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The Interdependence of Relationships with Adult Children and Spouses

Researchers have documented the interrelatedness of parent–child and marital relationships during the early parenting years, but little is known about how these two family subsystems are associated once children reach adulthood. The authors of the current study addressed this gap by examining parents' relationships with their adult children and their marital satisfaction using an actor–partner interdependence model. Participants included 197 married other-sex couples (N = 394 individuals; range: 40–69 years of age) who had a child over age 18 years. A spillover effect was found among fathers, indicating that parent–child relationship quality was positively associated with marital satisfaction, but the same was not found for mothers. Interestingly, a negative crossover effect was also found, meaning that more negative relationship quality between

mothers and their adult children was associated with lower marital satisfaction on the part of the father. These findings suggest that the interdependence between parent–child and marital relationships persist once children reach adulthood.

Notable shifts in life expectancy over the past century have brought many changes in family ties, including longer parent–child and marital relationships. Enduring family ties are characterized by new expectations and potential sources of support as well as conflicts among family members (Clarke, Preston, Raksin, & Bengtson, 1999; Fingerman, 1996; Shaw, Krause, Chatters, Connell, & Ingersoll-Dayton, 2004). These relationships are not static features of individuals' lives; instead, they change over time, as individuals age and as they face challenges throughout life (Umberson & Reczek, 2007). Indeed, life course perspectives emphasize the importance of linked lives, including that relationships with children interact with and influence the relationship between parents as they age (Elder, Johnson, & Crosnoe, 2003). This has led researchers to examine the interrelatedness of parent–child and spousal relationships.

Research on family relationships in adulthood highlights their importance for individual well-being. Studies of marital relationships have consistently found that a satisfying marriage is associated with well-being and successful aging

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for middle-aged individuals (Ko, Berg, Butner, Uchino, & Smith, 2007; McNulty & Fincham, 2012). In addition, researchers have found that parent–child relationships have important implications for the well-being of middle-aged parents (Birditt, Fingerman, & Zarit, 2010; Greenfield & Marks, 2006; Fingerman, Pitzer, Lefkowitz, Birditt, & Mroczek, 2008). Despite the emphasis on both parent–child and marital relationships once children reach adulthood, little work has explored how these relationships are associated at this stage of family development. Using data from the Family Exchange Study (Fingerman, Miller, Birditt, & Zarit, 2009), in the present study we examined the interdependence of marital satisfaction and parent–child relationships with adult children.

FAMILY SYSTEMS AS A FRAMEWORK FOR UNDERSTANDING FAMILY PROCESSES

Family systems theory posits that marital and parent–child relationships are important subsystems, each of which influences the other (Belsky, 1981; Cox & Paley, 1997; Minuchin, 1985). In recent decades, several processes have been proposed to explain how each of these subsystems influences the other (Engfer, 1988; Erel & Burman, 1995; Fauchier & Margolin, 2004; Umberson, 1992).

The *spillover hypothesis* suggests that affect or behavior transfers directly from one relationship to the other within a family system (Easterbrooks & Emde, 1988). The transfer occurs in the same valence, such that negative affect in one subsystem is linked to negative affect in another. For example, one's own negative mood or affect carries over and increases the negative mood in other relationships (Cowan, Cowan, Heming, & Miller, 1991; Fauchier & Margolin, 2004). Conversely, warm and affectionate relationships between parents and children are associated with higher marital satisfaction (Easterbrooks & Emde, 1988). Indeed, previous research has found that families with more marital conflict tend to have more negative parent–child relationships, whereas parents in more affectionate marriages tend to maintain positive relations with their children and give their children more approval and affection (Grych, 2002; Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993). In addition, research has shown that a good parent–child relationship is associated

with a couple's relationship quality (Carlson, Pilkauskas, McLanahan, & Brooks-Gunn, 2011; Nomaguchi & Milkie, 2003). Most studies on this topic, however, have focused on relatively young parents with young children.

An alternate view is the *compensatory hypothesis*, which proposes that a transfer between subsystems in a family occurs in the opposite valence; that is, for example, when the marital subsystem boundary is not maintained, parent–child coalitions form and marital dysfunction ensues (Engfer, 1988; Minuchin, 1985). According to this hypothesis, positive marital relationship quality is associated with negative parent–child relationship quality and, conversely, negative marital relationship quality is associated with positive parent–child relationship quality. Although these patterns have been noted in the clinical literature, there is little empirical evidence to support the notion of compensatory effects among family subsystems (Erel & Burman, 1995; J. A. Nelson, O'Brien, Blankson, Calkins, & Keane, 2009).

