# Ambivalent Reactions in the Parent and Offspring Relationship 

Karen L. Fingerman, ${ }^{1}$ Pei-Chun Chen, ${ }^{2}$ Elizabeth Hay, ${ }^{3}$ Kelly E. Cichy, ${ }^{4}$ and Eva S. Lefkowitz ${ }^{4}$<br>${ }^{1}$ Child Development and Family Studies, Purdue University, West Lafayette, Indiana. ${ }^{2}$ Department of Sociology, Purdue University, West Lafayette, Indiana. ${ }^{3}$ Department of Psychology, University of Florida, Gainesville. ${ }^{4}$ Department of Human Development and Family Studies, Pennsylvania State University, University Park.


#### Abstract

Theory suggests that aging parents and their adult children experience ambivalence (conflicting emotions) as a result of unclear norms governing the tie between them. This study investigated personality differences and relationship context differences in ambivalence, as well as the reactions of parents and offspring to each other. As part of the Adult Family Study, 474 individuals from 158 family triads consisting of a mother, father, and son or daughter aged 22 to 49 years completed telephone interviews, in-person interviews, and questionnaires. Multilevel models revealed that poor parental health and neuroticism in parents and offspring were associated with greater ambivalence. Surprisingly, investment in competing roles was associated with less ambivalence. Parents also experienced greater ambivalence when offspring scored higher on neuroticism, rated the parent as less important, or were less invested in their own spousal role. Parents' characteristics were not associated with offspring's ambivalence. Parents appear to react to their children's personality and achievements even after children are grown.


IN THE United States, parents' relationships with their children under the age of 18 are guided by legal and social sanctions, but there are few norms governing relationships between adults and their parents. Recently, scholars have proposed that ambivalence, in the form of conflicting emotions and cognitions, may arise when social structures do not provide direction for family relationships (Connidis \& McMullin, 2002; Luescher \& Pillemer, 1998).

Ambivalence can be conceptualized as (a) feeling conflicted or torn, or (b) having positive and negative sentiments toward the same object (Priester \& Petty, 2001). The latter approach may be helpful in the study of intergenerational ambivalence. Prior social scientific research has tended to operationalize ambivalence as polarized feelings or cognitions (Bassili, 1996; Kaplan, 1972; Uchino, Holt-Lunstad, Uno, \& Flinders, 2001; Weigert, 1991). Researchers take this approach because participants have a difficult time articulating the degree to which they feel torn or conflicted, but they can rate their actual positive and negative feelings (Luescher \& Pillemer, 1998). Further, an examination of positive and negative feelings may extend researchers' knowledge of parent-offspring ties in important ways. Studies pertaining to intergenerational ties have tended to focus on either solidarity (Silverstein \& Bengtson, 1997) or on conflict and tensions (Fingerman, 1996). Assessing ambivalence as positive and negative qualities may provide insights into the co-occurrence of tensions and positive feelings (see Fingerman, 2001; Willson, Shuey, \& Elder, 2003).

Initial theory and research pertaining to intergenerational ambivalence has been sociological in nature, focusing on how contradictory expectations that occur in status, roles, and institutions give rise to this ambivalence (Connidis \& McMullin, 2002). For example, studies examining intergenerational ambivalence have focused on gender (e.g., women experience greater ambivalence; Willson et al., 2003), financial status (e.g., mothers experience more ambivalence toward financially dependent offspring; Pillemer \& Suitor, 2002), and health
(e.g., parents experience ambivalence over offspring's assistance; Spitze \& Gallant, 2004). However, two individuals who occupy a similar status (e.g., gender) might experience varying degrees of ambivalence. Psychological factors may contribute to these individual differences because (a) these social structures may have different subjective meaning to different individuals, and (b) individuals may bring different predispositions to their relationships. In this study, we examine whether individuals' personality traits and their investment in the parent-offspring relationship contribute to intergenerational ambivalence.

Further, we extend current knowledge by considering interpersonal processes and examining parents and offspring within the same family. Prior studies of ambivalence have included only the parent's reporting (Pillemer \& Suitor, 2002; Spitze \& Gallant, 2004) or the offspring's reporting (Willson et al., 2003) on intergenerational ambivalence. However, individuals react to features of social partners, such as their age (Erber, Szuchman, \& Prager, 2001) and their personality characteristics (Gotlib \& Beatty, 1985). Thus, an individual's experience of intergenerational ambivalence may also reflect characteristics of the parent or offspring partner.

## Subjective Investment in the Relationship

The value that parents and offspring place on their relationship sets a psychological context for their emotional reactions toward one another. Role centrality theory posits that when individuals identify a particular role as self-defining, events in that role affect well-being to a greater extent than events in less salient roles (Gurin, Veroff, \& Feld, 1960; Martire, Stephens, \& Townsend 2000). Further, individuals who highly value a role may experience heightened positive and negative emotional reactions in that role. Appraisal theories of emotions (e.g., Lazarus, 1991) also suggest that individuals experience intense emotional reactions in situations that they consider to be personally relevant. Thus, these theories suggest that parents and offspring who greatly value one another may experience
more ambivalence in their relationship. Indeed, across cultures, people report problems in their closest social ties (Akiyama, Antonucci, Takahashi, \& Langfahl, 2003), and in other research we found that individuals aged 13 to 99 years were more likely to classify closer social partners as ambivalent than less close social partners (Fingerman, Hay, \& Birditt, 2004).

In addition, we anticipated that adults who are strongly invested in multiple roles (e.g., worker, spouse) would experience greater ambivalence toward their parents or offspring. Investment in many roles may generate conflicting feelings because it is unclear how the parent-offspring tie fits in with the other roles. For example, adults who work long hours, have small children, and value their own spouses may feel torn in their efforts to connect with parents.

## Personality and Ambivalence

Individuals may also hold predilections to experience positive or negative emotions in their relationships as a result of their personality traits. Evidence suggests that individuals' predispositions may contribute to problems in relationships (Atkinson \& Violato, 1994; Gunthert, Cohen, \& Armeli, 1999). We expected higher neuroticism to be associated with increased ambivalence between parents and offspring for two reasons. First, researchers have linked neuroticism and ambivalence in a variety of studies (Carver, 1997; Emmons \& Colby, 1995; Kokkonen \& Pulkkinen, 2001). Some researchers have suggested that ambivalence involves dysregulation of emotion (Kokkonen \& Pulkkinen). For example, certain individuals may experience ambivalence in situations with few norms (such as the parentoffspring tie), because they have a difficult time regulating their reactions to these situations. Other researchers argue that individuals bring predispositions in both personality and relationship style to their ties, and these researchers find that ambivalent relationship style and neuroticism are linked (Carver).

