

Original Article

Role of Perceived Maternal Favoritism and Disfavoritism in Adult Children's Psychological Well-Being

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Abstract

Objectives. The detrimental consequences of parents' differential treatment on children's well-being have been documented in earlier stages of the life course; however, little is known about this pattern in midlife. Drawing from theories of equity and social comparison, we tested whether psychological well-being was affected only by adult children's perceptions that their mothers treated some offspring in the family differently or by their perceptions that they were favored or disfavored. Further, we explored the extent to which these patterns differed by race.

Method. Multilevel regression modeling was conducted using data collected from 725 adult children nested within 309 later-life families as part of the Within-Family Differences Study-II.

Results. Depressive symptoms were higher when offspring perceived that they had the most emotional closeness to mothers or the greatest conflict with mothers. Depressive symptoms were also higher when respondents identified themselves as being the children in whom the mothers were most disappointed.

Discussion. The findings shed new light on the role of intergenerational relations in adult children's well-being in midlife by taking into consideration the respondents' direct reports of their perceptions of their mothers' favoritism and disfavoritism. Further, the findings provide evidence that the association between maternal differentiation and psychological well-being in adulthood is stronger in Black than in White families. These patterns suggest that the association between psychological well-being and both favoritism and disfavoritism can be accounted for by processes involving social comparison rather than equity for both Black and White adult children in midlife.

Key Words: Intergenerational relations—Interpersonal relations—Social comparison.

Theory and empirical research on interpersonal relations have emphasized the importance of the quality of relationships for individuals' well-being (Bar-Kalifa & Rafaeli, 2013; Cohen, 2004; DeLongis, Capreol, Holtzman, O'Brien, & Campbell, 2004; Fiori & Consedine, 2013; Rook, 2001). Further, this line of scholarship has shown that positive and negative elements of relationships have independent effects on well-being (Fiori & Consedine, 2013; Ha, 2010; Krause & Ellison, 2007), with negative elements playing a more salient role in these processes (Lackner et al., 2013; Mavandadi, Sorkin, Rook, & Newsom, 2007; Newsom, Nishishiba, Morgan, & Rook, 2003).

Research on the quality of relations between parents and their adult children has reflected these patterns, with positive and negative elements associated with well-being for both generations (Gilligan, Suito, Feld, & Pillemer, 2015; Pudrovska, 2008; Umberson, 1989). Studies of children and adolescents suggest that another important aspect of parent-child relations that should be taken into consideration in assessing children's well-being is their perceptions of the quality of their ties with their parents, relative to those of their siblings. This line of research has documented that parental differential treatment (PDT), particularly negative differential treatment, is associated with decreased well-being in childhood and adolescence (Feinberg & Hetherington, 2001; McHale, Updegraff, Tucker, & Crouter, 2000; Richmond, Stocker, & Rienks, 2005; Shanahan, McHale, Crouter, & Osgood, 2008). Only a few studies have addressed the consequences of PDT in young adulthood; however, the findings from this work suggest that there are similarly negative effects of children's reports of parental favoritism and disfavoritism on psychological well-being in this stage of the life course (Jensen, Whiteman, Fingerman, & Birditt, 2013; Young & Ehrenberg, 2007).

Despite the consistent and compelling patterns revealed by this body of research on younger families, there has been little attention to the potential effects of such parental differentiation on psychological well-being in midlife. Such inattention is especially surprising considering that PDT among adult children in midlife is common (Boll, Ferring, & Filipp, 2003, 2005; Suito, Gilligan, & Pillemer, 2013), is relatively stable (Suito et al., 2013), and has decidedly negative consequences on the quality of relationships among siblings (Boll et al., 2003, 2005; Suito et al., 2009; Suito, Gilligan, Johnson, & Pillemer, 2014).

Only two studies have explored the association between PDT and psychological well-being in midlife, both of which reported negative consequences (Davey, Tucker, Fingerman, & Savla, 2009; Pillemer, Suito, Pardo & Henderson, 2010). However, the designs of these investigations limited their ability to address several important questions regarding the association between perceptions of PDT and psychological well-being in adulthood. Davey and colleagues (2009) used indirect measures of PDT recalled from childhood, rather than asking adult children directly about their perceptions

of current patterns of favoritism and disfavoritism. In contrast, Pillemer and colleagues (2010) used direct measures of current perceptions of PDT; however, they considered only whether the respondents perceived that their mothers differentiated among their children, rather than whether the respondents perceived that they were favored or disfavored, relative to their siblings.

Our goal is to extend research on PDT in several regards that will increase understanding of the role of PDT in midlife and contribute to the broader literature on interpersonal relations and well-being. First, drawing from theories of equity and social comparison, we use direct measures of current perceptions of PDT to test alternative hypotheses regarding whether the consequences of maternal favoritism in midlife differ depending on the specific patterns of perceptions. In particular, we ask: Is psychological well-being affected only by the children's perceptions that their mothers treat some offspring in the family differently, or by whether they perceive that they, as opposed to their siblings, are favored or disfavored? Second, we include multiple measures of both perceived favoritism and disfavoritism to test the relative effects of a diverse set of dimensions of differentiation. Using these measures, we distinguish not only between favoritism and disfavoritism but also between what we define as "relational" and "evaluative" dimensions of favoritism and disfavoritism. Third, we provide the first exploration of whether the effects of perceived maternal differential treatment on depressive symptoms in adulthood are moderated by race. Specifically, does the greater closeness in parent-adult child ties typically found in Black families translate into race differences in the consequences of perceptions of maternal differentiation on adult children's psychological well-being? Data for the analysis were collected from 725 midlife adult children (mean = 49 years) regarding their mothers' differentiation, as part of the second wave of the Within-Family Differences Study (WFDS).

Maternal Differential Treatment in Midlife and Psychological Well-Being

Theories of both equity and social comparison can be used to argue that perceptions of mothers' differentiation in adulthood affect children's psychological well-being; however, these theoretical perspectives predict different patterns. Equity theory proposes that individuals who receive excessive benefits in relation to their role partners experience guilt, whereas persons who feel underbenefited feel disappointment and anger, in turn, leading to lower psychological well-being (Hatfield, Walster, & Berscheid, 1978). This argument seems particularly applicable to the study of the consequences of PDT in midlife, given that as individuals move across the life course they increasingly attempt to reduce or avoid conflict and emphasize harmony in their relationships (Charles & Carstensen, 2008; Coats & Blanchard-Fields, 2008; Lefkowitz & Fingerman, 2003). Thus, based on equity theory, we would hypothesize

that adult children's perceptions of mothers' favoritism and disfavoritism would be associated with higher depressive symptoms, regardless of whether the child perceived that she or he was overbenefited or underbenefited.

Alternatively, theories of social comparison suggest that the effects of maternal differentiation on adult children's depressive symptoms vary depending upon which child in the family is benefited. Social comparison theories (Festinger, 1954; Suls & Wheeler, 2000) posit that individuals engage in comparisons with others as a way of gathering information about and evaluating their social position. Further, these theories suggest that perceptions of one's position, relative to others, result in divergent feelings about the differentiation, depending upon whether the individual believes that he or she has greater or fewer resources than those to whom he or she compares himself or herself (Salovey, 1991). Specifically, when individuals consider themselves underbenefited, they are likely to experience feelings of hostility or unhappiness (Salovey, 1991). Thus, an alternative hypothesis, based on principles of social comparison, would be that perceiving oneself as not favored by one's mother, relative to one's siblings, would translate into higher depressive symptoms. Conversely, perceiving oneself as favored over one's siblings might lead to greater confidence, thus raising well-being.