A third possibility for crossover of affect or behavior is suggested by *interdependence theory* (Rusbult & Van Lange, 2003). Rather than a transfer of the affect or behavior of one person across subsystems, a crossover may occur involving the transfer of affect or behavior among people (Westman, 2001). According to this theory, individuals' moods and quality of relationships can be a function of their own mood and of the partner's mood or behaviors in that relationship. This coregulation of emotion or relationship quality can be also referred to as a *partner effect*. Several studies have examined partner effects in work and family domains and found that burnout crossover exists between spouses (Butner, Diamond, & Hicks, 2007; Thompson & Bolger, 1999). Also, research has found that the mood of one partner is related to the other partner's perception of other family relationships (Kiecolt-Glaser & Newton, 2001; Westman, 2001).

Although these three processes may appear distinct, it is possible that they occur simultaneously. In other words, the contagion of relationship satisfaction among parents and their children and spouses can be in the form of spillover, crossover, or both. For example, a father who reports higher marital satisfaction may also report positive relationships with his children. At the same time, his positive relationships with his children can

have a crossover effect on his wife's marital satisfaction.

GENDER DIFFERENCES IN THE EXPERIENCES OF PARENT AND ADULT CHILD RELATIONSHIPS

In the link between marital and parent-child relationships, gender differences have been found consistently in earlier stages of parenthood. In early parenthood, mothers tend to play more essential roles than fathers in the parent-child relationship by providing physical caregiving and emotional support for children, which contribute to positive parent-child relationships (Belsky, Rovine, & Fish, 1989; Nomaguchi & Milkie, 2003; Rossi & Rossi, 1990).

Furthermore, the climate of mothers' marital relationship typically does not affect their parenting behaviors (J. A. Nelson et al., 2009). In contrast, father-child ties tend to be more susceptible to marital distress (Belsky & Fearon, 2004; Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000). For example, one study found that when a husband reported a negative mood because of conflict or relationship strain with his wife, his negative mood was associated with the father-child relationship in the form of negative interactions with his children (Krishnakumar & Buehler, 2000). However, no studies have examined whether parent-child relationships later in adulthood are linked to marital relationships in the same way as has been found at earlier stages of family development.

RESEARCH HYPOTHESES

This study focused on two sets of questions. Our first aim was to examine the interdependence of parent-child and marital relationships. On the basis of previous research and theories, we expected to find support for the spillover hypothesis; that is, that the quality of each parent's parent-child relationship will be positively related to his or her own marital satisfaction (actor effect). In other words, positive parent-child relationships will be associated with higher marital satisfaction, and negative parent-child relationships will be associated with lower marital satisfaction.

The second aim of the study was to examine a crossover effect between parent-child and marital relationships. Given that spouses often share their relationship with adult children, we

anticipated that each partner's parent-child relationship quality will be associated with the other spouse's marital satisfaction (partner effect).

METHOD

Participants

The sample included adults residing in the Philadelphia, PA, primary metropolitan statistical area (including urban, suburban, and rural areas; Pennsylvania State Data Center, 2001). Potential participants were contacted by telephone using a sampling method stratified by age (ages 40-50 and 51-60) and based on a list purchased from GENESYS Sampling Systems of household telephone numbers that appear in the white pages of the telephone directory. Once contact was made with a potential participant, the interviewer administered a screening instrument to determine whether the household had an eligible target respondent. To be eligible, participants had to be between the ages of 40 and 60 and have at least one living child age 18 or older. For the purpose of another study being conducted simultaneously, participants also had to have at least one living parent. Once an eligible and willing person was identified, target participants completed a telephone interview lasting approximately 1 hour that addressed their relationships with their offspring, including exchange of support. Of the 845 people identified as eligible targets, 633 (75%) agreed to be interviewed.

During the interviews, married target participants were asked whether the research team could contact and attempt to recruit their spouse into the study. Among the 633 target participants, 335 (51%) were married at the time of the interview, and 287 (86%) of them agreed to let interviewers contact their spouses. Among those 287 spouses, 197 spouses (71%) agreed to be interviewed.