Second, measurement issues may contribute to associations between neuroticism and ambivalence. Individuals who score higher on measures of neuroticism are more likely to report negative sentiments in relationships than are individuals who score low on neuroticism. Parents and offspring tend to rate positive qualities of their relationships high (Rossi \& Rossi, 1990; Umberson, 1992), and there is little measured variability in positive sentiments. Therefore, measured variability in ambivalence is likely to reflect variability in participants' ratings of negative sentiments. Thus, we expected to find associations between neuroticism and ambivalence toward parents or offspring in this study.

## Family Processes in Ambivalence

Prior studies of intergenerational ambivalence have relied on reports from either parents or offspring (Fingerman et al., 2004; Pillemer \& Suitor, 2002; Spitze \& Gallant, 2004; Willson et al., 2003), but not on reports from parents and offspring concerning the same relationship. Nonetheless, studies suggest that parents and offspring respond to characteristics of the other party. For example, Willson and colleagues found that adults' ambivalence toward their parents depended on the parents' gender and health. Likewise, Pillemer and Suitor found that mothers' ambivalence varied as a function of their perceptions of off-
spring's needs. This study allowed us to examine parents' and offspring's reactions to the other party's psychological characteristics. Parents and offspring may react with greater ambivalence when the other party is higher in neuroticism or is less invested in their relationship.

In addition, parents' and offspring's experience of ambivalence may be associated. In studies involving dyads of mothers and daughters, some mother-daughter pairs show greater positive and negative emotionality than do other pairs (Fingerman, 2001; Lefkowitz \& Fingerman, 2003; Martini, Grusec, \& Bernardini, 2001). These findings suggest that mothers and daughters may respond to one another's emotionality. It is unclear whether fathers and sons also respond to their social partners' ambivalence, but this study allowed us to examine dyadic patterns of ambivalence.

Finally, we examined variability in ambivalence within dyads. Across studies, parents rate positive qualities of relationships with offspring more highly than do offspring (Bengtson \& Kuypers, 1971; Rossi \& Rossi, 1990; Shapiro, 2004). Nevertheless, parents may experience ambivalence toward offspring, despite positive feelings. Pillemer and Suitor (2002) found that over half of the mothers in their study experienced some ambivalence toward their offspring. Similarly, our prior research revealed that nearly half of middle-aged and young-old adults classified ties to offspring as ambivalent (Fingerman, Hay, et al., 2004). Nonetheless, we examined possible generational differences in ambivalence.

## Other Factors Associated With Ambivalence

The basic premise of this study is that the experience of intergenerational ambivalence partially reflects the value that individuals place on this relationship (relative to other roles and relationships) and the predispositions that individuals bring to their relationships. Yet the experience of intergenerational ambivalence also reflects structural factors that may generate unclear norms and that also may be associated with the value that individuals place on the relationship. These factors include gender (women are more ambivalent than men), ethnicity (African American adults are more ambivalent than European American adults), parental health (caregivers experience ambivalence), and contact (the more frequent the contact, the greater the ambivalence; see Connidis \& McMullin, 2002). We considered these variables here.

Age differences in ambivalence also may be evident. Socioemotional selectivity theory posits that older adults experience fewer problems in their personal relationships than do younger adults due to selection of rewarding social partners and improvements in emotion regulation (Carstensen, Isaacowitz, \& Charles, 1999; Fingerman, Hay, et al., 2004). We anticipated age differences with regard to ambivalence

We considered several additional variables without generating hypotheses. For example, family size may be associated with qualities of intergenerational relationships; parents with more offspring may be less invested in any given offspring (Fingerman, 2001). Further, some studies find that when offspring have partners and children of their own, their ties to their parents are stronger (Fischer, 1981, 1986; Umberson, 1992), but other studies find no such effects (Fingerman, 2000; Suitor \& Pillemer, 2000). We examined offspring's number of

Table 1. Characteristics of the Sample

|  | Offspring <br> $(n=158)$ | Parents <br> $(n=316)$ |
| :--- | :---: | :---: |
| Means and standard deviations |  |  |
| Age | $34.97(7.28)$ | $62.13(9.06)$ |
| Education, years | $15.05(1.97)$ | $14.08(2.72)$ |
| Self-reported physical health | $3.31(0.97)$ |  |
| Proportions | $3.75(0.85)$ |  |
| Gender |  |  |
| $\quad$ Women | .52 | .50 |
| Ethnicity |  |  |
| African American | .32 | .32 |
| European American | .68 | .68 |
| Marital status |  |  |
| $\quad$ Married or remarried | .64 | .89 |
| Widowed | .00 | .00 |
| Divorced | .09 | .07 |
| Single | .21 | .00 |
| Cohabitating | .06 | .03 |
| Work status |  |  |
| Working for pay | .83 | .54 |
| Unemployed | .05 | .03 |
| Homemaker or caregiver | .07 | .07 |
| Student | .03 | .00 |
| Retired | .00 | .33 |
| Disability or on leave | .01 | .04 |

Note: Due to rounding errors, not all categories sum to 1.00 .
${ }^{\text {a }}$ Rated $1=$ poor, $2=$ fair, $3=$ good, $4=$ very good, $5=$ excellent.
siblings, whether or not the offspring have children of their own, and both parties' marital status as control variables.

## Methods

## Participants

Data are from The Adult Family Study (Fingerman, Lefkowitz, \& Hay, 2004), which examines men and women aged 22 to 49 years, their mothers, and their fathers. The total sample included 213 families who participated in telephone interviews. This study examines 158 of those families ( $N=$ 474) who participated in face-to-face interviews and completed self-report questionnaires. These families did not differ from the larger sample on background or relationship characteristics. Participants resided in the Philadelphia Primary Metropolitan Statistical Area, encompassing five counties in southeastern Pennsylvania and four counties in New Jersey (Pennsylvania Data Center, 2004). We used a stratified sampling procedure to obtain distributions by offspring's age (aged 22-33 and 34-49), gender, and ethnic group (European American or African American). We identified potential participants by using telephone lists that targeted the offspring's age range, which we purchased from Genesys Corporation. Participants who had a listed address received a prenotification letter. We supplemented this approach to recruitment by using snowball and convenience sampling. In total, $86 \%$ of the participants were recruited by means of the Genesys list, $4 \%$ by snowball sampling, and $10 \%$ by convenience sampling. Recruitment tech-
niques were evenly distributed by offspring's age, gender, and ethnicity.

