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Do Positive Feelings Hurt? Disaggregating Positive and Negative Components of Intergenerational Ambivalence

Ambivalence has become an important conceptual development in the study of parent–adult child relations, with evidence highlighting that intergenerational relationships are characterized by a mix of positive and negative components. Recent studies have shown that ambivalence has detrimental consequences for both parents' and adult children's psychological well-being. The underlying assumption of this line of research is that psychological distress results from holding simultaneous positive and negative feelings toward a parent or child. The authors question this assumption and explore alternative interpretations by disaggregating the positive and negative dimensions commonly used to create indirect measures of intergenerational ambivalence. Data for the analyses were collected from 254 older mothers and a randomly selected adult child from each of the families. The findings suggest that the

negative component is primarily responsible for the association between indirect measures of ambivalence and psychological well-being. Implications of these findings for the study of intergenerational ambivalence are discussed.

Two overarching themes have guided theory and research on intergenerational relations across the past three decades. The first theme emphasizes family solidarity and highlights the role of adult children and older parents as primary sources of emotional and instrumental support for one another (Bengtson, Gans, Putney, & Silverstein, 2009; Silverstein & Bengtson, 1997). In contrast, the second theme focuses on the potential for conflict and estrangement between older parents and their adult children (Suito, Sechrist, Gilligan, & Pillemer, 2011). The concept of *intergenerational ambivalence* was developed to integrate these positive and negative dimensions of parent–adult child relations (Lüscher & Pillemer, 1998; Pillemer & Lüscher, 2004).

A hallmark of ambivalence theory is the assertion that relationships between older parents and adult children are characteristically ambivalent; that is, rather than being based uniformly in either solidarity or conflict, intergenerational relationships involve a fundamental interplay between positive and negative elements (Pillemer & Lüscher, 2004). The theory proposes that family relationships are characterized by such

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simultaneous positive and negative feelings in part because of structural contradictions inherent in family roles (Connidis & McMullin, 2002; Pillemer & Suito, 2005). In research conducted over the past decade, studies have confirmed that ambivalence (measured in a variety of ways) is indeed a common characteristic of parent-child relations in later life (Fingerman, Pitzer, Lefkowitz, Birditt, & Mroczek, 2008; Kiecolt, Blieszner, & Salva, 2011; Lowenstein, 2007; Pillemer et al., 2007; Pillemer, Munsch, Fuller-Rowell, Riffin, & Suito, 2012; Suito, Gilligan, & Pillemer, 2011; Wilson, Shuey, Elder, & Wickrama, 2006).

Most research to date has focused on demonstrating the extent of intergenerational ambivalence and on establishing potential predictors of ambivalent feelings (cf. Birditt, Fingerman, & Zarit, 2010; Pillemer et al., 2007, 2012; Wilson et al., 2006). Recently, scholars have begun to address an additional question: Does ambivalence in older parent-adult child relationships affect individual outcomes? On one hand, some scholars (Lüscher, 2004; Lüscher & Pillemer, 1998) have postulated that ambivalence is so fundamental to intergenerational relations that it may be a normative experience rather than an upsetting one. Furthermore, some theories of sociological ambivalence suggest that mixed feelings provide greater freedom for individuals and expand opportunities for action (Coser, 1966) rather than creating distress.

In contrast, empirical evidence has demonstrated that ambivalent feelings toward one's parents or adult children have detrimental, rather than positive or neutral, consequences on well-being. Specifically, recent studies have found higher ambivalence scores to be associated with greater psychological distress among older parents and their offspring (Fingerman et al., 2008; Kiecolt et al., 2011; Suito, Gilligan, & Pillemer, 2011).

One question that has been raised regarding the association between intergenerational ambivalence and psychological well-being is whether this finding is actually due to the presence of contradictory feelings (Fingerman et al., 2008; Fingerman, Sechrist, & Birditt, 2012; Suito, Gilligan, & Pillemer, 2011). In this article, we explore whether, alternatively, the association might be explained primarily by the negative dimension of ambivalence, rather than the combination of negative and positive dimensions. To examine this question, we use data

that were collected from 254 older mothers and a randomly selected adult child from each of the same families as part of the Within-Family Differences Study (WFDS; <http://web.ics.purdue.edu/~jsuito/wthin-family-differences-study/>).

The WFDS provides an opportunity to test alternative explanations for the association between intergenerational ambivalence and psychological well-being found by previous investigations (Fingerman et al., 2008; Kiecolt et al., 2011; Suito, Gilligan, & Pillemer, 2011) because it shares two central design elements with this set of studies. The first common element is that the calculation of ambivalence is based on the *Griffin measure*, developed by Thompson, Zanna, and Griffin (1995). This indirect measure uses individuals' independent positive and negative assessments of their relationships to create a numeric value that represents the balance between these two sentiments. Using this method, a high ambivalence score occurs only when similarly high levels of both positive and negative feelings are present.

The second common design element is that, consistent with the preponderance of research on intergenerational ambivalence, this set of studies measures positive and negative dimensions of the relationship using a combination of items that capture affective, perceptual, and behavioral components (Birditt et al., 2010; Fingerman & Hay, 2004; Fingerman, Hay, & Birditt, 2004; Ha & Ingersoll-Dayton, 2008; Kiecolt et al., 2011; Silverstein, Gans, Lowenstein, Giarrusso, & Bengtson, 2010; Wilson et al., 2006; Wilson, Shuey, & Elder, 2003). These items, which emphasize some combination of feelings of emotional closeness, expressive support, and pleasant interactions as positive dimensions of the relationship and perceptions of conflict, criticism, and high demands as negative dimensions, are commonly used in the literature on family relations to assess positive and negative relationship quality (Fingerman et al., 2008; Fingerman, Chen, Hay, Cichy, & Lefkowitz, 2006; Lendon, Silverstein, & Giarrusso, 2014; Rossi & Rossi, 1990; Silverstein et al., 2010; Suito, Gilligan, & Pillemer, 2011).