The participants' demographic characteristics, including age, ethnicity, work status, education, number of children, and self-rated health, are presented in Table 1. The majority of participants ($n = 161$, 82%) had three or fewer children age 18 or older, with a mean of 2.85 ($SD = 1.30$) children age 18 or older (range: 1-11). The majority of participants reported that their current spouse was from their first marriage (95%), and 38% ($n = 73$) of the couples also had children under age 18 living in their household at

Table 1. Background Characteristics of the Participants

Characteristic	Fathers <i>M</i> (<i>SD</i>) or %	Mothers <i>M</i> (<i>SD</i>) or %
Age	52.6 (5.1)	51.5 (4.7)
Years of education	14.7 (1.9)	14.5 (2.2)
Neuroticism	2.8 (0.8)	2.6 (0.7)
Rating of health ^a	3.7 (0.9)	3.6 (1.0)
Number of children		2.6 (1.2)
Income ^b		4.9 (1.7)
Ethnicity (White)	88.8%	88.8%
Work status (employed)	80.7%	60.9%
Positive relationship child gender ^c	43.0%	510.8%
Positive relationship child age	23.3 (5.0)	23.2 (4.6)
Positive relationship child distance ^d (miles)	167.8 (289.8)	184.0 (545.2)
Negative relationship child gender ^c	46.0%	47.6%
Negative relationship child age	22.7 (4.4)	22.7 (4.5)
Negative relationship child distance ^d (miles)	216.3 (467.8)	196.2 (621.3)

Note. *n* = 197 for both fathers and mothers.

^a1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent. ^bRated from less than \$10,000 (1) to more than \$100,000 (6). ^cPercentage female. ^dDistance measured in miles.

the time of participation. Detailed information (e.g., relationship quality and exchange of support) was obtained for a maximum of three adult children age 18 and older. Participants who had more than three adult children (*n* = 36, 18%) were asked to select three for the analysis: (a) the child who received the most assistance, (b) the child who received the least assistance, and (c) one additional child.

Measures

Marital Satisfaction. Participants rated the overall quality of their marital relationships on a 5-point scale that ranged from *excellent* (5) to *poor* (1). This single item was adapted from one used in the Americans' Changing Lives survey (Umberson, 1989). The mean for mothers was 4.17 (*SD* = 0.90), and the mean for fathers was 4.25 (*SD* = 0.91), indicating that respondents tended to rate their marital satisfaction highly.

Relationship Quality. Parent-child relationship quality was assessed with four items. Each item included parental perceptions of positive and negative qualities of the participants' relationships with each child, taken from the Americans' Changing Lives survey (Umberson, 1992). The positive quality scale (Birditt et al., 2010; Fingerman et al., 2008) included two items addressing the parent-child relationship

on a 5-point scale that ranged from *not at all* (1) to *a great deal* (5). These items were (a) "Overall, how much does your child love and care for you?" and (b) "How much does your child understand you?" The internal consistency (α) of this scale was .81 for fathers and .72 for mothers. Negative aspects of the relationships with each child were also assessed using two items (Birditt et al., 2010; Fingerman et al., 2008). The negative quality scale items were (a) "How much does your child criticize you?" and (b) "How much does your child make demands on you?" The internal consistency (α) of this scale was .75 for fathers and .68 for mothers.

Given that most couples (173 dyads, 88%) reported on more than one child, we decided to include the child who had the most positive and the most negative relationship (ratings) with each respective parent. This is consistent with the logic of the exposure model (Fingerman, Cheng, Birditt, & Zarit, 2012), according to which including the child whose relationship with the parents is the most salient may have greater implications for the well-being of the parents and thus also potentially for parents' marital relationship quality. We found that almost 90% of couples agreed on which parent-child relationship they considered most positive, and 93% of couples agreed on which parent-child relationship they considered most negative. Thus, in the subsequent analysis we included parental ratings of relationship quality

only for parent–child relationships perceived to be the most positive and the most negative.

Covariates

We also included parental and parent–child dyad characteristics as covariates. Previous research suggests that these variables (e.g., age, education, family size, and household income) are likely to be associated with marital satisfaction.

Participant (Parental) Characteristics. Prior studies have indicated that age, education, self-rated health, and neuroticism are parental characteristics that are positively associated with marital satisfaction (Jose & Alfons, 2007; Twenge, Campbell, & Foster, 2003). Thus, these variables were included as covariates. Each participant reported the highest grade or years of college completed. Individuals also reported their physical health on a scale that ranged from *poor* (1) to *excellent* (5). Neuroticism was assessed with four items adapted from the Midlife in the United States Study (see <http://www.midus.wisc.edu/>), in which participants rate how well each of four adjectives describe themselves, from *not at all* (1) to *a lot* (5).