The findings of studies of mothers' differential treatment and psychological well-being in adulthood are mixed in their reflection of principles of equity and social comparison. Investigations from young adulthood are consistent with both principles of equity and social comparison theories. Young and Ehrenberg (2007) reported that regardless of the pattern (respondent or sibling benefited), perceptions of mothers' greater differentiation were associated with lower adjustment. Similarly, Jensen and colleagues (2013) found that high levels of mothers' differentiation regarding support predicted depressive symptoms, regardless of whether the offspring were overbenefited or underbenefited. However, when only the *presence* of mothers' differentiation was included in the equation, without taking into consideration the magnitude of differentiation, being less favored by mothers was associated with *lower* depressive symptoms. Thus, these findings reflect principles of both equity and social comparison theories.

The two studies of the consequences of perceptions of PDT on psychological well-being in midlife also provide contradictory evidence regarding the role of equity and social comparison in these processes. Pillemer and colleagues (2010) found that adult children who perceived that their mothers differentiated among their offspring regarding conflict or emotional closeness reported higher depressive symptoms. Thus, their findings, using a binary measure of differentiation (child perceived the mother differentiated versus child perceived the mother did not differentiate) are consistent with principles of equity. In contrast, Davey and colleagues (2009) found that adult children whose reports of recalled maternal affection were higher than the family average and whose reports of maternal discipline were

lower than the family average scored higher on positive affect. Further, those whose reports of recalled maternal discipline were above the family average reported lower positive affect. Thus, Davey and colleagues' (2009) findings reflect principles of social comparison rather than equity.

Given the notable differences in the measurement of PDT across these studies, it is difficult to reconcile their divergent findings. Thus, rather than arguing for a single hypothesis driven by either equity or social comparison theories, we tested the two following alternative hypotheses: (a) Based on equity theory, we proposed that perceived maternal differentiation in midlife would be associated with higher depressive symptoms, regardless of the particular patterns of differentiation and (b) Based on social comparison theory, we proposed that the consequences of perceived maternal differentiation would vary depending upon whether children perceived that they or their siblings benefited from the differentiation.

Distinguishing Among Dimensions of Maternal Differential Treatment

Up to this point, we have discussed maternal differentiation without taking into consideration that some dimensions may be more consequential than others for adult children's psychological well-being. There are two axes upon which to make these distinctions: (a) positive versus negative and (b) relational versus evaluative. The measures of mothers' differentiation that we include in the present article fall along both of these axes. Specifically, we compare the consequences of perceptions of mothers' differentiation regarding emotional closeness, conflict, pride, and disappointment. As shown in Table 1, we conceptualize emotional closeness and conflict to be socioemotional characteristics of the parent–adult child relationship. Thus, when mothers differentiate on these dimensions, they are considering the quality of the relationship. Therefore, we designate these as “relational” dimensions of favoritism and disfavoritism. In contrast, we conceptualize pride and disappointment to be assessments of mothers' satisfaction and dissatisfaction with their children's progress toward goals held to be important by their mothers (Lazarus, 2006; Ryff, Schmutte, & Lee, 1996). Thus, we designate these as “evaluative” dimensions of favoritism and disfavoritism. We propose that the distinctions between both favoritism and disfavoritism and between relational and evaluative dimensions are important to consider when making predictions regarding

Table 1. Conceptualization of Dimensions of Maternal Differentiation

	Positive	Negative
Relational	Emotional closeness	Conflict
Evaluative	Pride	Disappointment

the association between perceptions of maternal differential treatment and adult children's psychological well-being.

Relative Consequences of Favoritism and Disfavoritism

A large body of research has shown that both positive and negative dimensions of social interaction affect well-being (cf. Cohen, 2004; Lincoln, 2008). However, across a wide range of relational contexts and ages, the preponderance of studies has shown that negative interactions typically have stronger effects on psychological well-being than do positive interactions (Cranford, 2004; DeLongis, 2004; Finan et al., 2010; Jones, Forehand, Dorsey, Foster, & Brody, 2005; Lincoln, 2000, 2008). Thus, we hypothesized that being disfavored would have greater effects on well-being than would being favored, regardless of whether the pattern of effects was consistent with principles of equity or social comparison.

Relative Consequences of Relational Versus Evaluative Dimensions of Differentiation.

We propose that the distinction between "relational" and "evaluative" dimensions of parental favoritism and disfavoritism may also play an important role when attempting to understand the consequences of parental differentiation. Specifically, we hypothesized that evaluative dimensions of differentiation (pride and disappointment) would be stronger predictors of psychological well-being than would be relational dimensions (emotional closeness and conflict) because offspring have more direct control over the bases upon which mothers make evaluations of progress toward goals held to be important by the mothers, than over the mothers' feelings about their relationship.

Race, Maternal Differentiation, and Well-Being

The role of race in parent–adult child relations has been a central question in research on later-life families for more than four decades (cf. Mouzon, 2013; Ruggles, 1994; Sarkisian & Gerstel, 2004; Stack, 1975; Wilson, 1986). Thus, it is surprising that it has received little attention in the study of within-family differences in parent–child relations in adulthood. Although a small number of studies of patterns and predictors of PDT have explored race differences (Sechrist et al., 2012; Suito, Gilligan, Peng, & Pillemer, 2013), no investigations of PDT and children's psychological well-being in young adulthood or midlife have taken race into consideration beyond as a control (Davey et al., 2009; Jensen et al., 2013; Pillemer et al., 2010; Young & Ehrenberg, 2007). Thus, the present study is the first to explore the extent to which PDT has similar effects on the psychological well-being of Black and White children in adulthood.

Our motivation for studying differences in the consequences of maternal differentiation for Black and White

adult children is based both on the broader literature on race and intergenerational relations and on the findings regarding race and patterns of PDT in adulthood. Both of these bodies of work suggest that not only may there be race differences in the consequences of PDT but that the principles of equity and social comparison may play different roles in these processes. Although some research on intergenerational relations has shown inconsistent patterns regarding race and family solidarity (Mouzon, 2013; Sarkisian & Gerstel, 2004), the preponderance of studies over the past two decades has shown greater closeness between mothers and adult children in Black than in White families (Aquilino, 1999; Kaufman & Uhlenberg, 1998; Sechrist, Suito, Henderson, Cline, & Steinhour, 2007; Silverstein & Bengtson, 1997; Wharton & Thorne, 1997). Consistent with research on race and closeness, recent studies of within-family differences suggest that solidarity plays a more important role in shaping Black than in shaping White mothers' differentiation among her offspring. For example, Black mothers have been found to emphasize family involvement and commitment over instrumental achievements when differentiating among their offspring, in contrast to White mothers, for whom personality differences and achievements are most salient (Sechrist et al., 2012). Black mothers have also been found to be less willing than White mothers to differentiate among their offspring regarding disappointment, despite being more likely to report that their offspring experienced problems resulting from poor life choices (Suito et al., 2013). Thus, the findings of studies focusing on within-family differences suggest that family solidarity may be of greater concern among Black than among White mothers.