Thus, we were able to disaggregate components common to all three studies of intergenerational ambivalence and psychological well-being (Fingerman et al., 2008, 2012; Suito, Gilligan, & Pillemer, 2011) to test alternative explanations for the association between these constructs.

ALTERNATIVE EXPLANATIONS FOR THE ASSOCIATION BETWEEN AMBIVALENCE AND PSYCHOLOGICAL WELL-BEING

We propose three specific alternative explanations for the detrimental effects of ambivalence on parents' and children's psychological well-being. First, consistent with theories of ambivalence, the effects of negative aspects of the parent-child relationship may be exacerbated by the presence of positive aspects. Second, the effects of negative feelings may be unaffected by the presence of positive feelings. Third, positive feelings may buffer the effects of negative feelings (Lin, Dean, & Ensel, 1986; Okun & Keith, 1998; Walen & Lachman, 2000), contrary to ambivalence theories that claim that the presence of positive feelings exacerbates the effects of negative feelings. We discuss each of these alternatives in detail below.

Presence of Contradictory Feelings

Classic approaches to ambivalence assume that the positive component of ambivalence exacerbates the harmful effects of negative feelings. Scholars have proposed several possible mechanisms for this effect (Fingerman et al., 2008; Lüscher & Pillemer, 1998; Smelser, 1998; Uchino, Holt-Lunstad, Smith, & Bloor, 2004; van Gaalen, Dykstra, & Komter, 2010), two of which we propose are especially salient for understanding the consequences of the simultaneous presence of positive and negative feelings in the context of intergenerational relations. First, unlike ties that can be terminated relatively easily if they become problematic, parents and children are constrained by strong familistic norms to continue to engage in high levels of interaction and exchange. Second, parents and children may harbor guilt for feeling negativity in a relationship in which highly positive feelings are normative.

On these bases, we hypothesized that positive feelings, in the presence of negative feelings, would increase the harmful effects of negative feelings on psychological well-being for both mothers and adult children.

Salience of Negative Feelings

Alternatively, the literature on negative interactions in social relationships can be used to argue that the harmful effects of ambivalence on

psychological well-being may only reflect the negative aspects of the relationship. Research has shown that negative interactions typically have a more detrimental effect on psychological well-being than do positive interactions with the same role partner (Kiecolt et al., 2011; Rook, 1984, 2001; Schuster, Kessler, & Aseltine, 1990), suggesting that the negative dimension of ambivalence may account for the association between ambivalence and well-being. Furthermore, recent evidence indicates that such negative interactions have more detrimental effects on psychological well-being than do ambivalent interactions (Rook, Luong, Sorkin, Newsom, & Krause, 2012). Taken together, this evidence suggests that negative feelings, rather than the combination of positive and negative feelings, may be the driving force behind the effects of intergenerational ambivalence on psychological well-being. Thus, we propose the following alternative hypothesis: The effect of negative feelings regarding the parent-child relationship on well-being will not be affected by the presence of positive feelings regarding the relationship.

Positive Feelings as a Buffer

Finally, in contrast to theories of ambivalence, the literature on social support suggests that positive feelings may reduce the detrimental effects of negative feelings and interactions (Lin et al., 1986; Okun & Keith, 1998; Walen & Lachman, 2000). In particular, positive relationship quality has been found to create a buffering effect, in particular in the case of close ties (Rook, 2001; Schuster et al., 1990). These findings suggest that mothers' and adult children's positive feelings toward one another may protect against the harmful effects of negative feelings rather than exacerbate them, as theories of ambivalence argue. We therefore propose an additional alternative hypothesis: The addition of positive feelings regarding the parent-child relationship will protect against the harmful effects of negative feelings on psychological well-being.

Generational Position

Up to this point, we have not considered the ways in which the association between ambivalence and psychological well-being may differ for parents than for adult children. Beginning with Bengtson and Kuypers's (1971) classic

article on the generational stake, research has demonstrated that parents tend to report greater closeness, cohesion, and harmony in their relationships with their adult children than do their offspring (Giarrusso, Feng, & Bengtson, 2004; Rossi & Rossi, 1990; Shapiro, 2004). This argument suggests that parents would be less willing to report ambivalent feelings, a pattern that has been confirmed by recent research (Lendon et al., 2014; Sutor, Gilligan, & Pillemer, 2011). However, such differences do not appear to necessarily translate into generational differences in the effects of ambivalence on psychological well-being. In the only two studies to have examined this issue, Sutor and colleagues (Sutor, Gilligan, & Pillemer, 2011) reported an inconsistent pattern of differences between the effects of self-reported ambivalence on mothers and adult children, whereas Fingerman and colleagues (2008) found no generational differences between the effects of ambivalence on psychological well-being. Thus, there is not sufficient evidence to suggest a particular pattern of generational differences in the hypotheses we tested. Nevertheless, the consistent patterns of generational differences found in the broader literature on parent-child relations (Sutor, Sechrist, et al., 2011), as well as in the prevalence of ambivalence (Fingerman et al., 2008; Sutor, Gilligan, & Pillemer, 2011), calls for taking generational position into consideration in our analyses.

Analytic Plan

We began the analysis by conducting bivariate correlations among depressive symptom scores, positive and negative components of ambivalence, and the Griffin measure that was created using the same positive and negative measures.

We then tested the three hypotheses introduced above by conducting a series of regression analyses. In the first model, we regressed depressive symptoms onto the positive and negative component of ambivalence in the same equation. In the second model, we introduced an interaction term (positive \times negative components). This allowed us to test all three of our central hypotheses—specifically, whether the presence of positive feelings exacerbated, buffered, or had no effects on the impact of negative feelings on well-being.