Family Characteristics. Family size and household income were included as family characteristic variables. Previous studies have shown that household income and family size are often associated with higher marital satisfaction (Barnett & Shibley, 2001; Ward, 2008). Annual household income was rated by participants on a 6-point scale from *less than \$10,000* (1) to *more than \$100,000* (6).

Analysis Plan

Before estimating the main model, we ran Pearson correlations between covariates and marital satisfaction, which are presented in Table 2. Predictor variables were associated with marital satisfaction in the expected directions, with correlations between spouses ranging from .33 to .42. In terms of parental characteristics, participants' self-rated health was positively associated with their own marital satisfaction ratings. The results showed that most child, respondent, and family characteristics were not statistically associated with marital satisfaction for either spouse. To avoid spurious associations,

Table 2. *Bivariate Correlations Between Covariates and Marital Satisfaction of Mothers and Fathers*

Variables	Mother's marital satisfaction	Father's marital satisfaction
Mother's age	<.01	.12
Mother's education	.06	.06
Mother's health	.14*	.08
Mother's neuroticism	-.19	-.23*
Father's age	-.06	.12
Father's education	.08	.12
Father's health	.06	.28*
Father's neuroticism	-.06	-.23
Positive relationship child age	.07	.11
Positive relationship child distance	.10	.07
Negative relationship child age	.10	.10
Negative relationship child distance	.13	.17
Family size	.05	.14
Family income	.07	.12

* $p < .05$.

we included only statistically significant covariates (self-rated health of fathers and mothers) in the subsequent analysis (Rovine, von Eye, & Wood, 1988).

The main aim of the study was to examine whether marital and parent–child relationships are associated with each other. Dyadic data on fathers and mothers are nonindependent (Kenny & Cook, 1999) because both partners are exposed to a common family context. Indeed, the intraclass correlations for key variables in the data set ranged from .34 to .45, with the mean being .36. Given these nonzero correlations, the data are nonindependent, justifying dyadic analysis.

Therefore, we used the actor–partner interdependence model (APIM; Kenny & Cook, 1999), which is designed to measure interdependence between members within the dyad. By applying the APIM it is possible to calculate the extent to which a person's independent variable (i.e., each parent's relationship with an adult child) affects his or her own dependent variable (i.e., each parent's marital satisfaction) as well as his or her partner's dependent variable (i.e., each spouse's marital satisfaction).

To test the two aims of the study, we estimated two separate APIM models (one model for positive relationship quality and the other for

Table 3. Means, Standard Deviations, and Correlations of Parent–Child Relationship Quality (RQ) and Marital Satisfaction

Key variables	M (SD)	1	2	3	4	5	6
1. Mothers' positive RQ with child	4.36 (0.57)	—					
2. Fathers' positive RQ with child	4.27 (0.61)	.38**	—				
3. Mothers' negative RQ with child	2.38 (0.81)	-.25**	-.14*	—			
4. Fathers' negative RQ with child	2.48 (0.88)	-.11	-.23***	.41*	—		
5. Mothers' marital satisfaction	4.14 (0.89)	.15*	.03	-.17*	-.10	—	
6. Fathers' marital satisfaction	4.20 (0.90)	.12	.26**	-.23**	-.20*	.44**	—

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 4. Mixed Model Predicting Marital Satisfaction from Positive Relationship Quality (RQ) Between Parents and a Child

Variables	Model 1			Model 2		
	B (SE)	<i>p</i>	β	B (SE)	<i>p</i>	β
Mother intercept	3.09 (0.59)	< .001		3.23 (0.67)	< .001	
Father intercept	2.41 (0.49)	< .001		2.51 (0.61)	< .001	
Mother actor positive RQ ^a	0.21 (0.10)	.046	.13	0.22 (0.12)	.083	.12
Father actor positive RQ	0.38 (0.08)	< .001	.25	0.36 (0.10)	< .001	.24
Mother partner positive RQ				-0.05 (0.11)	.680	-.03
Father partner positive RQ				-0.01 (0.11)	.946	-.01
Covariates						
Mother self-rated health	0.09 (0.06)	.134	.10	0.09 (0.06)	.132	.11
Father self-rated health	0.20 (0.06)	.002	.21	0.19 (0.06)	.001	.19
Mother neuroticism	-0.05 (0.08)	.503	.04	-0.05 (0.08)	.527	-.03
Father neuroticism	-0.18 (0.08)	.019	.14	-0.18 (0.07)	.019	-.12

Note. Parameter estimates are fixed effects.