We suggest that such higher levels of intergenerational solidarity create stronger expectations that mothers treat all of their children similarly, making the divisions created by PDT more distressing for adult children in Black than in White families. On this basis, we hypothesized that perceptions of mothers' differentiation would predict higher depressive symptoms among Black than among White adult children; further, we hypothesized that perceptions of favoritism and disfavoritism would be associated with higher depressive symptoms among Black adult children regardless of whether they perceived that they or their siblings were favored. Thus, for Black adult children, we hypothesized that the consequences of perceptions of maternal differential treatment would reflect principles of equity theory. In contrast, for White adult children, we did not make specific proposals regarding whether the consequences of maternal differential treatment would reflect principles of equity or social comparison.

Additional Factors that May Predict Adult Children's Depressive Symptoms

It is important to control for several characteristics of adult children that have been found to predict depressive

symptoms and within-family differences in mothers' favoritism and disfavoritism. These include child's age, gender, educational attainment, marital status, employment, and self-rated health. In some cases, the controls we have included have not been found to predict patterns of favoritism or disfavoritism; however, we have included them due to their strong role in psychological well-being. This is the case for age, physical health, and employment status (Suitor & Pillemer, 2007; Suitor et al., 2013). Specifically, physical health and employment predict lower depressive symptoms (Clarke, Marshall, House, & Lantz, 2011; Schieman & Glavin, 2011), whereas age has been found to have a curvilinear relationship to depressive symptoms (Clarke et al., 2011). In the case of gender, educational attainment, and marital status, each has been found to predict both maternal differentiation and depressive symptoms. Mothers have been found to be closer to daughters than sons and are less likely to be disappointed in daughters, yet experience more conflict with daughters (Suitor et al., 2013). Mothers are also more likely to favor, and less likely to disfavor, offspring who have completed more education and have stable marriages (Suitor & Pillemer, 2007; Suitor et al., 2013). Gender, educational attainment, and marital status also predict depressive symptoms, with men and those who are better educated and married reporting lower symptoms than women and those who are less educated and unmarried (Clarke et al., 2011). Therefore, we included these characteristics throughout the analyses.

Method

The data used in the present analyses were collected as part of the WFDS. The design of the WFDS-I involved selecting a sample of mothers who were 65–75 years of age with at least two living adult children and collecting data from mothers regarding each of their children. The first wave of interviews was conducted between 2001 and 2003; the original study was expanded to include a second wave of data collection from 2008–2011 (WFDS-II). With the exception of race and educational attainment, all of the data for the present analyses were collected at T2.

Procedures

Massachusetts city and town lists were used as the source of the WFDS-I sample. With the assistance of the Center for Survey Research at the University of Massachusetts, Boston, the researchers drew a probability sample of women aged 65–75 years with two or more children from the greater Boston area. The T1 sample consisted of 566 mothers, which represented 61% of those who were eligible for participation, a rate comparable with that of similar surveys in the 2000s (Wright & Marsden, 2010). (For a more detailed description of the WFDS-I and II designs,

see Suitor & Pillemer, 2006 and Suitor et al., 2013, where portions of this section have been published previously.)

For the follow-up study (WFDS-II), the survey team attempted to contact each mother who had participated in the original study. At T2, 420 mothers were interviewed. 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 represent 86% of mothers who were alive at T2. Comparisons between the mothers alive at T2 who did and did not participate revealed that they differed on only education and subjective health; those who participated were better educated and in better health. 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.

Following the interviews, mothers were asked for contact information of their adult children; at T2, 81% of the mothers provided contact information—a rate higher than typically found in studies of multiple generations (Kalmijn & Liefbroer, 2011; Rossi & Rossi, 1990). In cases in which the mother was not interviewed at T2, information from T1 was used to contact adult children at T2. Seventy-five percent of the adult children for whom contact information was available agreed to participate, resulting in a final sample of 826 children nested within 360 families. Analyses comparing mothers with no participating children and mothers who had at least one participating child revealed no differences between these two groups in terms of race, marital status, education, age, or number of children, but that daughters, marrieds, and those with higher education were slightly more likely to participate, consistent with other studies with multiple generations (Kalmijn & Liefbroer, 2011; Rossi & Rossi, 1990).

The analytic sample for this study includes 725 adult children nested within 309 families. The sample was restricted to adult children (a) whose mothers were alive at the time of the child's T2 interview; (b) who had at least one living sibling at T2; and (c) whose families had been identified as Black or non-Hispanic White. Using these criteria, 64 children whose mothers had died between T1 and T2, 9 children who had no living siblings at T2, and 18 children who were Asian or Hispanic were omitted. Further, 10 children were omitted because they were missing data on variables of central interest. In 13 of the 309 families, the mother died during the period of data collection, such that some offspring were interviewed before and some after her death; only data from the children interviewed prior to her death were included in the analytic sample for this study.

Table 2 presents demographic information for the adult children and their mothers in this subsample.

Table 2. Demographics of Adult Children and Mothers in Analytic Sample

	Mean/% (SD)	
	Mothers (<i>n</i> = 309)	Adult children (<i>n</i> = 725)
Age in years (<i>SD</i>)	77.9 (3.1)	49.4 (5.6)
Race (in %)		
White	77	79.8
Black	23	20.2
Sex (female)	100	57.9
Marital status (in %)		
Married	40.8	64.4
Cohabiting	1	5.5
Divorced or separated	12.3	13.8
Widowed	46	2.3
Never married	0	14
Education (in %)		
Less than high school	17.5	5.1
High school graduate	43.3	24.6
Some college	13.6	13
College graduate	12.6	34.8
Graduate school	12.6	22.4
Number of children (<i>SD</i>)	3.7 (1.6)	1.9 (1.5)

Measures

Depressive Symptoms

To measure depressive symptoms, we employed the 7-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; rather, 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 items composing the scale are as follows: (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 ranged from 7–28, with a mean of 11.6 (*SD* = 4.6) and an alpha coefficient of .84.

Independent Variables

All of the favoritism and disfavoritism variables used in the present analyses were collected at T2. To create the perceived parental favoritism and disfavoritism measures, each offspring was asked to select: (a) To which child in your family is your mother the most emotionally close?; (b) Taking all things together, of which child in the family does your mother feel most proud?; (c) With which child in the family does your mother have the most disagreements or arguments?; and (d) Taking all things together,

Table 3. Distribution of Adult Children’s Perceptions of Mothers’ Differentiation (in %; *n* = 725)

Dimension of differentiation	Child reported no differentiation	Child chose self	Child chose sibling
Most emotionally close	11.0	33.0	56.0
Most conflict	11.5	16.4	72.1
Most proud	35.5	26.0	38.5
Most disappointed	34.2	13.0	52.8

with which child in the family has your mother been most disappointed? Children’s responses to each question were coded as 0 = child does not perceive mother as favoring or disfavoring any particular offspring; 1 = child perceives that mother favors or disfavors him or herself; or 2 = child perceives that mother favors or disfavors another child in the family. Finally, a set of three dummy variables was created for each favoritism and disfavoritism variable. The variables “chose self” and “chose sibling” were entered into the equations; “perceived mother did not differentiate” was the reference category.