In using an interaction term, we departed from most recent research on intergenerational ambivalence, which has used the Griffin indirect

measure developed by Thompson et al. (1995). We acknowledge that an interaction term is not equivalent to the Griffin measure in that the Griffin takes into consideration the similarity and intensity of the positive and negative components (Thompson et al., 1995). Furthermore, the Griffin measure produces high ambivalence scores only when the positive and negative components are both strong. In contrast, when using an interaction term high ambivalence scores can occur either because the negative and the positive components are both high or because one component is high and the other is moderate. However, it is necessary to use an interaction term to test the relative effects of the positive and negative dimensions that compose the Griffin measure because the measure cannot be disaggregated to test the unique effects of these two dimensions.

There is, however, an alternative approach to testing the ambivalence hypothesis that allows us to disaggregate the positive and negative components without introducing the limitations imposed by using an interaction term. On the basis of the classic conceptualization and operationalization of ambivalence, high levels of this construct occur only when strong negative *and* positive feelings are present. By selecting a subsample of individuals with high negative feelings and including only positive feelings in the regression model, we can allow positive feelings to vary while holding negative feelings constant. Thus, we can assess whether positive feelings have an effect on psychological well-being in the context of high negative feelings. This allows us to test the ambivalence hypothesis because what distinguishes the Griffin measure from negative feelings is, specifically, the presence of positive feelings. Therefore, by using this approach we can test whether that Griffin measure has negative effects on psychological well-being over and above the effect of the high negative feelings.

Finally, given the prominence of the Griffin measure in the study of intergenerational ambivalence, it is important to make comparisons between the effects of the Griffin measure and both positive and negative feelings. Thus, we conducted a set of regression analyses in which we included the Griffin measure in the equation, rather than the separate positive and negative components of ambivalence. This allowed us to compare the variance explained using this standard measure of ambivalence and

the separate positive and negative items that compose it.

Taken together, by using the set of approaches just described we were able to test our alternative hypotheses using conceptually similar but analytically distinct analyses.

METHOD

The data used in the present analyses were collected as part of the WFDS. The design of the WFDS involved selecting a sample of mothers 65–75 years of age with at least two living adult children and collecting data from mothers regarding each of their children. A further decision was to recruit only community-dwelling mothers to reduce the likelihood that the women would be in need of extensive assistance, thus allowing us to study relationships outside of the context of caregiving. The WFDS began in 2001, with interviews of mothers taking place between 2001 and 2003; the original study was expanded to include a second wave of data collection beginning in 2008. The variables of central interest in the present article were collected at Time 2 (T2), most of which were not available in the Time 1 (T1) data.

Sampling

Suitor and Pillemer (2006) used Massachusetts city and town lists as the source of the original WFDS sample. With the assistance of the Center for Survey Research at the University of Massachusetts, Boston, Suitor and Pillemer drew a probability sample of women ages 65–75 with two or more children from the greater Boston area. (For a more detailed description of the WFDS design, see Suitor & Pillemer, 2006, and Suitor, Gilligan, & Pillemer, 2011, where portions of this section have been published previously.) The T1 sample consisted of 566 mothers, which represented 61% of those who were eligible for participation, a rate that is comparable to that of similar survey strategies in the past decade (Dixon & Tucker, 2010; Wright & Marsden, 2010).

Although Boston has been the site of prominent studies of intergenerational relations (Pillemer & Finkelhor, 1988; Rossi & Rossi, 1990), we recognize that such regionality might introduce limitations. Our concern regarding this issue is reduced by an investigation that used data from the National Survey of Families and

Households that found that the only significant regional differences in intergenerational relations were between Southern and all other families (Sechrist, Suitor, Henderson, Cline, & Steinhour, 2007). These findings suggest that region plays a relatively small role in family processes in the middle and later years.

For the follow-up study, Suitor and Pillemer (2006), with the assistance of the Center for Survey Research, attempted to contact each mother who participated in the original study. Data collection occurred between 2008 and 2010. In the second wave of the study, 420 mothers were interviewed, resulting in a response rate of approximately 86%, taking into consideration both valid responses and deaths among mothers. Of the 146 mothers who participated at only T1, 78 had died between waves, 19 were too ill to be interviewed, 33 refused, and 16 could not be reached. Thus, the 420 mothers represent 86% of those who were living at T2. Comparison of the T1 and T2 samples revealed that the respondents differed on subjective health, educational attainment, marital status, and race. Mothers who were not interviewed at T2 were less healthy, less educated, and less likely to have been married at T1; they were also more likely to be Black. Comparisons between the mothers alive at T2 who did and did not participate revealed that they differed only on education and subjective health.

After the interview, mothers were asked for contact information for their adult children; 81% of the mothers provided contact information for their children, a rate somewhat higher than typically found in studies of multiple generations (Kalmijn & Liefbroer, 2011; Rossi & Rossi, 1990). Seventy-five percent of the adult children for whom we had contact information agreed to participate, resulting in a final sample of 835 children nested within 277 families. For the present analyses, we used the subsample of 254 mothers in which at least one adult child participated in the study at T2 and for which there were no missing data on any of the variables of central interest in the study. Analyses comparing mothers with no participating children and mothers who had at least one participating child revealed no significant differences between these two groups in terms of race, marital status, education, age, or number of children.

Because we wanted to compare these processes in both generations, we also used a subsample of adult children in the same families.