^aRQ indicates relationship quality with a child.

negative relationship quality). Fathers and mothers were treated as distinguishable members of the marital dyad given the different roles of males and females in these relationships.

We used a sequential approach to modeling; that is, the covariate (e.g., self-rated health) was entered at Step 1 (not shown in table), and each actor effect (each parent's individual effects) was entered at Step 2 (Aim 1; actor effect). At Step 3, spouse effect was entered (Aim 2; partner effect).

RESULTS

Gender Differences

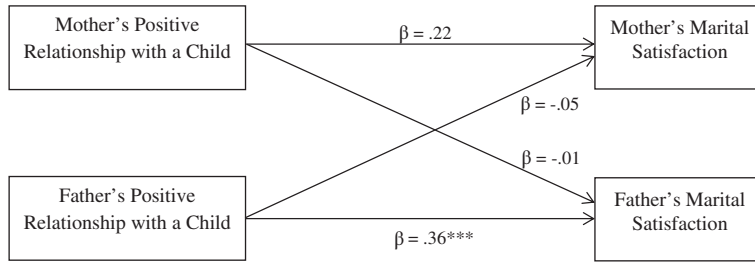
Table 3 shows the means and standard deviations of key variables for fathers and mothers. Although not shown here, the results of several pairwise *t* tests showed no statistical gender differences for reports of positive or negative parent–child relationships or marital satisfaction.

Interdependence Between Parent–Child Relationships and Marital Satisfaction

The association between relationship quality with adult children and marital satisfaction was examined using the APIM. The results of the multilevel models that included the positive quality of the relationship are shown in Table 4. For easier interpretation, we present both unstandardized and standardized coefficients.

To examine the spillover hypothesis, we first estimated an actor effect for positive parent–child relationship quality on marital satisfaction. Father and mother actor effects were statistically significant ($\beta = .38, p < .001$ for fathers, $\beta = .21, p = .046$ for mothers; see Model 1 in Table 4). In other words, fathers and mothers who reported more positive relationships with their children also reported higher marital satisfaction. In the next step we included the partner effect (Model 2 in Table 4). As shown in Figure 1, we found a statistically significant father actor effect ($\beta = .36, p = .001$), but the

FIGURE 1. ACTOR–PARTNER INTERDEPENDENCE MODEL OF SPOUSES' MARITAL RELATIONSHIP AND POSITIVE QUALITIES OF RELATIONSHIP BETWEEN PARENTS AND CHILDREN.



*** $p < .001$.

Table 5. Mixed Model Predicting Marital Satisfaction from Negative Relationship Quality (RQ) Between Parents and a Child

Variables	Model 1			Model 2		
	B (SE)	<i>p</i>	β	B (SE)	<i>p</i>	β
Mother intercept	4.25 (0.37)	< .001		4.48 (0.40)	< .001	
Father intercept	4.23 (0.37)	< .001		4.50 (0.38)	< .001	
Mother actor negative RQ ^a	-0.12 (0.07)	.110	-0.11	-0.15 (0.08)	.081	-0.15
Father actor negative RQ	-0.19 (0.06)	.004	-0.19	-0.16 (0.07)	.042	0.16
Mother partner negative RQ				-0.05 (0.08)	.511	0.05
Father partner negative RQ				-0.15 (0.07)	.048	0.14
Covariates						
Mother self-rated health	0.11 (0.06)	.089	0.12	0.11 (0.06)	.089	0.12
Father self-rated health	0.23 (0.05)	< .001	0.24	0.23 (0.06)	< .001	0.24
Mother neuroticism	-0.06 (0.07)	.120	-0.04	-0.07 (0.08)	.368	-0.06
Father neuroticism	-0.13 (0.08)	.421	-0.10	-0.13 (0.08)	.117	-0.10

Note. Parameter estimates are fixed effects.

^aRQ indicates relationship quality with a child.

mother's actor effect was no longer statistically significant ($\beta = .22$, $p = .083$). No statistically significant partner effects were found for fathers or mothers. In terms of covariates, father's self-rated health ($\beta = .19$, $p = .001$) and neuroticism ($\beta = -.18$, $p = .019$) were statistically associated with his marital satisfaction.