The distributions of the favoritism and disfavoritism variables are shown in Table 3.

Control Variables: Family-Level Characteristics

Mother’s age was measured by asking each respondent the year in which she was born. 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, Native American, Asian). They were instructed that they could choose more than one race or ethnicity. The analytic sample for this study included 579 adult children in families in which the mothers identified themselves as White and 146 in families in which the mothers identified themselves as Black. We coded race as White=0 and Black=1.

Control Variables: Adult Child Characteristics

Gender was coded as 0 = son; 1 = daughter. Marital status was coded as not married = 0; married = 1. Age at T2 was age at T1 plus 7 (the number of years between interviews). Employment was measured by asking each respondent whether he or she was currently working for a job with pay (0 = no; 1 = yes). Respondents’ educational attainment was reported by their mothers at T1; categories were 1 = eighth grade or less; 2 = 1–3 years of high school; 3 = high school graduate; 4 = vocational/noncollege, post high school; 5 = 1–3 years of college; 6 = college graduate; and 7 = graduate work.

Subjective health was measured by asking respondents whether their physical health was excellent (5), very good (4), good (3), fair (2), or poor (1).

Plan of Analysis

Because the 725 adult children were nested within 309 families, we used multilevel modeling, which accounts for

nonindependence and allows for correlated error structure. To determine whether to use random-effects or fixed-effects models, we ran an intercept-only model, which provided the variance components to calculate the intraclass correlation coefficients (Heck, Thomas, & Tabata, 2013). The intraclass correlation coefficient was .025, indicating that the family-level factors accounted for only 2.5% of the variance in adult children's depressive symptoms. Although the amount of family-level variance was small, we also conducted a Hausman test to assess the difference between within-family effects and between-family effects. The results of this test indicated that the differences were insignificant, in which case a random-effects model is generally preferred. We conducted subsequent analyses to determine whether we could identify any particular family-level characteristics that accounted for this explained variance. This set of analyses revealed that race and mothers' age were the only family-level characteristics to predict children's depressive symptoms; thus, we have included these two variables in the multilevel modeling (MLM) analyses.

To ensure that all four favoritism and disfavoritism variables could be included in the same equation, we conducted collinearity diagnostics; these analyses revealed that all of the variance inflation factors were less than 3.0.

To explore differences by race, we conducted separate MLM analyses for Black and White adult children. To test specific race differences in the relationship between perceptions of favoritism or disfavoritism and psychological well-being, we conducted Chow tests. Listwise deletion was used to handle missing data on the independent variables because there were fewer than 2% missing on any variable in the analysis (cf. Allison, 2010). The analyses were conducted using STATA14.

Results

Relative Effects of the Four Dimensions of Favoritism or Disfavoritism

One of our central aims was to assess the relative effects of perceptions of the four dimensions of favoritism and disfavoritism on psychological well-being. To address this question, we included perceptions of all four dimensions in the same equation. As shown in Table 4, depressive symptoms were predicted by three of the four dimensions. Depressive symptoms were higher among adult children who perceived that their mothers were most emotionally close to them ($b = 1.27$). Depressive symptoms were also higher when respondents identified themselves as being the children with whom their mothers had the greatest conflict ($b = 1.62$), and in whom the mothers were most disappointed ($b = 1.75$).

Taken together, these analyses reveal substantial differences in the effects of maternal differential treatment on adult children's depressive symptoms depending on the dimension of PDT under consideration and the direction

Table 4. Mixed Model Predicting Adult Children's Depressive Symptoms ($N = 724$ in 309 families)

Predictors	Depressive symptoms	
	Estimate	SE ^a
Family-level characteristics		
Race (Black = 1)	-0.77	0.42
Age	0.10	0.05
Child-level characteristics		
Age	-0.04	0.03
Daughter	-0.03	0.33
Education	0.02	0.10
Married	-1.81**	0.40
Employment	-1.54**	0.44
Subjective health	-1.41**	0.17
Perceived maternal differentiation		
Most close		
Choose self	1.27*	.56
Choose sibling	0.41	0.51
Most conflict		
Choose self	1.62**	0.64
Choose sibling	0.46	0.51
Most pride		
Choose self	0.17	0.40
Choose sibling	0.47	0.36
Most disappointment		
Choose self	1.75**	0.59
Choose sibling	0.55	0.36
Model statistics		
Chi-square	219.59	

^aRobust standard errors.

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

of favoritism and disfavoritism. To determine the relative strength of the four predictors, we conducted F-tests. These tests revealed that being perceived as favored for emotional closeness or as the child most disfavored for either conflict or disappointment were stronger predictors of depressive symptoms than was being favored regarding pride. However, there were no significant differences between being perceived as favored for closeness or disfavored for conflict or disappointment.

It is important to note that perceptions of favoritism and disfavoritism predicted depressive symptoms only when the respondents perceived that *they*, as opposed to their siblings, were chosen. To provide a more direct test of equity theory, we conducted a separate set of analyses in which we used dummy variables that reflected only whether the child perceived that his or her mother differentiated among her offspring rather than whether she chose the respondent or another sibling. The results from these analyses revealed that perceptions of mothers' differentiation did not predict depressive symptoms for any of the dimensions under consideration, without taking the direction of favoritism or disfavoritism into consideration. (Table not shown.)

Finally, to determine whether the findings might vary by child's gender we conducted the analyses separately for sons and daughters and found no consistent differences from the patterns using the full sample. (Tables not shown.)

Race as a Moderator

To explore race differences in the relationship between mothers' differential treatment and adult children's psychological well-being, we repeated the analyses separately for Black and White offspring, testing the significance of differences between the coefficients across models.

As shown in the bottom row of Table 5, Black adult children's depressive symptoms were predicted more strongly by perceptions that their mothers were most disappointed in them than was the case for White adult children ($b = 1.14$ vs $b = 4.15$). A Chow test revealed that the difference between these coefficients was statistically significant at the .04 level. This was the only notable race difference in the magnitude of the associations between depressive symptoms and mothers' differentiation.

Discussion

The central question addressed in this article is that whether children's perceptions of their mothers' favoritism and disfavoritism in midlife affect psychological well-being. In this research, we have extended the study of this question in several new directions. First, we tested whether the specific patterns of perceptions of current favoritism, rather than only the presence of perceptions of mothers' differentiation, predicted depressive symptoms in midlife. Specifically, we were able to distinguish between whether a respondent perceived that she/he or a sibling was favored or disfavored. Second, we considered the relative strength of four dimensions of perceptions of mothers' differential treatment on adult children's psychological well-being. Using these measures, we were able to distinguish between favoritism and disfavoritism as well as between relational and evaluative dimensions of differentiation. Third, we provided the first examination of race differences in the association between PDT in adulthood and psychological well-being.