The research question in the present article did not involve within-family processes; thus, we chose to randomly select a child from the adult child respondents in each family. This allowed us to use multivariate statistical approaches relying on ordinary least squares regression rather than multilevel models, which are not appropriate for the questions at hand. Furthermore, we believe that comparisons between the effects of positive and negative components of ambivalence can best be made when the mothers and children are reporting on the same relationships.

Analyses comparing children who were and were not interviewed indicated that daughters, married respondents, and those with higher education were slightly more likely to participate, which is consistent with other studies that have examined multiple generations (Kalmijn & Liefbroer, 2011; Rossi & Rossi, 1990). Most germane to the present study, we found no significant differences in mothers' indirect ambivalence scores between children who were and were not interviewed. Taken together, we believe that the small discrepancies between the subgroups of children who did and did not participate is not sufficiently large to introduce consequential confounds, a conclusion consistent with Kalmijn and Liefbroer's (2011) recent article on nonresponse bias in studies of intergenerational relations.

Analytic Sample Characteristics

Mothers' and children's demographic characteristics ($N = 254$) for the analytic sample are presented in Table 1. It is important to note that although the mean number of living children in this subsample is higher than would be found in a nationally representative sample of women in this age group, this is due primarily to the criterion that all participants must have had at least two living adult children. The mean number of children of women in the subsample is similar to that found in national samples, such as the National Survey of Families and Households (Sweet & Bumpass, 1996), when compared specifically to mothers in the same age group who have two or more children. It is also worth noting that although the mothers' ages only fall within the range of 72–82, such a restriction is unlikely to affect the generalizability of the findings. In particular, two recent studies have shown high levels of continuity in relationship quality between adult children

Table 1. *Demographic Information on Mothers and Adult Children*

| Variable | Statistic |
|-------------------------------|-----------|
| Mothers ($n = 254$) | |
| Age in years (M/SD) | 77/3.1 |
| Race (%) | |
| Black | 22 |
| White | 76 |
| Other | 2 |
| Married (%) | 42 |
| Education (%) | |
| Less than high school | 16 |
| High school graduate | 37 |
| Post-high school vocational | 8 |
| At least some college | 13 |
| College graduate | 13 |
| Some graduate school | 13 |
| Employed (%) | 16 |
| Number of children (M/SD) | 3.9/1.7 |
| Adult children ($n = 254$) | |
| Age in years (M/SD) | 49.5/5.7 |
| Daughters (%) | 60 |
| Married (%) | 67 |
| Education (%) | |
| Less than high school | 4 |
| High school graduate | 21 |
| Post-high school vocational | 3 |
| At least some college | 12 |
| College graduate | 37 |
| Some graduate school | 24 |
| Employed | 80 |
| Parents | 74 |

and older mothers across as much as a 7-year period (Schenk & Dykstra, 2012; Sutor, Gilligan, & Pillemer, 2013). Thus, we suggest that the present findings are likely to be generalizable to other families in which mothers are age 65 and over.

Measures

The complete set of items used to measure positive and negative components of ambivalence were available only in the T2 data; therefore, measurement of the primary dependent and independent variables are from the second wave of the study. The only variables used from T1 are demographic characteristics that would be highly unlikely to change from T1 to T2, such as race and gender.

Positive and Negative Components of Intergenerational Ambivalence

We created measures of positive and negative components of intergenerational ambivalence using items commonly used in calculating these measures (Birditt et al., 2010; Birditt, Miller, Fingerman, & Lefkowitz, 2009; Fingerman et al., 2006, 2008; Kiecolt et al., 2011; Wilson et al., 2003, 2006). For the present analysis, we used mothers' and children's self-reports of positive and negative feelings to predict depressive symptoms. This approach is most consistent with the literature on this topic (Kiecolt et al., 2011; Sutor, Gilligan, & Pillemer, 2011); furthermore, in the one study that used actor-partner independence models, reports of ambivalence by one member of the dyad were not found to predict psychological well-being of the other member (Fingerman et al., 2008).

We began by combining three items measuring the positive component of ambivalence:

1. Use any number from 1 to 7, where 1 is *very distant* and 7 is *very close*. What number would you use to describe the relationship between you and (your child/your mother) nowadays?
2. How often does (your child/your mother) make you feel loved or cared for—*very often* (5), *fairly often*, *sometimes*, *rarely*, or *never* (1)?
3. Being with (your child/your mother) makes you feel very happy—*strongly agree* (4), *agree*, *disagree*, *strongly disagree* (1)?

To create the positive component we needed to make the range of the three items comparable. Because the distributions were positively skewed, we collapsed the lowest categories of each item, so that the scores ranged from 1 to 4, as has been done previously when using these items to create scales of intergenerational closeness (Sutor, Gilligan, & Pillemer, 2011). The range of the combined positive scale was 4–12 for mothers and 4–10 for adult children. The mean for mothers was 10.55 ($SD = 1.68$); the mean for adult children was 8.03 ($SD = 1.46$). The Cronbach's alpha for mothers was .67, and for adult children it was .76.

We used the same approach to create the negative component. The items used were as follows:

1. Sometimes no matter how close we may be to someone, the relationship can also at times be

tense and strained. Use any number from 1 to 7, where 1 is *not at all tense and strained* and 7 is *very tense and strained*. What number would you use to describe how tense and strained the relationship between you and (your child/your mother) is nowadays?

2. How often would you say the two of you typically have disagreements or conflicts—*very often* (5), *fairly often*, *sometimes*, *rarely*, or *never* (1)?
3. Does (your child/your mother) make too many demands on you *very often* (5), *fairly often*, *sometimes*, *rarely*, or *never* (1)?

We then transformed the negative items so that they would range from 1 to 4 before combining them. The range of the combined negative scale was 3–12 for both mothers and adult children. The mean for mothers was 5.75 ($SD = 2.17$); the mean for the adult children was 6.74 ($SD = 2.22$). The Cronbach's alpha for mothers was .67, and for adult children it was .61.

