

## Original Article

# The Long Arm of Maternal Differential Treatment: Effects of Recalled and Current Favoritism on Adult Children's Psychological Well-Being

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## Abstract

**Objectives:** In this article, we draw from classic theories of social psychology and the life course to compare the effects of current and recalled perceived maternal differential treatment (MDT) on the depressive symptoms of adult children in midlife.

**Method:** To address this question, we used data collected from 746 adult children nested within 293 later-life families as part of the Within-Family Differences Study.

**Results:** Multilevel regression revealed that both recollections of maternal differentiation from childhood and perceptions of mothers' current disfavoritism regarding conflict predicted depressive symptoms, whereas perceptions of current favoritism regarding emotional closeness did not.

**Discussion:** Taken together, the findings from this investigation reflect principles of theories of social comparison and the life course in that both perceptions of current MDT and MDT recalled from childhood affect children's well-being in midlife. These findings contribute to a growing body of literature highlighting the role of within-family differences in parent-child relationships on well-being across the life course.

**Keywords:** Adult children—Depressive symptoms—Mother-child relations—Parental favoritism—Psychological well-being—Within-family design

Despite norms calling for parents to avoid favoring some of their children over others (Cleese & Bates, 2003; Cohen & Cohen, 1997), a substantial proportion of adult children and parents have reported that parental favoritism is common in both childhood and adulthood (Bedford, 1992; Boll, Ferring, & Filipp, 2003; Sutor, Gilligan, & Pillemer, 2013). Perceptions of maternal differential treatment (MDT) have been found to play an important role in well-being in both childhood and adolescence, predicting depression, anxiety, and poor adjustment (Kowal & Kramer, 1997; Kowal, Kramer, Krull, & Crick, 2002; Shanahan, McHale, Crouter, & Osgood, 2008).

Studies have documented that such MDT also has consequences on psychological well-being in adulthood. Young adults have been found to have poorer adjustment when they perceived mothers' differential treatment (Young & Ehrenberg, 2007), particularly in the presence of high levels of perceptions of favoritism and disfavoritism (Jensen, Whiteman, Fingerman, & Birditt, 2013). Similarly, perceptions of both favoritism and disfavoritism in midlife have been found to be associated with higher depressive symptoms (Pillemer, Sutor, Pardo, & Henderson, 2010; Sutor, Gilligan, Peng, Jung, & Pillemer, 2015).

Although these lines of research have demonstrated that MDT, as reported by mothers and offspring, affects psychological well-being in both childhood and adulthood, there has been little attention to the *relative consequences* of current MDT and MDT experienced at earlier points in the life course. Ideally, this question would be addressed using longitudinal data spanning the period from childhood through midlife on the same set of individuals; however, no such data exist.

However, using the Within-Family Differences Study, it is possible to shed new light on the relative consequences of MDT in childhood and midlife on psychological well-being, using data collected regarding perceptions of current MDT and MDT recalled from childhood. To address this research question, we use data collected from 746 midlife adult children nested within 293 families in which mothers are in their 60s and 70s.

### MDT and Children's Psychological Well-Being Across the Life Course

A large body of scholarship has developed across the past two decades regarding the consequences of MDT on psychological well-being in childhood, adolescence, and early adulthood (Feinberg & Hetherington, 2001; Jensen et al., 2013; McHale, Updegraff, Jackson-Newsom, Tucker & Crouter, 2000; Richmond, Stocker, & Rienks, 2005; Shanahan et al., 2008; Young & Ehrenberg, 2007). Recently, this line of research extended to the exploration of MDT and well-being when children are well into midlife (Davey, Tucker, Fingerman, & Savla, 2009; Suito et al., 2015, 2016).

#### Perceptions of current MDT and psychological well-being in midlife

Two recent studies have examined the association between perceptions of *current* MDT and psychological well-being in midlife (Pillemer et al., 2010; Suito et al., 2015). Both studies drew from classic theories of social comparison theory (Festinger, 1954; Suls & Wheeler, 2000) and equity (Hatfield, Walster, & Berscheid, 1978) in developing their hypotheses. Theories of social comparison propose that individuals engage in comparisons with others as a way of gathering information and evaluating their social position, and when individuals consider themselves underbenefited, they are likely to experience feelings of hostility or unhappiness (Salovey, 1991). Based on these principles, the authors argued that perceiving oneself as not favored by one's mother or disfavored by her, 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.

Alternatively, theories of equity propose 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 for both groups (Hatfield et al., 1978). Based on this theory, the authors proposed, alternatively, 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/he was overbenefited or underbenefited.