For the negative quality of the parent–child relationship and marital satisfaction, we found somewhat different patterns (see Table 5). In Step 1, we tested the actor effect and found a statistically significant father actor effect ($\beta = -.19$, $p = .004$), but the mother's actor effect was not statistically significant ($\beta = .12$, $p = .110$; see Model 1 in Table 5); that is, fathers who reported more negative relationships with their adult offspring also reported lower marital satisfaction.

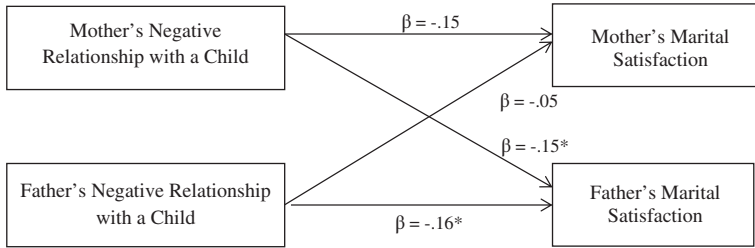
When we included the partner effect (see Model 2 in Table 5), we also found the same

father actor effect, indicating that a more negative relationship with adult offspring was related to lower marital satisfaction for fathers ($\beta = -.16$, $p = .042$). The father partner effect was also statistically significant, indicating an association between mothers' negative relationship with her offspring and fathers' marital satisfaction ($\beta = -.15$, $p = .048$); that is, when a mother reported a more negative relationship with her offspring, her husband (i.e., the father) reported lower marital satisfaction. In terms of covariates, fathers' self-rated health ($\beta = .23$, $p < .001$) was positively associated with their marital satisfaction (see Figure 2).

Post Hoc Tests

To ensure the stability of findings with multiple children (as noted earlier, 88% of parents in the sample had more than one child), we conducted

FIGURE 2. ACTOR–PARTNER INTERDEPENDENCE MODEL OF SPOUSES' MARITAL RELATIONSHIP AND NEGATIVE QUALITIES OF RELATIONSHIP BETWEEN PARENTS AND CHILDREN.



* $p < .05$.

post hoc analyses by examining the mean values for positive and negative relationship quality among all children within each parental dyad. We compared models for including the mean values for all children to the models we have presented in this article. Although the coefficients were a bit different, we found that the pattern of results was identical.

DISCUSSION

The aims of this study were (a) to investigate the relationship between marriage and parent–child relationships with adult offspring and (b) to consider how one's marital relationship is related to his or her spouse's parent–child relationship with adult offspring. Our findings showed that marital and parent–child relationships with adult offspring are indeed linked, especially for fathers, suggesting different associations between marital and parent–child relationships for fathers and mothers.

The statistically significant actor effect of both positive and negative parent–child relationship quality on marital satisfaction for fathers indicates that similar affect co-occurs in the two relationships, which is congruent with the spillover effect. This finding is consistent with previous studies that have reported that marital conflict often occurs in conjunction with coparenting problems or negative parent–child relationships in earlier stages of family life (Erel & Burman, 1995; Krishnakumar & Buehler, 2000). Thus, our results extend the current literature by showing that this linkage continues for fathers even after their children enter adulthood and that fathers may view their relationship with their children and wives as interdependent (Stolz, Barber, & Olsen, 2005).

Interestingly, we found a negative spillover (e.g., crossover effect) for fathers, but not for mothers; that is, we found negative mother–child relationships were associated with fathers' lower marital satisfaction but not mothers' own marital satisfaction. Thus far, the interdependence of spousal and parent–child relationships has been found for women across their children's infant, middle childhood, and adolescent years (Belsky & Fearon, 2004; Owen & Cox, 1997).

There are at least three possible explanations for why we did not find the same result for women with adult children. First, the ages of the children in this study were relatively older. The interdependence between a parent–child relationship and how it is connected to the parental marriage may change once children enter early adulthood. Second, fathers may perceive that their wives are less qualified in parenting when mothers have negative relationships with their children. For the most part, studies that have focused on married couples (Essex & Hong, 2005; Henry & Miller, 2004; Pina & Bengtson, 1995) have found that parents experience higher marital satisfaction when their spouses participate more in household labor, including child care or caregiving tasks, because they regard their spouses' parenting effort as one component of marital satisfaction. Thus, fathers may consider their spouses' relationships with children in evaluating their marital satisfaction. Finally, the use of APIM tests the effects of one person (e.g., the actor), while controlling for partner effects. Unlike prior research that has tested the effects of relationship quality on marital satisfaction separately for husbands and for wives (e.g., Belsky & Fearon, 2004), in this study we considered both parental reports at the same time, which may have resulted in different findings.