We refer to these measures as positive and negative *components of ambivalence* or as positive and negative *feelings*, both of which are terms commonly used in the literature to refer to the components of the ambivalence construct.

The Griffin Measure

We created the indirect measure using the Griffin calculation (Thompson et al., 1995):

$$\text{indirect ambivalence} = (\text{positive} + \text{negative}) / 2 - |\text{positive} - \text{negative}| + 1.5$$

We used Griffin's original indirect measure because it is the most broadly employed in studies of intergenerational ambivalence (Birditt et al., 2009, 2010; Fingerman et al., 2006, 2008; Kiecolt et al., 2011; Wilson et al., 2003, 2006). The indirect ambivalence measure for mothers ranged from 0 to 13.50 ($M = 4.37$, $SD = 3.02$); the indirect measure for adult children ranged from 1 to 11.50 ($M = 6.11$, $SD = 2.11$).

Depressive Symptoms

To measure depressive symptoms we used the seven-item version of the Center for Epidemiological Studies Depression (CES-D) Scale (Ross & Mirowsky, 1988). The CES-D asks respondents how often in the past week they

have felt a certain way. It should be noted that the CES-D was not intended for use as a diagnostic tool; instead, it provides a valid and reliable means for ordering individuals on the basis of the frequency and severity of their symptoms. The CES-D Scale's reliability and validity for use in community surveys have been clearly established (Radloff, 1977). The seven items that compose the scale are (a) "Everything I did was an effort," (b) "I had trouble getting to sleep or staying asleep," (c) "I felt lonely," (d) "I felt sad," (e) "I could not get going," (f) "I felt I could not shake off the blues," and (g) "I had trouble keeping my mind on what I was doing." In this sample, the scale for mothers ranged from 7 to 28, with a mean of 10.68 ($SD = 3.95$) and a Cronbach's alpha of .79; the scale for adult children ranged from 7 to 29, with a mean of 11.57 ($SD = 4.71$) and a Cronbach's alpha of .80.

Control Variables

We included subjective health as a control in the analysis of depressive symptoms because it has been found to be a strong predictor of psychological well-being (Beekman, Kriegsman, Deeg, & van Tilburg, 1995; Geerlings, Beekman, Deeg, & van Tilburg, 2000). The measure of subjective health had five categories, ranging from *poor* (1) to *excellent* (5).

Race was measured by asking the mothers to select from a card listing several races and ethnicities (e.g., White, Black or African American, Hispanic or Latina, Asian). They were instructed that they could choose more than one race or ethnicity. The analytic sample for this article included 194 White families, 55 Black families, three Hispanic families, and two Asian families. On the basis of the literature on later-life families, which has shown closer intergenerational ties in Black, Asian, and Hispanic families than in White families (Suito, Sechrist, et al., 2011), we coded race as White (0) or non-White (1).

Adult children provided their current marital status and number of living children at T2. For the present analyses, child's marital status was coded as currently married (0 = child not married, 1 = child married).

We used listwise deletion to handle missing data because there were fewer than 8% missing on any variable in the analysis (cf. Allison, 2010; Graham, 2009).

Table 2. Correlations Between Positive and Negative Feelings, the Griffin Measure, and Depressive Symptoms for Mothers and Adult Children

| Variable | 1 | 2 | 3 | 4 |
|------------------------|--------|--------|--------|-------|
| 1. Positive feelings | — | -.47** | -.41** | -.14* |
| 2. Negative feelings | -.38** | — | .91** | .22** |
| 3. Griffin measure | -.10 | .65** | — | .22** |
| 4. Depressive symptoms | -.07 | .20** | .08 | — |

Note: Correlations for mothers are on the upper right diagonal; correlations for adult children are on the lower left diagonal.

* $p < .05$. ** $p < .01$.

RESULTS

Table 2 is the correlation matrix of the positive and negative components of ambivalence, the Griffin measure, and depressive symptoms. Correlations for mothers are shown in the upper right diagonal. For mothers, there were moderate correlations between depressive symptoms and both positive ($-.14$, $p < .05$) and negative components ($.22$, $p < .01$). It is interesting that the correlation between the Griffin measure and depressive symptoms was identical to the correlation between the negative component and depressive symptoms ($.22$, $p < .01$). It is also important to note the strikingly strong correlation between the negative component and the Griffin measure ($.91$, $p < .01$). This correlation indicates that the negative component explained approximately 83% of the variance in the Griffin measure.

Correlations for adult children are shown in the lower diagonal of Table 2. For adult children, there was a weak correlation between the positive component and depressive symptoms ($-.07$, *ns*). The correlation between the negative component and depressive symptoms was moderately strong ($.20$, $p < .10$). In contrast, the association between the Griffin measure and depressive symptoms was much weaker ($.08$, *ns*). Although not as striking as for mothers, for adult children there was also a strong correlation between the negative component and the Griffin measure ($.65$, $p < .01$).