To frame these questions, we drew from theories of equity and social comparison. Based on principles of equity (Hatfield et al., 1978), we hypothesized that any perception of mothers' favoritism or disfavoritism would affect their adult children's psychological well-being because offspring who considered themselves as either overbenefited or underbenefited, relative to their siblings, would experience distress from the imbalance. Alternatively, based on principles of social comparison (Festinger, 1954; Suls & Wheeler, 2000), we hypothesized that the specific patterns of perceptions would affect well-being. Specifically, children who felt they were favored would have higher well-being relative to those who did not feel they were favored, whereas those who felt they were disfavored would have

Table 5. Mixed Model Results Predicting Adult Children's Depressive Symptoms by Race ($N = 724$ in 309 families)

Dimensions of perceived maternal differentiation	Depressive symptoms			
	White		Black	
	$(n = 578)$		$(n = 146)$	
	Estimate	SE ^a	Estimate	SE ^a
Family-level characteristics				
Age	0.01 ^b	0.06	0.42**	0.12
Child-level characteristics				
Age	-0.03	0.03	-0.07	0.07
Daughter	-0.33	0.37	1.21	0.79
Education	0.02	0.12	-0.12	0.24
Married	-1.67**	0.48	-2.21**	0.76
Employment	-1.44**	0.54	-1.50	0.81
Subjective health	-1.52**	0.20	-1.06**	0.34
Perceived favoritism				
Most emotionally close				
Choose self	1.03	0.63	1.28	1.41
Choose sibling	0.13	0.57	1.01	1.13
Most conflict				
Choose self	1.96**	0.68	0.72	1.61
Choose sibling	0.54	0.55	0.06	1.36
Most Pride				
Choose self	0.29	0.41	0.23	1.26
Choose sibling	0.36	0.38	1.47	1.12
Most disappointment				
Choose self	1.14 ^b	0.63	4.15**	1.42
Choose sibling	0.40	0.37	1.20	1.12
Model statistics				
Chi-square	164.00		106.69	

Robust standard errors.

$p < .05$ for the difference between coefficients across models.

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

lower well-being than would siblings who did not perceive this about themselves.

The findings reflected principles of social comparison more strongly than principles of equity. This is seen particularly clearly in the case of perceiving oneself as the child with whom the mother had the greatest conflict or in whom she was most disappointed. In both of these cases, perceptions of being the most disfavored child predicted higher depressive symptoms, whereas perceiving that a sibling was disfavored did not.

It is less obvious how to interpret the finding that adult children who reported that they were most emotionally close to their mothers also reported higher depressive symptoms. Had the perception that a sibling was most emotionally close to the mother also predicted depressive symptoms, the pattern would be unambiguously consistent with principles of equity and suggest that any differentiation has negative consequences on adult children's psychological well-being. However, this was not the case, because only being overbenefited predicted higher depressive

symptoms. To provide a more direct test of equity theory, we conducted a separate set of analyses which showed that the perception that mothers differentiated did not predict depressive symptoms, without taking the direction of favoritism or disfavoritism into consideration. Thus, we conclude that our findings are not consistent with principles of equity theory.

The finding that perceiving oneself as most emotionally close to one's mother predicted depressive symptoms might be interpreted as suggesting that mothers are most emotionally close to offspring whom they feel are most psychologically vulnerable. In fact, such an interpretation is consistent with that of [Jensen and colleagues \(2013\)](#) for their finding that young adults reported lower depressive symptoms when their mothers provided them with less support, relative to their siblings. Although this argument cannot be completely ruled out, based on mothers' reports, psychological problems experienced by the adult children in the present study did not predict to which of their offspring they were most emotionally close ([Suitor & Pillemer, 2007](#)). Further, longitudinal studies in childhood have shown that although children's behaviors and temperaments affect PDT, there are also clear effects of PDT on children's outcomes ([Richmond et al., 2005](#)). We suggest that a more likely interpretation of the finding of our study regarding emotional closeness is that adult children who perceive themselves as most emotionally close to their mothers experience greater tension and less closeness with their siblings, as has been found in previous research ([Boll et al., 2003](#); [Suitor et al., 2009](#)). Further, tension with siblings has been found to be especially high when adult children are both favored and provide care to their mothers—a context that is particularly common when mothers are in their late 70s and 80s, as is the case in the present study ([Suitor et al., 2014](#)). Such tension with family members, including siblings, has been found to increase distress ([Lincoln, 2008](#); [Umberson, 1992](#)).

In addition to the higher sibling tension experienced by adult children favored for emotional closeness, another "cost" of such favoritism may be greater feelings of responsibility, either for the "emotional care" or for the actual future instrumental care of their mothers. Such an argument is consistent with classic arguments regarding ambivalence and role conflict in intergenerational relations ([Coser, 1966](#); [Luescher & Pillemer, 1998](#); [Merton & Barber, 1963](#)).

We find it particularly intriguing that siblings continue to engage in such a high degree of social comparison even well into their middle years. Findings from studies of childhood, adolescence, and young adulthood have reported patterns of PDT and children's well-being consistent with principles of both social comparison and equity ([Jensen et al., 2013](#); [Jensen & Whiteman, 2014](#); [McHale et al., 2000](#); [Richmond et al., 2005](#); [Shanahan et al., 2008](#); [Young & Ehrenberg, 2007](#)). However, theory and research on interpersonal relations across the life course suggest that mothers' differentiation would play a diminishing role in well-being as

offspring advance through adulthood. First, it appears that as individuals move across the life course, they increasingly attempt to reduce or avoid conflict and emphasize harmony in their relationships ([Charles & Carstensen, 2008](#); [Coats & Blanchard-Fields, 2008](#); [Lefkowitz & Fingerman, 2003](#)). Second, as individuals age, their perceptions of control in relationships increase, and they appear to regulate their emotions more effectively within relationships ([Coats & Blanchard-Fields, 2008](#); [Hay & Fingerman, 2005](#); [Lang & Carstensen, 2002](#)). Further, as siblings move through adulthood, they are less likely to share an environment and more likely to make transitions that differentiate them from one another, also reducing the likelihood of making comparisons. Thus, it is remarkable that the findings of the present study have so decidedly provided evidence that is consistent with principles of social comparison theory.

We proposed that children's depressive symptoms would be more strongly predicted by perceptions of disfavoritism than favoritism, as well as by evaluative, as opposed to relational, dimensions of differentiation. Support for these hypotheses was mixed. Comparisons of the magnitude of the four dimensions of perceptions of mothers' differentiation revealed that both dimensions of disfavoritism predicted depressive symptoms, whereas only one dimension of favoritism did so. This could be interpreted as showing greater effects of disfavoritism than favoritism. However, tests of the differences in the magnitude of the coefficients within the model showed that emotional closeness, conflict, and disappointment were similarly strong predictors and differed only from pride. Thus, there is only partial support for our proposal that disfavoritism is a stronger predictor of psychological well-being than is favoritism. Further, given that the only dimension of differentiation that did not predict depressive symptoms was pride, there is no support for the hypothesis that evaluative dimensions would be stronger predictors than relational dimensions.