Gender role theory can extend our understanding of the determinants and consequences of parent–child relationships and their differential effects on marital satisfaction (Rogers & White, 1998). In general, the literature guided by gender role theory assumes that mothers' relationships with their children are richer and more complex than are fathers' parent–child relationships because mothers spend more time than fathers caring for children, as well as on other family matters (Arendell, 2000; Essex & Hong, 2005). Thus, studies consistently report that mothers experience both more strain and more reward from the parental role than do fathers (Duindam, 1995; Hansen, 2012; S. K. Nelson, Kushlev, & Lyubomirsky, 2014; Umberson, 1989). Given that the mothering role is cultivated in women's socialization processes (Stolz et al., 2005), mothers may have developed a tendency to view parental and marital roles separately at an earlier stage of their lives. This gender socialization may explain our findings that mothers made distinctions between their relationships with their (adult) children and with their spouses.

Given the cross-sectional nature of the data, this interdependence between parent–child and marital relationship quality is open to at least two interpretations. First, as the spillover hypothesis suggests, emotions are “contagious” in close relationships, and individuals often reflect the emotions that their partners experience in other relationships (Kerr, Capaldi, Pears, & Owen, 2009; Klausli & Owen, 2011). As has been found in work–family spillover studies, individuals who are either distressed or content with one relationship may experience or exhibit similar relationship characteristics with other family members (Goodman & Shippy, 2002).

Another possibility for the interdependence is that similar experiences in different family relationships may reflect individual personalities and a general tendency to see other family members in certain ways. For example, a pessimistic person might tend to focus on or perceive characteristics in his or her children and spouse as negative. In contrast, optimistic spouses may perceive parent–child relationships positively and rate their marital relationships as highly satisfying (McNulty, 2010; McNulty, O'Mara, & Karney, 2008).

Taken as a whole, the results of this study demonstrate the concept of linked lives (Fingerman et al., 2008; Greenfield & Marks, 2006), indicating that parent–child and marital

relationships may have implications for one another and that parents' marital and parental roles remain intertwined even after their children are adults.

This study had a number of strengths, including the use of a dyadic approach to examine relationships with adult children and spouses simultaneously. Nevertheless, some limitations of this study must be acknowledged. First, the data were cross-sectional, thus precluding conclusions regarding causal interpretations. Although we controlled for parental individual characteristics, such as neuroticism, in our analysis, individuals with negative moods may have reported their relationships with their spouses or family members as negative. Future studies that use middle-aged couples as the unit of analysis and measure relationship quality in both the parent–child and marital subsystems over time can help determine the direction of the interdependence evidenced in this sample.

Moreover, there are several sampling biases that limit the generalizability of our findings. First, this study relied on parental perceptions of their relationships with adult children. According to the developmental stake hypothesis (Giarrusso, Stallings, & Bengtson, 1995), parents tend to describe their parent–child relationships more positively than their children describe the same relationship. Therefore, including data reported by the children would allow us to examine whether the patterns found in this study are stable or instead are based on the biased perceptions of parents.

Second, a selection bias was possible. During recruitment, individuals were informed that the study was about family relationships and the exchange of support between family members. This recruitment strategy may have produced bias, as family members who are willing to participate in such studies tend to have better relationships with family members than do those who do not participate (Waite & Gallagher, 2002).

In addition, we found that the vast majority of participants (95%) reported that their current spouse was from their first marriage. Thus, the findings may not generalize to other married couples with multiple marriages. Given this limitation in generalization, future studies are needed to examine whether our findings can be replicated following marital transitions.

Despite these limitations, the present study provides insight into several aspects of the

interdependence between marital satisfaction and parent-child relationships with adult children. In general, in line with the spillover hypothesis, happily married fathers tend to have positive relationships with their children. Furthermore, the negative crossover from the mothers' relationship with the child to the fathers' marital satisfaction indicates that the parent-child relationship may have implications for the fathers' marital relationship. Given these results, future studies examining changes in marital relationships and parent-child relationships with adult children may provide further insight into the well-being of these families at later stages of family development.

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