Pillemer and colleagues' (2010) results appear to be consistent with principles of equity. They found substantially higher depressive symptoms when offspring perceived that mothers' differentiated regarding conflict, and somewhat higher depressive symptoms when offspring perceived their mothers differentiated regarding emotional closeness. However, their measures of favoritism regarding emotional closeness and disfavoritism regarding conflict captured only whether adult children perceived that their mothers differentiated within the family, without taking into consideration whether the respondents specifically perceived themselves, as opposed to their siblings, as favored or disfavored. Thus, the study provided insufficient information to assess whether the findings reflect principles of social comparison.

In contrast, Suito and colleagues' (2015) design allowed them to test not only whether psychological well-being was affected by adult children's perceptions that their mothers treated any offspring in the family differently but also whether well-being was affected by adult children's perceptions that they were favored or disfavored, relative to their sibling(s). Their analyses revealed that depressive symptoms were higher when offspring perceived that they had the most emotional closeness to mothers, had the greatest conflict with mothers, or were the offspring in whom mothers were the most disappointed; however, depressive symptoms were not higher when adult children perceived that other siblings in the family were favored or disfavored. Thus, their findings were consistent with principles of social comparison, rather than equity. Initially, finding that being most emotionally close was associated with higher depressive symptoms might seem counter to principles of social comparison. However, Suito and colleagues (2015) argued that in families in which mothers are in their 80s, as was the case in their study, offspring closest to their mothers feel the most responsibility for meeting their mothers' emotional needs at a time when mothers are at high risk for serious physical and cognitive declines, thus increasing these children's depressive symptoms.

Taken together, the findings from these two studies demonstrate that perceptions of mothers' current favoritism and disfavoritism predict depressive symptoms. Furthermore, based on Suito and colleagues' more refined analyses, it appears that these effects occur when children perceive that they, as opposed to their sibling(s), are the favored or disfavored offspring. However, because these studies provide data on perceptions of only *current* favoritism and disfavoritism, they cannot assess whether current perceptions are independent of MDT or only reflect recollections of MDT in childhood.

### Recollections of MDT and psychological well-being in midlife

Theories of developmental psychology and the life course can be used to argue that MDT recalled from childhood would have a strong effect on psychological well-being in adulthood. Theories of the life course propose that adverse childhood events, including problematic relationships with parents, have a significant impact on adult health outcomes (Elder, 1998; Felitti et al., 1998; Morton, Mustillo, & Ferraro, 2014). This is also consistent with timing models, which propose that childhood is a time when adversity is highly salient for later psychological outcomes (Antonucci, Akiyama, & Takahashi, 2004; Elder, 1998; Morris, Silk, Steinberg, Myers, & Robinson, 2007).

To the best of our knowledge, only one investigation has explored the association between recalled MDT and adult well-being (Davey et al., 2009). Davey and colleagues studied the role of childhood MDT on adult well-being using data collected from midlife adult children regarding the quality of their relationships with their mothers to create measures of favoritism and disfavoritism based on difference scores. They 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. Furthermore, those whose reports of recalled maternal affection were above the family average reported lower negative affect. Thus, Davey and colleagues' findings suggest that MDT recalled, on average, from three decades earlier, affected psychological well-being in midlife.

However, because no measures of perceptions of current MDT were included in Davey's study, it is not possible to compare the relative consequences of such recollections of MDT and perceptions of current MDT on well-being. Furthermore, it is not possible to assess whether recollections of MDT from childhood may actually reflect current perceptions, and thus tell us little about the long-term consequences of MDT on well-being.

Due to the absence of studies comparing the consequences of current and recalled MDT, we turned to the literature on childhood and adult adversity in other contexts to provide guidance for developing hypotheses regarding the relative effects of these two dimensions of MDT. Our review of the literature revealed that adversity in both childhood and adulthood play a role in well-being (cf. Angela & Hamil-Luker, 2005; Cohen, Janicki-Deverts, Chen, & Matthews, 2010; Ferraro, Schafer, & Wilkinson, 2016); however, because the goals of these studies were to explore the cumulative effects of adversity over time, rather than compare the effects of the same dimension of adversity decades apart, they could not provide clear guidance regarding our research question.

Therefore, based on the literatures on adversity and well-being and on current and recalled MDT, we hypothesized that perceptions of MDT in midlife and recalled from childhood would predict depressive symptoms when both

dimensions were in the same model. However, rather than making a specific hypothesis regarding the role of current or recalled MDT in children's depressive symptoms, we conducted exploratory analyses to test the relative strength of these two associations.