We also hypothesized that there would be race differences in the consequences of PDT on adult children's psychological well-being. Specifically, we proposed that perceptions of mothers' favoritism and disfavoritism would be more distressing to Black than to White adult children. Our basis for this prediction was that most studies have found greater closeness between mothers and adult children in Black than in White families ([Aquilino, 1999](#); [Kaufman & Uhlenberg, 1998](#); [Sechrist et al., 2007](#); [Silverstein & Bengtson, 1997](#); [Wharton & Thorne, 1997](#)) and that within-family studies have found that Black mothers emphasize family solidarity more than do White mothers in their patterns of favoritism and disfavoritism ([Sechrist et al., 2012](#); [Suitor et al., 2013](#)). The perception of being the child in whom the mother was most disappointed had a substantially stronger effect on Black than on White adult children's psychological well-being; however, this was the only dimension of differentiation that varied considerably by race. We also proposed that the findings would be more likely to reflect principles of equity in Black than in White families, given the greater

emphasis on solidarity. Instead, the pattern of findings suggested that Black offspring were particularly distressed when they, as opposed to their siblings, had disappointed their mothers, for fear that this might threaten the strength of their emotional ties. Thus, these findings suggested that even in the face of higher solidarity in Black than in White families, adult children in both groups were more concerned with their own standing with their mothers relative to their siblings, than with the maintenance of equitable treatment.

Directions for Future Research

This study points to several directions for future research on PDT and adult children's psychological well-being in adulthood. First, the present analysis was limited by the cross-sectional nature of the data. Research in childhood and adolescence has shown that, in fact, the association between PDT and children's well-being is reciprocal (Richmond et al., 2005). Research using panel data would provide the opportunity to rule out alternative causal directions from those we hypothesized. Such an approach, although ideal, was not possible in the present analysis because questions regarding perceptions of mothers' favoritism regarding pride and disappointment were asked only in Wave 2 of the WFDS.

Second, our analyses considered only perceptions of mothers' favoritism and disfavoritism. Given well-established gender differences in parent-adult child relations (Suitor, Sechrist, Gilligan, & Pillemer, 2011), it is possible that the consequences of perceptions of favoritism and disfavoritism may differ for mothers and fathers. In fact, recent research contrasting mothers' and fathers' differentiation among their adult children has shown that fathers' favoritism has more negative effects on sibling relations than does mothers' favoritism (Gilligan, Suitor, Kim, & Pillemer, 2013). Thus, understanding the consequences of perceptions of fathers' favoritism and disfavoritism is worthy of consideration.

Third, we suggest that within-family differences in instrumental support, including both financial support and practical help, may constitute another important dimension of favoritism that may also affect adult children's well-being. Based on the broader literature, we proposed that such differential support might be especially consequential when offspring experience negative life events (August, Rook, & Newsom, 2007; Ha, 2010). Research in early adulthood using measures that combine instrumental and expressive dimensions of support suggests that differential assistance plays a role in well-being (Jensen et al., 2013). We hope that future research will compare the consequences of within-family differences in provision of instrumental support with those of relational and evaluative dimensions of favoritism.

Finally, previous research on within-family differences in adulthood has generally involved creating measures in

which favoritism and disfavoritism are both conceptualized and operationalized as opposite ends of the same continuum. For example, adult children are often asked to rate themselves, relative to a target sibling, on dimensions such as closeness, recognition, or the provision of support (Boll et al., 2003, 2005; Boll, Michels, Ferring, & Filipp 2010; Jensen et al., 2013). Difference scores are then created and used to identify which sibling is "favored," based on having a higher score than his or her sibling, or "disfavored," based on having a lower score than his or her sibling. The present study differs from these approaches in that respondents were asked separately about favoritism and disfavoritism, and comparisons were made among all offspring, rather than only between two particular siblings. Research on adolescents has shown that although indirect and direct measures of PDT are related, they are conceptually and empirically distinct (Jensen & Whiteman, 2014). Further, studies of other dimensions of intergenerational relations in later-life families, such as ambivalence, have revealed clear differences in the effects of such direct and indirect approaches (Suitor, Gilligan, & Pillemer, 2011). We hope that future research will pursue a comparison of the consequences of a variety of approaches to capture within-family differences on psychological well-being in adulthood.

Taken together, the findings provide further evidence of the importance of considering variations in parent-child ties within the family. In particular, the findings shed new light on the role of maternal differentiation in adult children's well-being in midlife by taking into consideration respondents' direct reports of the specific patterns of relational and evaluative dimensions of favoritism and disfavoritism. Further, the findings provide the first evidence that the association between maternal differentiation and psychological well-being in adulthood is stronger in Black than in White families. The patterns also suggest that the association between psychological well-being and both favoritism and disfavoritism can be accounted for by processes involving social comparison rather than equity for both Black and White offspring in midlife. We hope that family scholars will continue to extend the understanding of parents' differentiation among their children in later life, examining the consequences of these complex patterns of intergenerational relations on adult children's well-being.

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article. S. Peng and J.H. Jung contributed to developing the background section; S. Peng also contributed to revising the article. K. Pillemer collaborated with J.J. Suito in planning the study and contributed to revising the article.