To ensure participation in the face-to-face interviews, we picked those parents and offspring who resided in separate households within 50 miles ( 80.45 km ) of each other. No parents or offspring were engaged in caregiving relationships. Table 1 includes background information for offspring and parents. Participants rated themselves as being in relatively good health on a scale of 1 (poor) to 5 (excellent; see Idler \& Kasl, 1991). Participants described their ethnicity as African American or European American, except for two parents who described their ethnicity as both Hispanic and African American. For simplicity, we grouped these individuals in the African American category.

## Procedures

Each family member completed a telephone interview. Then offspring completed in-person videotaped interviews and selfreport questionnaires separately with their mother and their father ( 158 complete families, $N=474$ ). We counterbalanced in-person interviews, with mother interview first for half the sample, and father interview first for the other half. We derive the data in this study from the telephone interviews and written questionnaires.

Throughout the study, offspring responded to questions concerning their mothers and their fathers, and each parent responded to questions about the target offspring. For the telephone interviews we used Computer Assisted Telephone Interview software, permitting the random order of administration of sections pertaining to mother and to father across offspring.

Background information.-Participants provided their age, gender, and ethnicity during initial telephone screening. In the telephone interviews, participants also provided their education in years, marital status, and work information, and they rated their health.

Relationship characteristics.-Offspring identified the persons they considered to be their mother and their father during screening. Most offspring selected their biological mother ( $n=$ 153) and biological father $(n=143)$. Remaining participants selected stepfathers $(n=12)$, stepmothers $(n=2)$, or adoptive parents $(n=3)$.

Importance of relationship.-Participants rated the importance of the parent or offspring relative to other social partners, using 6 categories: 1 (most important person in your life), 2 (among the 3 most important), 3 (among the 6 most important), 4 (among the 10 most important), 5 (among the 20 most important), and 6 (less important than that). In prior studies (Fingerman, 2001), this item was associated with emotional qualities of relationships. We reverse coded this item, so that higher numbers equal greater importance of relationship.

Investment in roles.-Using a modified version of the role centrality measure by Martire and colleagues (2000), we had participants rate the importance of their roles as parent, romantic partner or spouse, and worker on a scale from 1 (not at all important) to 10 (very important). We examined these items for each role separately (spouse, parent, and worker), and we also
combined them to obtain a total score (total roles). In this sample, 112 offspring and 259 parents rated all three roles. Some individuals who were unemployed, retired, and on leave still rated the importance of the worker role.

Theoretically, parents' investment in the parenting role could overlap with their ratings of the importance of the offspring in this study. Yet the measures appeared to be distinct $(r=.07)$. This low correlation could reflect the fact that $90 \%$ of the parents had more than one child and their ratings of the parenting role included other children. To illustrate, one parent might greatly value the parenting role, but rate the target child as only within the top 10 people in his or her life (because the target child is one of many children); another parent might rate the parenting role as important and the child as important; and still another parent might rate the role as unimportant, but the child an important social partner.

Neuroticism.-To assess neuroticism, or the general predisposition to experience negative feelings, participants completed the widely used 12 -item Revised Eysenck Personality Questionnaire (Eysenck, Eysenck, \& Barrett, 1985). Example yes-no items included "Are you often fed up?" and "Are your feelings easily hurt?" Coefficient alphas were $\alpha=0.73$ for both parents and offspring.

## Control Variables

Family variables.-Offspring reported number of sisters and brothers, and parents reported number of children. Offspring also indicated the number of children they had.

Frequency of contact.-Participants reported frequency of telephone or electronic contact, using a scale from 1 (every day) to 7 (less often than once a month). They also reported face-toface contact on a scale from 1 (every day) to 6 (less than twice a year). The use of ordinal scales to assess contact minimizes the impact of extreme values on results (Dewit, Wister, \& Burch, 1988; Greenwell \& Bengtson, 1997). Most participants reported frequent face-to-face contact ( $62 \%$ of participants reported seeing the other party once a week or more often). Thus, in analyses, we used frequency of contact by phone or e-mail.

## Measurement of Ambivalence

We assessed positive and negative feelings by using four items from prior studies of parent-offspring ties (Umberson, 1992; Willson et al., 2003). Positive feelings reflected the average ratings of two items, "How much does he or she make you feel loved and cared for?" and "How much does he or she understand you?" These were rated 1 (not at all) to 5 (a great deal), with $\alpha=0.69$. We assessed negative feelings with the average rating of two items, "How much does he or she criticize you?" and "How much does he or she make demands on you?" Here, $\alpha=0.68$.

Social psychologists have derived several formulas for calculating ambivalence scores from ratings of contradictory feelings (see, e.g., Kaplan, 1972; Thompson, Zanna, \& Griffin, 1995). As in prior studies of intergenerational ties (e.g., Willson et al., 2003), we used Griffin's Similarity and Intensity of Components formula (described in Thompson et al.) to calculate ambivalence as follows:

Table 2. Descriptive Information Pertaining to Independent and Dependent Variables

| Variable | Total <br> $(N=474)$ | Offspring <br> $(n=158)$ | Parents <br> $(n=316)$ |
| :--- | ---: | ---: | ---: |
| Dependent variable |  |  |  |
| $\quad$ Ambivalence | $2.30(1.10)$ | $2.29(1.13)$ | $2.32(1.07)$ |
| Independent variable |  |  |  |
| $\quad$ Importance of target relationship $^{\mathrm{a}}$ | $4.40(0.88)$ | $4.38(0.90)$ | $4.41(0.87)$ |
| Neuroticism $^{\mathrm{b}}$ | $3.11(2.58)$ | $3.75(2.66)$ | $2.46(2.32)$ |
| Total roles $^{\mathrm{c}}$ | $23.99(6.01)$ | $23.31(6.94)$ | $24.68(4.82)$ |
| $\quad$ Spousal role $^{\text {Parental role }}$ | $8.92(1.57)$ | $9.25(1.14)$ | $8.62(1.84)$ |
| Worker role | $9.44(1.23)$ | $9.48(1.40)$ | $9.40(1.09)$ |
|  | $8.11(1.99)$ | $8.10(1.97)$ | $8.13(2.01)$ |

Note: Standard deviations are shown in parentheses.
${ }^{\text {a }}$ Investment in relationship: $1=$ less important, $2=$ among 20 most important, $3=$ among 10 most important, $4=$ among 6 most important, $5=$ among 3 most important, $6=$ most important.
${ }^{\mathrm{b}}$ The possible range of neuroticism scores is 0 to 12 .
${ }^{\mathrm{c}}$ The sums ratings of three roles-parent, spouse, and worker: $1=$ not at all important, $10=$ very important.

$$
(\text { Positive }+ \text { Negative }) / 2-\mid \text { Positive }- \text { Negative } \mid .
$$

Because the calculations may result in negative numbers, we then added a constant of 1.5 . For example, when both average positive and negative scores were 5, we calculated ambivalence as $[(5+5) / 2-0]+1.5$, generating a high ambivalence score of 6.5. When the positive score was 5 and the negative score was 1 , we calculated the ambivalence score as $[(5+1) / 2-|5-1|]+$ $1.5=0.5$, which is a very low ambivalence. This formula has several advantages: it takes into account both the presence and intensity of coexisting positive and negative sentiments, it correlates highly with other formulas for ambivalence, and is widely used in research (Thompson et al.). Table 2 presents means and standard deviations of the independent variables and the ambivalence scores.