Mothers

The findings for the multivariate analyses of mothers' depressive symptoms, which allowed us to test our three alternative hypotheses, are

Table 3. Ordinary Least Squares Analysis Predicting Depressive Symptoms of Mothers

| Predictor | Model 1 (N = 254) | | | Model 2 (N = 254) | | |
|-------------------------------------|-------------------|-------|------|-------------------|-------|------|
| | β | B | SE B | β | B | SE B |
| Married | -.03 | -0.27 | 0.50 | -.03 | -0.27 | 0.50 |
| Subjective health | -.34** | -1.22 | 0.22 | -.34** | -1.22 | 0.22 |
| Age | -.01 | -0.02 | 0.08 | -.01* | -0.02 | 0.08 |
| White | -.06 | -0.53 | 0.60 | -.06 | -0.53 | 0.60 |
| Family size | .04 | 0.09 | 0.14 | .04 | 0.09 | 0.14 |
| Positive feelings | -.08 | -0.19 | 0.16 | -.10 | -0.22 | 0.46 |
| Negative feelings | .14* | 0.26 | 0.12 | .12 | 0.21 | 0.64 |
| Negative \times positive feelings | | | | .02 | 0.01 | 0.06 |
| Adjusted R^2 | | .14** | | | .13** | |
| df | | 7 | | | 8 | |

* $p < .05$. ** $p < .01$.

presented in Table 3. We began by examining the effects of the positive and negative components on mothers' depressive symptoms. As shown in Model 1 of Table 3, the negative component predicted mothers' higher depressive symptoms ($\beta = .14$, $p < .05$), whereas the positive component did not ($\beta = -.08$, ns).

Next, in Model 2, we included the interaction term between the negative and positive components. This allowed us to test all three of our central hypotheses: (a) the *ambivalence hypothesis*, which proposes that the presence of positive feelings will exacerbate the detrimental effects of negative feelings on psychological well-being; (b) the *negative feelings hypothesis*, which proposes that the effects of negative feelings on psychological well-being will be unaffected by the presence of positive feelings; and (c) the *buffering hypothesis*, which proposes that the presence of positive feelings will reduce the effects of negative feelings on psychological well-being.

As shown in Model 2, the interaction term did not predict mothers' depressive symptoms. Furthermore, its inclusion did not increase the overall model fit. Thus, we did not find support for either the ambivalence hypothesis or the

Table 4. Ordinary Least Squares Analysis Predicting Depressive Symptoms of Adult Children

| Predictor | Model 1 (N = 254) | | | Model 2 (N = 254) | | |
|-------------------------------------|-------------------|-------|------|-------------------|-------|------|
| | β | B | SE B | β | B | SE B |
| Married | -.15** | -1.53 | 0.60 | -.15** | -1.51 | 0.60 |
| Subjective health | -.40** | -1.74 | 0.26 | -.40** | -1.72 | 0.26 |
| Age | .01 | 0.01 | 0.05 | .01 | 0.01 | 0.05 |
| White | -.03 | -0.36 | 0.69 | -.03 | -0.31 | 0.69 |
| Family size | -.10 | -0.27 | 0.16 | -.10 | -0.26 | 0.16 |
| Positive feelings | -.01 | -0.01 | 0.13 | .14 | 0.30 | 0.38 |
| Negative feelings | .13* | 0.28 | 0.13 | .31 | 0.65 | 0.45 |
| Negative \times positive feelings | | | | -.19 | -0.04 | 0.05 |
| Adjusted R^2 | | .22** | | | .22** | |
| df | | 7 | | | 8 | |

* $p < .05$. ** $p < .01$.

buffering hypothesis. Instead, the pattern of findings supports the negative feelings hypothesis. In other words, the detrimental effects of the indirect ambivalence measure on psychological well-being can be accounted for primarily by the presence of negative feelings rather than the combination of negative and positive feelings.

Adult Children

The findings on adult children's depressive symptoms are presented in Table 4. As in the case of mothers, we first examined the effects of positive and negative feelings. As shown in Model 1 of Table 4, the negative component of ambivalence was a moderate predictor of adult children's depressive symptoms ($\beta = .13$, $p < .05$), whereas the positive component was not ($\beta = -.01$, ns).

Model 2 in Table 4 presents the findings of the test of our three hypotheses. As shown in the bottom row of coefficients, the interaction term did not predict adult children's depressive symptoms, and the R^2 remained unchanged. Thus, the findings support the negative feelings hypothesis, as was the case for mothers.

Table 5. Ordinary Least Squares Analysis Predicting Depressive Symptoms Using the Subsamples of Respondents With High Negative Feelings

| Predictor | Model 1: Mothers (N = 117) | | | Model 2: Adult children (N = 114) | | |
|-------------------|-------------------------------|-------|------|--------------------------------------|-------|------|
| | β | B | SE B | β | B | SE B |
| Married | -.04 | -0.36 | 0.91 | -.13 | -1.39 | 0.94 |
| Subjective health | -.35** | -1.45 | 0.38 | -.48** | -2.32 | 0.43 |
| Age | .02 | 0.03 | 0.13 | -.06 | -0.05 | 0.07 |
| White | -.01 | -0.09 | 1.02 | .00 | -0.04 | 1.04 |
| Family size | .04 | 0.10 | 0.25 | -.12 | -0.33 | 0.24 |
| Positive feelings | -.12 | -0.28 | 0.21 | -.06 | -0.14 | 0.19 |
| R ² | .14** | | | .28** | | |
| df | 6 | | | 6 | | |

** $p < .01$.

Analyses Using Subsamples of Respondents With High Negative Feelings Regarding the Relationship

To more closely simulate the Griffin measure we have also included a second method that selected individuals with high negative feelings and included only positive feelings in the model. Specifically, we selected those cases in which the respondent's negative component score was above the mean. We then regressed depressive symptoms onto the positive component. This analysis is conceptually very similar to including the interaction term; however, it provides a more precise way of addressing the question, "Among those with high negative feelings regarding the parent-adult child relationship, are positive feelings associated with elevated depression?" It addresses this specific question by looking at the

effect of positive feelings only in the presence of high levels of negative feelings. Consistent with the analyses that used the full sample of mothers and children, positive feelings were not associated with higher CES-D scores for either groups, as shown in Table 5. In fact, the coefficients are in the opposite direction than would be predicted by ambivalence theory, although neither is statistically significant.