References

- Allison, P. D. (2010). Missing data. In J. Wright & P. Marsden (Eds.), *Handbook of survey research* (pp. 631–658). Bingley, UK: Emerald Group Limited.
- Aquilino, W. S. (1999). Two views of one relationship: Comparing parents' and young adult children's reports of the quality of intergenerational relations. *Journal of Marriage and Family*, *61*, 858–870. doi:10.2307/354008
- August, K. J., Rook, K. S., & Newsom, J. T. (2007). The joint effects of life stress and negative social exchanges on emotional distress. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *62*, S304–S314. doi:10.1093/geronb/62.5.S304
- Bar-Kalifa, E., & Rafaeli, E. (2013). Disappointment's sting is greater than help's balm: Quasi-signal detection of daily support matching. *Journal of Family Psychology: JFP*, *27*, 956–967. doi:10.1037/a0034905
- Boll, T., Ferring, D., & Filipp, S. H. (2003). Perceived parental differential treatment in middle adulthood: Curvilinear relations with individuals' experienced relationship quality to sibling and parents. *Journal of Family Psychology: JFP*, *17*, 472–487. doi:10.1037/0893-3200.17.4.472
- Boll, T., Ferring, D., & Filipp, S.-H. (2005). Effects of parental differential treatment on relationship quality with siblings and parents: Justice evaluations as mediators. *Social Justice Research*, *18*, 155–182. doi:10.1007/s11211-005-7367-2
- Boll, T., Michels, T., Ferring, D., & Filipp, S.-H. (2010). Trait and state components of perceived parental differential treatment in middle adulthood: A longitudinal study. *Journal of Individual Differences*, *31*, 158–165. doi:10.1027/1614-0001/a000024
- Charles, S. T., & Carstensen, L. L. (2008). Unpleasant situations elicit different emotional responses in younger and older adults. *Psychology and Aging*, *23*, 495–504. doi:10.1037/a0013284
- Clarke, P., Marshall, V., House, J., & Lantz, P. (2011). The social structuring of mental health over the adult life course: Advancing theory in the sociology of aging. *Social Forces*, *89*, 1287–1313. doi:10.1353/sof.2011.0036
- Coats, A. H., & Blanchard-Fields, F. (2008). Emotion regulation in interpersonal problems: The role of cognitive-emotional complexity, emotion regulation goals, and expressivity. *Psychology and Aging*, *23*, 39–51. doi:10.1037/0882-7974.23.1.39
- Cohen, S. (2004). Social relationships and health. *The American psychologist*, *59*, 676–684. doi:10.1037/0003-066X.59.8.676
- Coser, R. L. (1966). Role distance, sociological ambivalence, and transitional status systems. *American Journal of Sociology*, *72*, 173–187. doi:10.1086/224276
- Cranford, J. A. (2004). Stress-buffering or stress-exacerbation? Social support and social undermining as moderators of the relationship between perceived stress and depressive symptoms among married people. *Personal Relationships*, *11*, 23–40. doi:10.1111/j.1475-6811.2004.00069.x
- Davey, A., Tucker, C. J., Fingerman, K., & Savla, J. (2009). Within-family variability in representations of past relationships with parents. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *64*, 125–136. doi:10.1093/geronb/gbn001
- DeLongis, A., Capreol, M., Holtzman, S., O'Brien, T., & Campbell, J. (2004). Social support and social strain among husbands and wives: A multilevel analysis. *Journal of Family Psychology: JFP*, *18*, 470–479. doi:10.1037/0893-3200.18.3.470
- Feinberg, M., & Hetherington, E. M. (2001). Differential parenting as a within-family variable. *Journal of Family Psychology*, *15*, 22–37. doi:10.1037/0893-3200.15.1.22
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117–140. doi:10.1177/001872675400700202
- Finan, P., Okun, M., Kruszewski, D., Davis, M., Zautra, A., & Tennen, H. (2010). Interplay of concurrent positive and negative interpersonal events in the prediction of daily negative affect and fatigue for rheumatoid arthritis patients. *Health Psychology*, *29*, 429–437. doi:10.1037/a0020230
- Fiori, K. L., & Consedine, N. S. (2013). Positive and negative social exchanges and mental health across the transition to college: Loneliness as a mediator. *Journal of Social and Personal Relationships*, *30*, 920–941. doi:10.1177/0265407512473863
- Gilligan, M., Suito, J. J., Feld, S., & Pillemer, K. (2015). Do positive feelings hurt? Disaggregating positive and negative components of intergenerational ambivalence. *Journal of Marriage and the Family*, *77*, 261–276. doi:10.1111/jomf.12146
- Gilligan, M., Suito, J. J., Kim, S., & Pillemer, K. (2013). Differential effects of mothers' and fathers' favoritism on sibling relations in adulthood. *Journal of Gerontology: Social Sciences*, *68*, 593–598. doi:10.1093/geronb/gbt039
- Ha, J. H. (2010). The effects of positive and negative support from children on widowed older adults' psychological adjustment: A longitudinal analysis. *The Gerontologist*, *50*, 471–481. doi:10.1093/geront/gnp163
- Hatfield, E., Walster, G. W., & Berscheid, E. (1978). *Equity: Theory and research*. Boston, MA: Allyn & Bacon.
- Hay, E. L., & Fingerman, K. L. (2005). Age differences in perceptions of control in social relationships. *The International Journal of Aging and Human Development*, *60*, 53–75. doi:10.2190/KQRF-J614-0CEQ-H32L
- Heck, R. H., Thomas, S., & Tabata, L. (2013). *Multilevel modeling of categorical outcomes using IBM SPSS*. London, UK: Routledge Academic.
- Jensen, A. C., & Whiteman, S. D. (2014). Parents' differential treatment and adolescents' delinquent behaviors: Direct and indirect effects of difference-score and perception-based measures. *Journal of Family Psychology: JFP*, *28*, 549–559. doi:10.1037/a0036888
- Jensen, A. C., Whiteman, S. D., Fingerman, K. L., & Birditt, K. S. (2013). "Life still isn't fair": Parental differential treatment of young adult siblings. *Journal of Marriage and the Family*, *75*, 438–452. doi:10.1111/jomf.12002
- Jones, D. J., Forehand, R., Dorsey, S., Foster, S., & Brody, G. (2005). Coparent support and conflict in African American single mother-headed families: Associations with maternal and child psychosocial functioning. *Journal of Family Violence*, *20*, 141–150. doi:10.1007/s10896-005-3650-0
- Kalmijn, M., & Liebroer, A. C. (2011). Nonresponse of secondary respondents in multi-actor surveys: Determinants, consequences,