## Analysis Strategy

Bivariate associations.-Our preliminary analyses focused on bivariate associations between independent variables. Correlations between psychological variables (neuroticism, role investment, and importance of the relationship) were all less than . 12.

We then considered potential covariates. The inclusion of control variables not associated with the dependent variable may generate spurious significant associations between independent and dependent variables in analyses (Rovine, von Eye, \& Wood, 1988; Weisberg, 1979). Offspring's number of siblings, having children of their own, participants' work status, hours spent working, and educational attainment were not associated with ambivalence scores; therefore, we did not consider these variables further.

Multilevel models.-Mothers and fathers responded to questions about the target offspring, and offspring responded to questions about each parent. We used PROC Mixed in SAS to estimate multilevel models to account for nonindependence of parents' and offspring's responses in analyses (Littell, Milliken, Stroup, \& Wolfinger, 1996; Singer, 1998). Multilevel

Table 3. Mixed Model Predicting Ambivalence Scores From Structural and Psychological Variables

| Predictor | $B$ | $S E_{B}$ | $t$ |
| :---: | :---: | :---: | :---: |
| Intercept | 2.99 *** | 0.55 | 5.40 |
| Age | 0.01 | 0.01 | -0.88 |
| Dyad ${ }^{\text {a }}$ |  |  |  |
| Mother son | -0.16 | 0.11 | $-1.52$ |
| Father daughter | -0.15 | 0.14 | -1.04 |
| Father son | -0.02 | 0.14 | -0.11 |
| Mother daughter | - | - | - |
| Generation ${ }^{\text {b }}$ | -0.29 | 0.20 | -1.51 |
| Ethnicity ${ }^{\text {c }}$ | 0.23 | 0.13 | 1.79 |
| Neuroticism | 0.05** | 0.02 | 0.76 |
| Importance of relationship ${ }^{\text {d }}$ | 0.04 | 0.05 | 2.59 |
| Total investment in roles ${ }^{\text {e }}$ | -0.02* | 0.01 | -2.18 |
| Parent's health ${ }^{\text {f }}$ | -0.09* | 0.04 | -2.02 |
| Contact ${ }^{\text {g }}$ | -0.01 | 0.04 | 1.18 |
| Family variance component | . 30 | $z=4.87 * * *$ |  |
| Residual | . 86 |  |  |

Note: Estimated parameters 14, Akaike Information Criteria $=1,839.10$.
${ }^{\text {a }}$ The reference group is mother-daughter dyad.
${ }^{\mathrm{b}}$ Generation: $0=$ parent, $1=$ offspring.
${ }^{\mathrm{c}}$ Ethnicity: $0=$ European American, $1=$ African American.
${ }^{\mathrm{d}}$ Investment in the relationship: 1 = less important, 2 =among 20 most important, $3=$ among 10 most important, $4=$ among 6 most important, $5=$ among 3 most important, $6=$ most important.
${ }^{\mathrm{e}}$ Roles of being parent, spouse, and worker: $1=$ not at all important, $10=$ very important.

${ }^{\mathrm{g}}$ Contact with parent or offspring: $1=$ every day, $2=$ several times a week, $3=$ once a week, $4=$ every 1 to 2 weeks, $5=$ every 2 to 4 weeks, $6=$ once per month; $7=$ less often.

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

models allowed us to treat family as an upper level unit, with parent, offspring, and relationship characteristics as lower level units. Ambivalence scores served as the dependent variable. Lower level social structural variables included participants' age, ethnicity, generation (parent or offspring), dyad (e.g., daughter-mother, son-mother), parental health, and frequency of contact with partner as control variables. By including dyad (mother-son) and participants' generational status (parent), we implicitly included participants' gender. Lower level psychological variables included importance of the relationship, investment in roles, and neuroticism. Because members of the same family might have correlated responses, we included a random term for family effect in the model.

## Results

We started by examining whether individuals' psychological factors are associated with their ambivalence toward parents or offspring. Multilevel models (see Table 3) revealed that individuals who scored higher in neuroticism had higher ambivalence scores. Individuals who were highly invested in a number of roles (spouse, parent, and worker) had lower ambivalence scores. Further, when parents were in poorer health, parents and offspring had higher ambivalence scores. The family variance component was significant, supporting the use of mixed models.

We estimated post hoc analyses to explore these findings. Because offspring have higher neuroticism scores on average than

Table 4. Correlations of Offspring and Parent Ambivalence

|  | 1 | 2 | 3 | 4 |
| :--- | :---: | :---: | :---: | :---: |
| 1. Offspring ambivalence for mothers | - | $0.37^{* *}$ | $0.46^{* *}$ | $0.22^{* *}$ |
| 2. Offspring ambivalence for fathers |  | - | 0.12 | $0.24^{* *}$ |
| 3. Mother ambivalence for offspring |  |  | - | $0.29^{* *}$ |
| 4. Father ambivalence for offspring |  |  |  | - |
| Ambivalence score, $M$ (SD) | 2.40 | 2.19 | 2.25 | 2.39 |
|  | $(1.19)$ | $(1.07)$ | $(1.15)$ | $(0.98)$ |

${ }^{* *} p<.01$.
parents, we estimated the models separately for parents and offspring; significant effects for neuroticism emerged in both models. Further, to understand the association of neuroticism with ambivalence, we examined correlations between ambivalence scores and ratings of the negative dimension of the relationship ( $r=.88$ ) and the positive dimension of the relationship ( $r=-.48$ ). Participants in the lowest quartile of ambivalence scores had high positive scores ( $M=4.70, S D=0.41$ ) and low negative scores ( $M=1.16, S D=0.23$ ). Individuals in the highest quartile of ambivalence scores showed a mixture of positive scores ( $M=$ $3.52, S D=0.73$ ) and negative scores ( $M=2.86, S D=0.60$ ). Thus, low ambivalence was synonymous with high positivity and low negativity. High ambivalence was associated with moderate positive and moderate negative feelings.