Comparisons Between the Griffin Measure and Its Positive and Negative Components

Finally, we predicted depressive symptoms using the Griffin measure. The findings of these analyses are shown in Table 6. To present the findings in the most parsimonious way, only the coefficients for positive and negative components and the Griffin measure are included in the table. As noted in the table note, all models included controls for marital status, subjective health, age, race, and family size.

In this set of analyses we included the Griffin measure in a separate equation that did not include positive or negative feelings. This allowed us to compare the variance explained using this standard ambivalence measure versus positive and negative measures. An alternative way in which to assess the relative effects of the Griffin measure and measures of positive and negative feelings would be to include both the Griffin measure and its separate positive and negative components in the same regression analysis and compare the variance explained by these constructs. However, the magnitude of the bivariate correlations of the Griffin measure and the negative component suggests that this would create an unacceptable degree of collinearity (Allison, 2012, 2014). In fact, as

Table 6. The Griffin Measure and Psychological Well-Being

| Variable | Mothers | | | | | | Adult children | | | | | |
|-------------------|---------|-------|------|---------|------|------|----------------|-------|------|---------|------|------|
| | Model 1 | | | Model 2 | | | Model 3 | | | Model 4 | | |
| | β | B | SE B | β | B | SE B | β | B | SE B | β | B | SE B |
| Positive feelings | -.08 | -0.19 | 0.16 | | | | -.01 | -0.01 | 0.13 | | | |
| Negative feelings | .14* | 0.26 | 0.12 | | | | .13* | 0.28 | 0.13 | | | |
| Griffin | | | | .17** | 0.23 | 0.08 | | | | .08 | 0.14 | 0.10 |
| R ² | .14** | | | .13** | | | .22** | | | .21** | | |
| df | 7 | | | 6 | | | 7 | | | 6 | | |

Note: N = 254 for all models. All models include controls for marital status, subjective health, age, race, and family size.

* $p < .05$. ** $p < .01$.

shown in Table 2, the Griffin measure is correlated .91 with the negative component for the mothers and .65 for the adult children.

Models 1 and 2 in Table 6 present the findings for mothers. Instead of explaining considerably more variance with the Griffin measure than with the separate measure of negative feelings, the standardized coefficients were very similar (.14 vs .17), as were the adjusted R^2 values. This comparison suggests that the negative component and the Griffin measure were similarly strong predictors of mothers' depressive symptoms. This finding, combined with the bivariate correlation of .91 between the Griffin measure and the negative component, suggests strongly that these two measures are capturing the same construct.

Models 3 and 4 in Table 6 present the findings for adult children. Instead of explaining more variance than did the negative component, the coefficient for the Griffin measure was slightly weaker (.13 [$p < .05$] vs. .08 [ns]). Although these differences might suggest that negative feelings explain more variance than does the Griffin measure, the difference between the coefficients was not statistically significant, and the adjusted R^2 values between the models were similar.

DISCUSSION

Recent research has suggested that intergenerational ambivalence has detrimental effects on both parents' and children's psychological well-being (Fingerman et al., 2008; Kiecolt et al., 2011; Sutor, Gilligan, & Pillemer, 2011). In this article, we raised the question of whether the harmful effects of ambivalence on psychological well-being reflect contradictory feelings or instead reflect the negative component of commonly used indirect measures (Fingerman et al., 2008, 2012; Sutor, Gilligan, & Pillemer, 2011).

To address this question, we tested three alternative hypotheses: (a) the ambivalence hypothesis, which proposes that the presence of positive feelings exacerbates the detrimental effects of negative feelings on psychological well-being; (b) the negative feelings hypothesis, which proposes that the effects of negative feelings on psychological well-being are unaffected by the presence of positive feelings; and (c) the buffering hypothesis, which proposes that the presence of positive feelings reduces the

effects of negative feelings on psychological well-being. Our findings provided support only for the negative feelings hypothesis. In particular, for both mothers and adult children, negative feelings predicted depressive symptoms, yet the interaction term between the negative and positive components of ambivalence did not predict either groups' depressive symptoms. These findings suggest that the presence of positive feelings neither exacerbated nor buffered the effects of negative feelings and that negative feelings may be the driving force behind the association between commonly used indirect measures of ambivalence and psychological well-being.

We also conducted an alternative analysis to examine whether the presence of positive feelings exacerbated the effects of negative feelings, by regressing depressive symptoms onto positive feelings using a subsample of respondents with high negative feelings. The findings from these analyses yielded results that were substantively similar to those using an interaction term.

Given the prominence of the Griffin measure in the study of intergenerational ambivalence (Thompson et al., 1995), we felt it was important to also consider this measure in the present article. We did so using two approaches. First, we conducted bivariate analyses among the positive and negative components of intergenerational ambivalence, the Griffin measure, and depressive symptoms. The magnitude of the bivariate correlations between the Griffin measure and the negative component further indicates substantial overlap between these two variables. The Griffin measure was correlated .91 with the negative component for mothers and .65 for adult children.

Because of the high collinearity between the negative component and the Griffin measure, we were unable to include these variables in the same analysis. Instead, we conducted separate analyses in which we included only the Griffin measure in the equation. This allowed us to compare the variance explained using this standard indirect measure to that explained using measures of positive and negative feelings. These analyses revealed that for both mothers and adult children, the Griffin measure did not explain any additional variance in depressive symptoms beyond that explained by the negative component of ambivalence.

Taken together, this set of findings suggests that the association between indirect measures

of ambivalence and depressive symptoms is driven primarily by negative feelings rather than by the combination of positive and negative feelings. These findings are consistent with the broader literature on interpersonal relations indicating that negative interactions are more salient for well-being than are positive interactions (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Rook, 1984, 2001; Schuster et al., 1990).

