1                   | 2                  | 3                  | 4                  | 5                  | 6                  | 7                  | 8                  | 9                 | 10   |
|--|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|------|
| 1. I's Actor Effect for PE <sup>a</sup>    |                     |                    |                    |                    |                    |                    |                    |                    |                   |      |
| 2. I's I-O Family Mean for PE <sup>a</sup> | -.46 <sup>***</sup> |                    |                    |                    |                    |                    |                    |                    |                   |      |
| 3. I to S PE <sup>b</sup>                  | .09                 | .22 <sup>**</sup>  |                    |                    |                    |                    |                    |                    |                   |      |
| 4. S to I PE <sup>b</sup>                  | .04                 | .22 <sup>**</sup>  | .70 <sup>**</sup>  |                    |                    |                    |                    |                    |                   |      |
| 5. I to S Hostility <sup>b</sup>           | .07                 | -.25 <sup>**</sup> | -.62 <sup>**</sup> | -.47 <sup>**</sup> |                    |                    |                    |                    |                   |      |
| 6. S to I Hostility <sup>b</sup>           | .01                 | -.23 <sup>**</sup> | -.53 <sup>**</sup> | -.53 <sup>**</sup> | .64 <sup>**</sup>  |                    |                    |                    |                   |      |
| 7. I's QMI <sup>b</sup>                    | .04                 | .13 <sup>*</sup>   | .48 <sup>**</sup>  | .35 <sup>**</sup>  | -.44 <sup>**</sup> | -.35 <sup>**</sup> |                    |                    |                   |      |
| 8. S's QMI <sup>b</sup>                    | .04                 | .13 <sup>*</sup>   | .42 <sup>**</sup>  | .40 <sup>**</sup>  | -.28 <sup>**</sup> | -.33 <sup>**</sup> | .55 <sup>**</sup>  |                    |                   |      |
| 9. I's Negative Behaviors <sup>b</sup>     | .05                 | -.17 <sup>**</sup> | -.37 <sup>**</sup> | -.33 <sup>**</sup> | .40 <sup>**</sup>  | .36 <sup>**</sup>  | -.66 <sup>**</sup> | -.52 <sup>**</sup> |                   |      |
| 10. S's Negative Behaviors <sup>b</sup>    | -.02                | -.14 <sup>*</sup>  | -.38 <sup>**</sup> | -.37 <sup>**</sup> | .37 <sup>**</sup>  | .36 <sup>**</sup>  | -.52 <sup>**</sup> | -.66 <sup>**</sup> | .59 <sup>**</sup> |      |
| Mean                                       | -0.25               | 2.19               | 5.88               | 5.85               | 3.32               | 3.21               | 4.36               | 4.38               | 2.25              | 2.35 |
| SD   | 0.25                | 0.32               | 1.49               | 1.56               | 1.62               | 1.55               | 0.72               | 0.73               | 0.82              | 0.85 |

Note. I = Individual, PE = Positive Engagement, I-O = Individual-Omitted, S = Spouse, QMI = Quality of Marriage Index. Variables designated by the superscript "a" were collected between the years 1989 and 1991. Variables designated by the superscript "b" were collected between the years 2007 and 2008.

\*  $p < .05$ .

\*\*  $p < .01$ .

Multilevel model analyses examining links between family-of-origin positive engagement and adult behaviors and perceptions within the marital context

**Table 2**

|                                      | Focal Individual to Spouse                            |           |         | Spouse to Focal Individual |           |         |
|--------------------------------------|---|-----------|---------|----------------------------|-----------|---------|
|                                      | <i>b</i>  | <i>SE</i> | $\beta$ | <i>b</i>                   | <i>SE</i> | $\beta$ |
| Observed Marital PE 2007–2008        |   |           |         |                            |           |         |
| Family Mean Positive Engagement      | 1.53 <sup>**</sup>                                    | .33       | .33     | 1.46 <sup>**</sup>         | .33       | .31     |
| Actor Effect Positive Engagement     | 1.40 <sup>**</sup>                                    | .43       | .23     | 1.08 <sup>*</sup>          | .43       | .18     |
|                                      | Pseudo $R^2 = .08$ , $\chi^2(5) = 25.63$ , $p < .001$ |           |         |                            |           |         |
| Observed Marital Hostility 2007–2008 |   |           |         |                            |           |         |
| Family Mean Positive Engagement      | -1.41 <sup>**</sup>                                   | .35       | -.29    | -1.39 <sup>**</sup>        | .35       | -.28    |
| Actor Effect Positive Engagement     | -0.36   | .45       | -0.06   | -0.77                      | .45       | -.12    |
|                                      | Pseudo $R^2 = .07$ , $\chi^2(5) = 23.57$ , $p < .001$ |           |         |                            |           |         |
| Negative Behaviors 2007–2008         |   |           |         |                            |           |         |
| Family Mean Positive Engagement      | -0.46 <sup>**</sup>                                   | .17       | -.18    | -0.54 <sup>**</sup>        | .18       | -.21    |
| Actor Effect Positive Engagement     | -0.09   | .23       | -.03    | -0.39                      | .23       | -.12    |
|                                      | Pseudo $R^2 = .03$ , $\chi^2(5) = 17.02$ , $p = .005$ |           |         |                            |           |         |
| Relationship Satisfaction 2007–2008  |   |           |         |                            |           |         |
| Family Mean Positive Engagement      | 0.39 <sup>*</sup>                                     | .15       | .17     | 0.46 <sup>**</sup>         | .15       | .21     |
| Actor Effect Positive Engagement     | 0.33  | .20       | .11     | 0.40 <sup>*</sup>          | .20       | .14     |
|                                      | Pseudo $R^2 = .03$ , $\chi^2(5) = 10.91$ , $p = .053$ |           |         |                            |           |         |

Note. PE = Positive Engagement. SE = Standard error of unstandardized regression coefficient. Family mean is the individual-omitted family mean.

\*  $p < .05$ .

\*\*  $p < .01$ .