To understand the association of parental health with ambivalence, we examined offspring's ambivalence scores for their healthier versus their less healthy parent. Mothers' and fathers' health ratings were the same in 47 families. For the remaining families, offspring's ambivalence scores were lower for their healthier parent, paired $t(110)=2.45, p<.05$.

We reestimated the multilevel models, examining ratings of the three roles separately. We treated individuals who did not have one of the roles (i.e., spouse, parent, or worker) as missing cases. In this analysis, neuroticism and parental health remained significant (as in Table 3), but only investment in the parental role was significantly associated with ambivalence in a negative manner. Role as worker and parent were not significantly associated with ambivalence.

Within-family patterns.-Next, analyses focused on patterns within families. Correlations between parents' and offspring's ambivalence scores are presented in Table 4. Within-family patterns were evident in mothers' and offspring's ambivalence scores ( $r=.46$ ) and mothers' and fathers' ambivalence scores ( $r=.29$ ). Not surprisingly, offspring's ambivalence scores for the two parents also were correlated ( $r=.37$ ).

To further understand whether parents and offspring react to one another's psychological characteristics, we estimated multilevel models examining (a) parents' ambivalence scores predicted by offspring's characteristics and (b) offspring's ambivalence scores predicted by parents' characteristics. Associations between parents' and offspring's ratings on these variables were small, ranging from $r=.12$ to $r=.18$. Our analyses focused on participants' own psychological variables as well as those of their parent or offspring. We did not include structural variables, because there were strong associations between parents' and offspring's ages ( $r=.79$ ) and ethnicity. Thus, the inclusion of partner's age or ethnicity on ambivalence would be redundant with parents' or offspring's own age and ethnicity examined in prior analyses (Table 3). In addition, we

Table 5. Mixed Models Predicting Parents' Ambivalence from Offspring's and Parents' Psychological Variables and Total Investment in Roles Scores

| Predictor | $B$ | $S E_{B}$ | $t$ |
| :---: | :---: | :---: | :---: |
| Intercept | $3.10^{* * *}$ | 0.57 | 5.40 |
| Offspring variables |  |  |  |
| Importance of relationship ${ }^{\text {a }}$ | -0.09 | 0.07 | $-1.21$ |
| Neuroticism | 0.04 | 0.03 | 1.69 |
| Total roles ${ }^{\text {b }}$ | -0.02 * | 0.01 | $-2.13$ |
| Parent variables |  |  |  |
| Importance of relationship ${ }^{\text {a }}$ | -0.01 | 0.07 | -0.09 |
| Neuroticism | 0.05* | 0.03 | 2.10 |
| Total roles ${ }^{\text {b }}$ | -0.01 | 0.01 | -0.49 |
| Family variance component | . 31 | $z=3.15^{* *}$ |  |
| Residual | . 82 |  |  |

Note: Estimated parameters 9, Akaike Information Criteria $=924.40$.
${ }^{\text {a }}$ Investment in the relationship: $1=$ less important, $2=$ among 20 most important, $3=$ among 10 most important, $4=$ among 6 most important, $5=$ among 3 most important, $6=$ most important.
${ }^{\mathrm{b}}$ Total score for investment in three roles-importance of being parent, spouse, and worker: $1=$ not at all important, $10=$ very important.
$* p<.05 ;{ }^{* *} p<.01 ; * * * p<.001$.
estimated analyses with the partner's gender, but there were no significant effects for gender; therefore, we do not include gender in the findings presented here.

Table 5 presents analyses predicting parents' ambivalence from offspring's and parents' psychological variables. Offspring's total investment in roles was associated with parents' ambivalence; when offspring were more invested in other roles, parents were less ambivalent about the relationship. As well, parents' neuroticism was significantly associated with parental ambivalence, and offspring's neuroticism tended toward association with parental ambivalence ( $p<.10$ ).

We also examined ratings of the three roles separately. As one can see in Table 6, parents had lower ambivalence scores when their offspring rated them as more important in their social network as well as when offspring were more invested in the spousal role; parents had higher ambivalence scores when their offspring scored higher on neuroticism.

To explore these findings, we estimated post hoc tests including possible moderator effects such as frequency of contact and parental neuroticism. These tests allowed us to examine issues such as whether having frequent contact with a more neurotic son or daughter generates greater ambivalence. These models were not significant. We also examined indicators of offspring's social achievement, such as years of education, marital status (married vs not married), work status (work for pay vs not work for pay), and presence of children, on parents' ambivalence. These models, too, were not significant.

Models predicting offspring's ambivalence from parental characteristics did not reveal significant associations. We do not present these findings here.

## Discussion

There is a large literature pertaining to intergenerational ties in the field of sociology (see Bengtson, 2001, for a review). Thus, much of what we know about relationships between parents and

Table 6. Mixed Models Predicting Parents' Ambivalence From Offspring's and Parents' Psychological Variables and Separate Investment in Role Scores

| Predictor | $B$ | $S E_{B}$ | $t$ |
| :---: | :---: | :---: | :---: |
| Intercept | $5.27 * * *$ | 1.23 | 4.28 |
| Offspring variables |  |  |  |
| Importance of relationship ${ }^{\text {a }}$ | $-0.24 *$ | 0.11 | -2.15 |
| Neuroticism | 0.08* | 0.04 | 2.33 |
| Parental role ${ }^{\text {b }}$ | -0.03 | 0.07 | -0.39 |
| Worker role ${ }^{\text {b }}$ | 0.04 | 0.05 | 0.71 |
| Spouse role ${ }^{\text {b }}$ | -0.19 * | 0.09 | -2.22 |
| Parent variables |  |  |  |
| Importance of relationship ${ }^{\text {a }}$ | -0.06 | 0.09 | $-0.63$ |
| Neuroticism | 0.06 | 0.04 | 1.57 |
| Parental role ${ }^{\text {b }}$ | -0.10 | 0.07 | -1.23 |
| Worker role ${ }^{\text {b }}$ | 0.00 | 0.04 | 0.06 |
| Spouse role ${ }^{\text {b }}$ | 0.06 | 0.04 | 1.42 |
| Family variance component | . 35 | $z=2.65^{* *}$ |  |
| Residual | . 78 |  |  |