The consistency in the findings for mothers and children is striking, given the differences between the generations reported in similar studies conceptualizing and measuring intergenerational ambivalence. In a recent investigation that compared the effects of direct and indirect measures of ambivalence on mothers and their adult children, the findings differed notably by generation (Suito, Gilligan, & Pillemer, 2011). In particular, indirect measures were much stronger predictors of mothers' than their children's depressive symptoms. However, the congruence in the findings for mothers and their children in the present study suggests that negative feelings play an equally important role in the effect of ambivalence on well-being for both generations.

Implications and Future Directions

The findings of the present article have implications for the conceptualization of intergenerational ambivalence as well as the operationalization of the concept for use in empirical studies. In particular, the findings call into question whether indirect measures of ambivalence have any greater predictive power than do negative feelings alone. However, further study is necessary to determine whether these findings would be replicated on different samples or using different measures. For example, perhaps the simultaneous presence of positive and negative feelings would have greater effects on psychological well-being than would negative feelings alone under conditions of extremely high ambivalence. Although the range of scores in the WFDS includes mothers and children with such extreme scores, only about 10% of sample fall into this high range, consistent with the findings of other studies of intergenerational ambivalence (Fingerman et al., 2008; Kiecolt et al., 2011; Wilson et al., 2006).

Furthermore, perhaps the findings we have presented are specific to indirect measures that

focus on positive and negative feelings regarding the parent-child relationship, which could be considered affective dimensions, as opposed to other aspects of this tie. We hope that future research will also assess the relative effects of various dimensions of other indirect measures of ambivalence on well-being. The conceptualization and measurement of positive and negative dimensions of indirect ambivalence vary widely across studies. Although many scholars have used items that tap the affective components of the relationship, such as closeness, expressive support, positive interactions, conflict, criticism, and high relational demands (Birditt et al., 2010; Ha & Ingersoll-Dayton, 2008; Kiecolt et al., 2011; Suito, Gilligan, & Pillemer, 2011; Wilson et al., 2003, 2006), others have included measures involving only support (Uchino, 2004); attributes of the relationship or role partner (Lüscher & Lettke, 2004); or a combination of support, contact, and relationship quality (van Gaalen et al., 2010; van Gaalen & Dykstra, 2006). It is possible that the findings we have presented would be replicated when examining these alternative measures, which would provide further evidence that the detrimental effects of ambivalence are fueled primarily by the negative component of ambivalence rather than by the combination of positive and negative components.

It is worth noting as well that no studies of intergenerational ambivalence have employed the type of long-established measures used by social psychologists to examine ambivalence in other personal relationships, attitudes, and domains (Kaplan, 1972; Newby-Clark, McGregor, & Zanna, 2002; Priester & Petty, 1996; Thompson et al., 1995). For example, in some studies that have used these approaches (cf. Priester & Petty, 1996), respondents were asked to consider a particular issue by first rating on a 0–10 scale all of the positive thoughts and feelings they have about the issue while setting aside any negative thoughts about it. Next, they were asked to rate, from 0 to 10, all of their negative thoughts about the same issue while setting aside any positive thoughts about it. These positive and negative ratings are then combined to create a measure of ambivalence regarding the issue under consideration. We suggest that future research that uses these measurement strategies is needed to further understand the role of intergenerational ambivalence and psychological distress.

We also call for future research to extend the study of the conceptualization and measurement of ambivalence in directions that were not possible using the WFDS data. In particular, the present analysis was restricted to mothers and their adult children. It is important to replicate the analyses we have presented using data from fathers as well as mothers to determine whether disaggregating positive and negative components of indirect measures of ambivalence yields similar results regardless of parents' gender. There is conflicting evidence regarding whether the level of ambivalence varies by parents' gender, even when considering mothers and fathers from the same families (Lendon et al., 2014; Pillemer et al., 2012). However, the predictors of ambivalence appear to differ somewhat by parents' gender (Pillemer et al., 2012); thus, it is possible that disaggregating the components of ambivalence may also vary by gender. Unfortunately, we were unable to consider this question in the present article because, although fathers were interviewed at the first wave of the WFDS, they were not interviewed at T2, when the full set of items necessary to create the positive and negative dimensions of the indirect measure were collected. We hope that future research will address this question.

Although our focus has been on the study of ambivalence in relations between parents and adult children, the findings we have presented may have implications for other relationships as well. In particular, we suggest that they may have implications for relationships that are also highly salient and in which ambivalence is common, such as those among adult siblings (Fingerman et al., 2004; Sherman, Lansford, & Volling, 2006), marital partners (Fingerman et al., 2004; Kachadourian, Fincham, & Davila, 2005), and parents-in-law and children-in-law (Wilson et al., 2003). This is because, unlike many other relationships, those with strong normative expectations regarding contact, closeness, and exchange—such as siblings, spouses, and in-laws—are likely to be maintained even in the face of high discordance. We suggest that the issues we have raised regarding the relative role of negative and positive feelings in the study of intergenerational ambivalence may be important to consider in the study of other intimate interpersonal relationships.

It is worth noting that the use of cross-sectional data precluded the assessment of

causal direction. However, this restriction was necessary given the central aim of the study, which was to replicate previous single-wave studies of the association between ambivalence and psychological well-being. It is important that future studies that examine the association between ambivalence and psychological well-being use longitudinal data to assess causation.

The findings from the present study indicate that the negative component of indirect measures of ambivalence is the primary driving factor in the association between intergenerational ambivalence and psychological well-being. This work is a first step toward understanding the differential effects of positive and negative components of indirect measures of ambivalence. A considerable body of research has confirmed that ambivalence is a common feature of older parent–adult child relationships. As interest in understanding the consequences of intergenerational ambivalence for relationship partners continues to grow, improving measurement of the concept should be a high priority.

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