- and possible remedies. *Journal of Family Issues*, 32, 735–766. doi:10.1177/0192513x10390184
- Kaufman, G., & Uhlenberg, P. (1998). Effects of life course transitions on the quality of relationships between adult children and their parents. *Journal of Marriage and Family*, 60, 924–938. doi:10.2307/353635
- Krause, N., & Ellison, C. G. (2007). Parental religious socialization practices and self-esteem in late life. *Review of Religious Research*, 49, 109–127. doi:10.2307/20447484
- Lackner, J. M., Gudleski, G. D., Firth, R., Keefer, L., Brenner, D. M., Guy, K., ... Sitrin, M. D. (2013). Negative aspects of close relationships are more strongly associated than supportive personal relationships with illness burden of irritable bowel syndrome. *Journal of Psychosomatic Research*, 74, 493–500. doi:10.1016/j.jpsychores.2013.03.009
- Lang, F. R., & Carstensen, L. L. (2002). Time counts: Future time perspective, goals, and social relationships. *Psychology and Aging*, 17, 125–139. doi:10.1037/0882-7974.17.1.125
- Lazarus, R. S. (2006). Emotions and interpersonal relationships: Toward a person-centered conceptualization of emotions and coping. *Journal of Personality*, 74, 9–46. doi:10.1111/j.1467-6494.2005.00368.x
- Lefkowitz, E. S., & Fingerma, K. L. (2003). Positive and negative emotional feelings and behaviors in mother-daughter ties in late life. *Journal of Family Psychology: JFP*, 17, 607–617. doi:10.1037/0893-3200.17.4.607
- Lincoln, K. D. (2000). Social support, negative social interactions, and psychological well-being. *Social Service Review*, 74, 231–252. doi:10.1086/514478
- Lincoln, K. D. (2008). Personality, negative interactions, and mental health. *The Social Service Review*, 82, 223–251. doi:10.1086/589462
- Luescher, K., & Pillemer, K. (1998). Intergenerational ambivalence: A new approach to the study of parent-child relations in later life. *Journal of Marriage and Family*, 60, 413–425. doi:10.2307/353858
- Mavandadi, S., Sorkin, D. H., Rook, K. S., & Newsom, J. T. (2007). Pain, positive and negative social exchanges, and depressive symptomatology in later life. *Journal of Aging and Health*, 19, 813–830. doi:10.1177/0898264307305179
- McHale, S. M., Updegraff, K. A., Tucker, C. J., & Crouter, A. C. (2000). Step in or stay out? Parents' roles in adolescent siblings' relationships. *Journal of Marriage and Family*, 62, 746–760. doi:10.1111/j.1741-3737.2000.00746.x
- Merton, R. K., & Barber, E. (1963). Sociological ambivalence. In E. A. Tiryakian (Ed.), *Sociological theory: Values and sociocultural change* (pp. 91–120). New York: Free Press.
- Mouzon, D. M. (2013). Can family relationships explain the race paradox in mental health? *Journal of Marriage and Family*, 75, 470–485. doi:10.1111/jomf.12006
- Newsom, J. T., Nishishiba, M., Morgan, D. L., & Rook, K. S. (2003). The relative importance of three domains of positive and negative social exchanges: A longitudinal model with comparable measures. *Psychology and Aging*, 18, 746–754. doi:10.1037/0882-7974.18.4.746
- Pillemer, K., Suito, J. J., Pardo, S., & Henderson, C. Jr. (2010). Mothers' differentiation and depressive symptoms among adult children. *Journal of Marriage and the Family*, 72, 333–345. doi:10.1111/j.1741-3737.2010.00703.x
- Pudrovska, T. (2008). Psychological implications of motherhood and fatherhood in midlife: Evidence from sibling models. *Journal of Marriage and Family*, 70, 168–181. doi:10.1111/j.1741-3737.2007.00469.x
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401. doi:10.1177/014662167700100306
- Richmond, M. K., Stocker, C. M., & Rienks, S. L. (2005). Longitudinal associations between sibling relationship quality, parental differential treatment, and children's adjustment. *Journal of Family Psychology: JFP*, 19, 550–559. doi:10.1037/0893-3200.19.4.550
- Rook, K. S. (2001). Emotional health and positive versus negative social exchanges: A daily diary analysis. *Applied Developmental Science*, 5, 86–97. doi:10.1207/S1532480XADS0502_4
- Ross, C. E., & Mirowsky, J. (1988). Child care and emotional adjustment to wives' employment. *Journal of Health and Social Behavior*, 29, 127–138. doi:10.2307/2137053
- Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent-child relations across the life course*. Piscataway, NJ: Transaction.
- Ruggles, S. (1994). The origins of African-American family structure. *American Sociological Review*, 59, 136–151. doi:10.2307/2096137
- Ryff, C. D., Schmutte, P. S., & Lee, Y. H. (1996). How children turn out: Implications for parental self-evaluation. In C. D. Ryff & M. M. Seltzer (Eds.), *The parental experience in midlife* (pp. 383–422). Chicago, IL: University of Chicago Press.
- Salovey, P. (1991). *The psychology of jealousy and envy*. New York, NY: Guilford Press.
- Sarkisian, N., & Gerstel, N. (2004). Kin support among Blacks and Whites: Race and family organization. *American Sociological Review*, 69, 812–837. doi:10.1177/000312240406900604
- Schieman, S., & Glavin, P. (2011). Education and work-family conflict: Explanations, contingencies and mental health consequences. *Social Forces*, 89, 1341–1362. doi:10.1093/sf/89.4.1341
- Sechrist, J., Suito, J. J., Henderson, A., Cline, K., & Steinhour, M. (2007). Regional differences in parent-adult child relations. *Journal of Gerontology: Social Sciences*, 62, 388–391. doi:10.1093/geronb/62.6.S388
- Sechrist, J., Suito, J. J., Pillemer, K., Gilligan, M., Howard, A. R., & Keeton, S. A. (2012). Aging parents and adult children: Determinants of relationship quality. In R. Blieszner & V. Bedford (Eds.), *Handbook of families and aging* (pp. 153–181). New York, NY: Praeger.
- Shanahan, L., McHale, S. M., Crouter, A. C., & Osgood, D. W. (2008). Linkages between parents' differential treatment, youth depressive symptoms, and sibling relationships. *Journal of Marriage and Family*, 70, 480–494. doi:10.1111/j.1741-3737.2008.00495.x
- Silverstein, M., & Bengtson, V. L. (1997). Intergenerational solidarity and the structure of adult child-parent relationships in American families. *American Journal of Sociology*, 103, 429–460. doi:10.1086/231213
- Stack, C. B. (1975). *All our kin: Strategies for survival in a black community*. New York, NY: Basic Books.
- Suito, J. J., Gilligan, M., Johnson, K., & Pillemer, K. (2014). Caregiving, perceptions of maternal favoritism, and tension among siblings. *The Gerontologist*, 54, 580–588. doi:10.1093/geront/gnt065

- Suitor, J. J., Gilligan, M., Peng, S., & Pillemer, K. (2013, November). *Garnering favor and avoiding disfavor: Predicting within-family differences in mother-adult child relations*. Paper presented at the Annual Meeting of the Gerontological Society of America, New Orleans, LA.
- Suitor, J. J., Gilligan, M., & Pillemer, K. (2011). Conceptualizing and measuring intergenerational ambivalence in later life. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, *66B*, 769–781. doi:10.1093/geronb/gbr108
- Suitor, J. J., Gilligan, M., & Pillemer, K. (2013). Continuity and change in mothers' favoritism toward offspring in adulthood. *Journal of Marriage and Family*, *75*, 1229–1247. doi:10.1111/jomf.12067
- Suitor, J. J., & Pillemer, K. (2006). Choosing daughters: Exploring why mothers favor adult daughters over sons. *Sociological Perspectives*, *49*, 139–160. doi:10.1525/sop.2006.49.2.139
- Suitor, J. J., & Pillemer, K. (2007). Mothers' favoritism in later life: The role of children's birth order. *Research on Aging*, *29*, 32–55. doi:10.1177/0164027506291750.
- Suitor, J. J., Sechrist, J., Gilligan, M., & Pillemer, K. (2011). Intergenerational relations in later-life families. In R. A. Settersten & J. L. Angel (Eds.), *Handbook of sociology of aging* (pp. 161–178). New York, NY: Springer.
- Suitor, J. J., Sechrist, J., Plikuhn, M., Pardo, S. T., Gilligan, M., & Pillemer, K. (2009). The Role of perceived maternal favoritism in sibling relations in midlife. *Journal of Marriage and the Family*, *71*, 1026–1038. doi:10.1111/j.1741-3737.2009.00650.x
- Suls, J., & Wheeler, L. (2000). *Handbook of social comparison: Theory and research*. Berlin, Heidelberg: Kluwer Academic.
- Umberson, D. (1989). Relationships with children: Explaining parents' psychological well-being. *Journal of Marriage and Family*, *51*, 999–1012. doi:10.2307/353212
- Umberson, D. (1992). Relationships between adult children and their parents: Psychological consequences for both generations. *Journal of Marriage and Family*, *54*, 664–674. doi:10.2307/353252
- Wharton, A. S., & Thorne, D. K. (1997). When mothers matter: The effects of social class and family arrangements on African American and White women's perceived relations with their mothers. *Gender & Society*, *11*, 656–681. doi:10.1177/089124397011005007
- Wilson, M. N. (1986). The black extended family: An analytical consideration. *Developmental Psychology*, *22*, 246–258. doi:10.1037/0012-1649.22.2.246
- Wright, J. D., & Marsden, P. V. (2010). Survey research and social science: History, current practice, and future prospects. In J. Wright & P. Marsden (Eds.), *Handbook of survey research* (pp. 3–26). Bingley, UK: Emerald Group.
- Young, L., & Ehrenberg, M. F. (2007). Siblings, parenting, conflict, and divorce. *Journal of Divorce & Remarriage*, *47*, 67–85. doi:10.1300/J087v47n03_04