Note: Estimated parameters 12, Akaike Information Criteria $=550.40$.
${ }^{\text {a }}$ Investment in the relationship: $1=$ less important, $2=$ among 20 most important, $3=$ among 10 most important, $4=$ among 6 most important, $5=$ among 3 most important, $6=$ most important.
${ }^{\mathrm{b}}$ Importance of being parent, spouse, and worker: $1=$ not at all important, $10=$ very important .
$* p<.05 ; * * p<.01 ; * * * p<.001$.
offspring pertains to social structural variables such as age, gender, and generational status (Rossi \& Rossi, 1990; Shapiro, 2004; Silverstein \& Bengtson, 1997). Findings from this study suggest that social structural variables may serve as marker variables for underlying psychological processes. For example, adults who occupy several roles (parent, spouse, and worker) experience less intergenerational ambivalence if they are highly invested in these roles. Further, individuals within a given social structure (e.g., gender) may vary in their experiences of ambivalence as a result of individual differences in psychological predispositions (e.g., neuroticism). In sum, although social structural contexts can contribute to intergenerational ambivalence through unclear norms, individuals' beliefs and feelings about those contexts and relationships influence their personal experience of intergenerational ambivalence.

## Psychological Underpinnings of Intergenerational Ambivalence

In this study, we considered individuals' investment in competing roles, the importance of the parent-offspring relationship, and the personality trait of neuroticism. Investment in competing roles and the relative importance of the relationship provide information about the context in which intergenerational ambivalence arises; these variables assess individuals' representation of the primacy of this relationship within their lives. Neuroticism represents general predispositions for negative feelings, or psychological properties that individuals may bring to their relationships. Both types of psychological variables were associated with intergenerational ambivalence.

Competing roles and relative importance of the relationship.Psychological perceptions of the salience of parent or offspring
contributed to the experience of ambivalence, but the findings contradicted expectations. We initially predicted that individuals who valued their roles as worker, parent, and spouse would feel more ambivalent in their efforts to retain connections with their parents or offspring. Instead, we found that investment in other roles was associated with lower ambivalence scores.

Several theories shed light on these findings. In the caregiving literature, researchers have posited energy expansion with multiple roles (Martire et al., 2000). According to this perspective, individuals who value multiple roles experience increased well-being because rewards across roles complement one another. Thus, individuals who are busy in a variety of contexts may feel more positive about their parents or grown offspring and focus less attention on their faults. Findings are also consistent with theories suggesting that autonomous functioning in the parent-offspring tie deters ambivalence (Fingerman, 2001; Lang \& Schütze, 2002; Pillemer \& Suitor, 2005). When parents and offspring value other roles, they indicate that they have outlets independent of this relationship. These roles may represent arenas in which they manifest autonomy.

Neuroticism and negativity.-Individuals' general predispositions toward negativity (i.e., neuroticism) contributed to intergenerational ambivalence. This finding is not surprising, given the literature suggesting that neuroticism contributes to poorer quality (Atkinson \& Violato, 1994; Gunthert et al., 1999) and more ambivalent relationships (Carver, 1997). Further, parents experienced greater ambivalence when their offspring scored higher on neuroticism. The directionality of these effects may be complex, however, given the long history of the parent-offspring relationship. Parents and children may influence one another's personality when children are young and reside at home. Longitudinal research might investigate associations between poor-quality relationships in childhood and subsequent neuroticism in adulthood.

In addition, low ambivalence involved the presence of positive sentiments and the absence of negative sentiments. High ambivalence involved moderate to high positive and negative feelings in this study. Ambivalence is not merely the presence of negative sentiments in this tie, but rather a mixture of sentiments. Nevertheless, measurement biases give the sense that ambivalent relationships are distinguished by the presence of negative emotions. It is difficult to assess variability in positive aspects of parent-offspring ties because adults lean toward high positive ratings of this tie. Indeed, elsewhere, approximately half of parents and offspring classified their ties as solely positive, whereas the other half classified their ties as both positive and problematic (i.e., ambivalent; Fingerman, Hay, et al., 2004). Generally negative parent-offspring relationships presumably exist, but individuals in these relationships may disband their ties in adulthood or refrain from participating in studies of intergenerational ties. Future research might focus on understanding negative feelings in ambivalent parent-offspring relationships.

## Parents' and Offspring's Characteristics and the Other Party's Ambivalence

We assessed intergenerational ambivalence from the perspective of parents and offspring within the same family. This
approach allowed us to consider associations between different parties' psychological variables and ambivalence. Findings pertaining to interpersonal processes raise as many questions as they answer.

Within families, mothers and their offspring experience the greatest similarity of ambivalence, more so than mothers and fathers (who responded to the same target offspring). These findings suggest that positive and negative emotional contagion or communication between mothers and offspring is greater than that between fathers and offspring in adulthood, consistent with earlier stages in the relationship (Collins \& Russell, 1991; Seiffge-Krenke, 1999).

Furthermore, offspring's psychological characteristics may contribute to their parents' experience of ambivalence. Findings varied when we examined parental ambivalence as a function of offspring's total investment in roles versus when we examined the same model but included investment in each role separately. For offspring who rated all three roles (worker, spouse, and parent), parents experienced less ambivalence when their offspring valued the parent-offspring relationship more, valued their own role as a romantic partner more, and scored lower in neuroticism.

These variables may represent distinct facets of the relationship. Elsewhere, we found that older mothers felt better about their relationships with their daughters when the daughters valued their relationships more (Fingerman, 2001), and findings are consistent in this study. Further, parents may experience less ambivalence when their children have an easy interaction style (i.e., low in neuroticism) and have achieved normative social markers of adulthood. Prior studies have also linked parental ambivalence with perceptions of their offspring's expected social achievements (e.g., Pillemer \& Suitor, 2002). Parents may worry more about a troubled or neurotic offspring (Hay, 2004). Finally, an offspring's having a strong tie to a spouse may indicate that the offspring has achieved a normative marker of adulthood, a good marriage. Alternately, the offspring's strong tie to a spouse may generate better relationships with the parents because children-in-law affect family relationships (Fingerman, 2004).

Nonetheless, the fact that the mothers' and fathers' ambivalence scores were only moderately correlated suggests that offspring's traits and accomplishments are not fully responsible for parental ambivalence. If offspring's characteristics fully accounted for parental ambivalence, we might expect both parents to respond in a more similar fashion.

It is unclear why parental psychological characteristics were not associated with offspring's ambivalence. Offspring might be sensitive to other parental psychological factors that we did not examine here. For example, offspring may be sensitive to parental favoritism of siblings (Suitor \& Pillemer, 2000) or parents' memories of the early relationship (Shaw, Krause, Chatters, Connell, \& Ingersoll-Dayton, 2004). As we discuss next, offspring were sensitive to their parents' health status.

## Comparisons With Other Studies

As in the study by Willson and colleagues (2003), we found that poorer parental health was associated with greater ambivalence. A recent study of parent-offspring relationships when parents experience physical declines in late life revealed similar findings (Fingerman, Hay, Kamp Dush, Cichy, \& Hosterman,
2005); parents and offspring were more likely to describe their relationship as growing worse if parents incurred difficulties in daily functioning. Future studies should examine whether personality and investment in the relationship explain variability in individuals' reactions to parental aging.

This study also raises questions about social structural variables examined elsewhere. We did not find the gender differences in ambivalence observed by Willson and associates (2003). Regional differences may help explain the distinct findings of the studies. Willson and associates used data from a longitudinal study of rural families who resided in Iowa in the 1980s when they entered the study. Other studies using these Iowa data have noted that farm families show gender distinctions, with patrilineal preferences (e.g., King \& Elder, 1995). Participants in the present study resided in the Philadelphia area. The lack of gender differences is consistent with studies of intergenerational ties in urban areas (e.g., Logan \& Spitze, 1996). In contexts where families show stronger differential treatment by gender (such as rural Iowa), ambivalence may vary by gender, but in contexts where differential treatment by gender is less strong (as in urban areas), gender differences may be less evident.

In sum, this study suggests that psychological aspects of parent-offspring ties contribute to intergenerational ambivalence. Intergenerational ambivalence reflects predispositions that adults and parents bring to their relationship, the importance of this relationship relative to other aspects of their lives, and interpersonal processes between the two parties. Parents, in particular, may be influenced by their offspring's achievements and views of the relationship, even after the offspring are grown. Future research should further examine the effects of psychological variables on qualities of relationships between adults and their parents.

## Acknowledgments

This study was supported by Grant R01AG17916 from the National Institute of Aging, "Problems Between Parents and Offspring in Adulthood." We appreciate the efforts of Ellin Spector, Carolyn Rahe, and Ann Shinefield, who managed the field study and data collection through the Institute for Survey Research at Temple University. We are grateful to Miriam Moss and Sheryl Potashnik for assistance with recruitment. Graciela Espinosa-Hernandez and Shelley Hosterman provided invaluable assistance on all aspects of this project. Lindsay Pitzer provided assistance with analyses and tables and read drafts of the manuscript. Lauren McIntyre, Michael Rovine, and Martin Gonzalo provided support for the statistical models.

## References

Akiyama, H., Antonucci, T., Takahashi, K., \& Langfahl, E. S. (2003). Negative interactions in close relationships across the life span. Journal of Gerontology: Psychological Sciences, 58B, P70-P79.
Atkinson, M., \& Violato, C. (1994). Neuroticism and coping with anger: The transituational consistency of coping responses. Personality and Individual Differences, 17, 769-782.
Bassili, J. N. (1996). Meta-judgmental versus operative indexes of psychological attributes: The case of measure of attitude strength. Journal of Personality and Social Psychology, 71, 637-653.
Bengston, V. L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bonds. Journal of Marriage and the Family, 63, 1-16.
Bengtson, V. L., \& Kuypers, J. A. (1971). Generational difference and the developmental stake. Aging and Human Development, 2, 249-260.
Carstensen, L. L., Issacowitz, D. M., \& Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. American Psychologist, 54, 165-181.

Carver, C. S. (1997). Adult attachment and personality: Converging evidence and a new measure. Personality \& Social Psychology Bulletin, 23, 865-883.
Collins, W. A., \& Russell, G. (1991). Mother-child and father-child relationships in middle childhood and adolescence: A developmental analysis. Developmental Review, 11, 99-136.
Connidis, I. A., \& McMullin, J. A. (2002). Ambivalence, family ties, and doing sociology. Journal of Marriage and the Family, 64, 594-602.
Dewit, D. J., Wister, A. V., \& Burch, T. K. (1988). Physical distance and social contact between elders and their adult children. Research on Aging, 10, 56-80.
Emmons, R. A., \& Colby, P. M. (1995). Emotional conflict and well-being: Relation to perceived availability, daily utilization, and observer reports of social support. Journal of Personality and Social Psychology, 68, 947-959.
Erber, J. T., Szuchman, L. T., \& Prager, I. G. (2001). Ain't misbehavin': The effects of age and intentionality on judgments about misconduct. Psychology and Aging, 16, 85-95.
Eysenck, S. B. G., Eysenck, H. J., \& Barrett, P. (1985). A revised version of the Psychoticism Scale. Personality and Individual Differences, 6, 21-29.
Fingerman, K. L. (1996). Sources of tension in the aging mother and adult daughter relationship. Psychology and Aging, 11, 591-606.
Fingerman, K. L. (2000). "We had a nice little chat": Age and generational differences in mothers' and daughters' descriptions of enjoyable visits. Journal of Gerontology: Psychological Sciences, 55B, P95-P106.
Fingerman, K. L. (2001). Aging mothers and their adult daughters: A study in mixed emotions. New York: Springer.
Fingerman, K. L. (2004). The role of offspring and children-in-law in grandparents' relationships with grandchildren. Journal of Family Issues, 25, 1026-1049.
Fingerman, K. L., Hay, E. L., \& Birditt, K. S. (2004). The best of ties, the worst of ties: Close, problematic, and ambivalent relationships across the lifespan. Journal of Marriage and the Family, 66, 792-808.
Fingerman, K. L., Hay, E. L., Kamp Dush, C. M., Cichy, K., \& Hosterman, S. (2005). Role revisions: Parents' and offspring's perceptions of change and continuity in later life. Manuscript under review.
Fingerman, K. L., Lefkowitz, E. S., \& Hay, E. L., (2004). The adult family study. West Lafayette, IN: Purdue University.
Fischer, L. R. (1981). Transitions in the mother-daughter relationship. Journal of Marriage and the Family, 45, 187-192.
Fischer, L. R. (1986). Linked lives: Adult daughters and their mothers. Newbury Park, CA: Sage.
Gotlib, I., \& Beatty, M. E. (1985). Negative responses to depression: The role of attributional style. Cognitive Therapy Research, 9, 91-103.
Greenwell, L., \& Bengtson, F. L. (1997). Geographic distance and contact between middle-aged children and their parents: The effects of social class over 20 years. Journal of Gerontology: Social Sciences, 52B, S13-S26.
Gunthert, K. C., Cohen, L. H., \& Armeli, S. (1999). The role of neuroticism in daily stress and coping. Journal of Personality and Social Psychology, 77, 1087-1100.
Gurin, G., Veroff, J., \& Feld, S. (1960). Americans view their mental health: A nationwide interview survey. New York: Basic Books.
Hay, E. L. (2004). The experience of worry in parent/offspring relationships. Unpublished doctoral dissertation, Pennsylvania State University, University Park.
Idler, E. L., \& Kasl, S. (1991). Health perceptions and survival: Do global evaluations of health status really predict mortality? Journal of Gerontology: Social Sciences, 46, S55-S65.
Kaplan, K. J. (1972). On the ambivalence-indifference problem in attitude theory and measurement: A suggested modification of the semantic differential technique. Psychological Bulletin, 77, 361-372.
King, V., \& Elder, G. H. (1995). American children view their grandparents: Linked lives across three rural generations. Journal of Marriage and the Family, 57, 165-178.
Kokkonen, M., \& Pulkkinen, L. (2001). Extraversion and neuroticism as antecedents of emotion regulation and dysregulation in adulthood. European Journal of Personality, 15, 407-424.
Lang, F., \& Schütze, Y. (2002). Adult children's supportive behaviors and older parents' subjective well-being-A developmental perspective on intergenerational relationships. Journal of Social Issues, 58, 661-681.
Lazarus, R. S. (1991). Goal incongruent (negative) emotions. In R. S. Lazarus (Ed.), Emotion and adaptation (pp. 217-263). New York: Oxford University Press.

Lefkowitz, E. S., \& Fingerman, K. L. (2003). Positive and negative emotional feelings and behaviors in mother-daughter ties in late life. Journal of Family Psychology, 17, 607-617.
Littell, R. C., Milliken, G. A., Stroup, W. W., \& Wolfinger, R. D. (1996). SAS system for mixed models. North Carolina: SAS Institute, Inc.
Logan, J. R., \& Spitze G. D. (1996). Family ties: Enduring relations between parents and their grown children. Philadelphia: Temple University Press.
Luescher, K., \& Pillemer, K. (1998). Intergenerational ambivalence: A new approach to the study of parent-child relations in later life. Journal of Marriage and the Family, 60, 413-425.
Martini, T. S., Grusec, J. E., \& Bernardini, S. C. (2001). Effects of interpersonal control, perspective taking, and attributions on older mothers' and daughters' satisfaction with their helping relationships. Journal of Family Psychology, 15, 688-705.
Martire, L. M., Stephens, M. A. P., \& Townsend, A. L. (2000). Centrality of women's multiple roles: Beneficial and detrimental consequences for psychological well-being. Psychology and Aging, 15, 148-156.
Pennsylvania Data Center. (2004). Philadelphia demographics. Retrieved March 15, 2005, from http://216.146.231.61/Demographics.htm
Pillemer, K., \& Suitor, J. J. (2002). Explaining mothers' ambivalence toward their adult children. Journal of Marriage and the Family, 64, 602-613.
Pillemer, K., \& Suitor, J. J. (2005). Ambivalence and the study of intergenerational relations. In M. Silverstein (Ed.), Intergenerational relations across time and place (pp. 3-54). New York: Springer.
Priester, J. R., \& Petty, R. E. (2001). Extending the bases of subjective attitudinal ambivalence. Journal of Personality and Social Psychology, 80, 19-34.
Rossi, A. S., \& Rossi, P. H. (1990). Of human bonding: Parent-child relations across the life course. New York: de Gruyter.
Rovine, M. J., von Eye, A., \& Wood, P. (1988). The effect of low covariate criterion correlations on the analysis-of-covariance. In E. Wegmen (Ed.), Computer science and statistics: Proceedings of the 20th symposium of the interface (pp. 500-504). Alexandria, VA: American Statistical Association.
Seiffge-Krenke, I. (1999). Families with daughters, families with sons: Different challenges for family relationships and marital satisfaction? Journal of Youth and Adolescence, 28, 325-342.
Shapiro, A. (2004). Revisiting the generation gap: Exploring the relationships of parent/adult-child dyads. International Journal of Aging and Human Development, 58, 127-146.

Shaw, B. A., Krause, N., Chatters, L. M., Connell, C. M., \& Ingersoll-Dayton, B. (2004). Emotional support from parents early in life, aging, and health. Psychology and Aging, 19, 4-12.
Silverstein, M., \& Bengston, V. L. (1997). Intergenerational solidarity and the structure of adult child-parent relationships in American families. American Journal of Sociology, 103, 429-460.
Singer, J. D. (1998). Using SAS PROC MIXED to fit multilevel models, hierarchical models, and individual growth models. Journal of Educational and Behavioral Statistics, 23, 323-355.
Spitze, G., \& Gallant, M. P. (2004). The bitter with the sweet: Older adults’ strategies for handling ambivalence with their adult children. Research on Aging, 26, 387-412.
Suitor, J. J., \& Pillemer, K. (2000). "Did mom really love you best?": Exploring the role of within-family differences in developmental histories on parental favoritism. Motivation and Emotion, 24, 104-119.
Thompson, M. M., Zanna, M. P., \& Griffin, D. W. (1995). Let's not be indifferent about (attitudinal) ambivalence. In R. E. Petty \& J. A. Krosnick (Eds.), Attitude strength: Antecedents and consequences (pp. 361-385). Mahwah: NJ: Erlbaum.
Uchino, B. N., Holt-Lunstad, J., Uno, D., \& Flinders, J. B. (2001). Heterogeneity in the social networks of young and older adults: Prediction of mental health and cardiovascular reactivity during acute stress. Journal of Behavioral Medicine, 24, 361-382.
Umberson, D. (1992). Relationships between adult children and their parents: Psychological consequences for both generations. Journal of Marriage and the Family, 54, 664-674.
Weigert, A. J. (1991). Mixed emotions: Certain steps toward understanding ambivalence. New York: State University of New York Press.
Weisberg, H. I. (1979). Statistical adjustments and uncontrolled studies. Psychological Bulletin, 86, 1149-1164.
Willson, A. E., Shuey, K. M., \& Elder, G. H. (2003). Ambivalence in the relationship of adult children to aging parents and in-laws. Journal of Marriage and the Family, 65, 1055-1072.

Received April 20, 2005
Accepted October 19, 2005
Decision Editor: Thomas M. Hess, PhD