### Potential moderators in the association between MDT and psychological well-being in midlife

Up to this point, we have been discussing the association between MDT and psychological well-being without taking into consideration children's characteristics that may moderate the association between MDT and depressive symptoms. However, we propose that children's gender and birth order may moderate these associations.

#### *Gender*

Theory and empirical research suggest that child's gender may moderate the association between MDT and psychological well-being in midlife. Classic feminist literature on gender role development argues that girls and women are encouraged to focus on interpersonal relationships in the family, whereas boys and men are encouraged to pursue instrumental achievements outside the family (Chodorow, 1978; Coser, 1991; Gilligan, 1982). Consistent with this argument, empirical research has found that mothers and daughters are the closest of all four parent-child gender combinations and that the mother-daughter relationship is characterized by the strongest history of support exchange across the life course (Suito, Gilligan, & Pillemer, 2015). Furthermore, daughters are substantially more likely than sons to be mothers' preferred caregivers (Suito et al., 2013; Suito & Pillemer, 2006), and more likely to provide care (Pillemer & Suito, 2014). Based on such gender differences in closeness and exchanges between mothers and daughters compared to sons, we hypothesized that the influence of both recalled and current perceived maternal differentiation on depressive symptoms would be stronger for daughters than sons.

#### *Birth order*

The role of birth order in intergenerational relationships in later-life families has received substantially less attention than has gender. However, the limited information that exists shows a consistent pattern of mothers' reporting that they are most emotionally close to last borns (Suito & Pillemer, 2007; Suito et al., 2013, 2016). Additionally, as mothers move through the last decades of life, they increasingly prefer last borns as their caregivers (Suito & Pillemer, 2007; Suito et al., 2013). Furthermore, research on adolescents suggests that the association between MDT and psychological well-being may be stronger among last borns because younger offspring are more likely to engage in social comparison than are older siblings (Jensen, Pond, & Padilla-Walker, 2015). Based on these arguments, we hypothesized that both current perceptions and recollections of MDT from childhood would be stronger predictors

of psychological well-being for last borns than for children in other birth-order positions.

#### Additional factors that may predict depressive symptoms

It is important to control for several characteristics of adult children and families that have been found to predict depressive symptoms or mothers' differential treatment. 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.

#### Adult child characteristics

At the adult child level, we controlled on age, educational attainment, marital status, employment, and self-rated health. 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). Both educational attainment and marital status have been found to predict both maternal differentiation and depressive symptoms. Mothers are more likely to favor, and less likely to disfavor, offspring who have completed more education and have stable marriages (Suitoer & Pillemer, 2007; Suitoer et al., 2013, 2016). Educational attainment and marital status also predict depressive symptoms, with those who are better-educated and married reporting lower symptoms than those less educated and unmarried (Clarke et al., 2011).

#### Family-level characteristics

At the family level, we controlled on age-spacing, gender composition, family size, and race. Although neither sibling age-spacing nor gender composition has been found to predict psychological well-being or MDT in midlife, we felt it was important to control on them because a higher proportion of sisters are associated with greater closeness and contact (Connidis & Campbell, 1995; White, 2001), whereas age closeness can also contribute to increased conflict between siblings because closely spaced siblings are more likely to compete for resources and attention (Hertwig, Davis, & Sulloway, 2002). We included family size because although it does not predict MDT, an increase in family size is associated with a lower likelihood of any particular child being named (Suitoer et al., 2013, 2016). Finally, race has been found to be associated with mothers being more likely to differentiate among their offspring regarding some dimensions of favoritism and less likely regarding some dimensions of disfavoritism (Suitoer et al., 2016). We included all of these variables throughout the analyses.

## Method

### Study Design

Data for this article were collected as part of the Within-Family Differences Study. The design of the study involved

selecting a sample of mothers aged 65–75 years with at least two living adult children and collecting data from mothers regarding each of their children. Massachusetts city and town lists were the source of the sample of mothers. Massachusetts requires communities to keep city/town lists of all residents by address. Town lists also provide the age and gender of residents. The investigators drew a systematic sample of women aged 65–75 from the town lists from 20 communities in the greater Boston area. (For a detailed description of the design, see [Suitoer et al., 2013], where portions of this section have been published previously.)

The interviewers completed interviews with 566 mothers between 2001 and 2003, which represented 61% of those who were eligible for participation, a rate comparable to that of similar surveys in the 2000s (Wright & Marsden, 2010). At the end of each interview, mothers were asked for contact information for their adult children. Approximately 70% of the mothers provided contact information and approximately 70% of the children who were contacted agreed to participate. Both rates are similar to those of other studies in which mothers are asked for contact information for their adult offspring (Birditt, Tighe, Fingerman, & Zarit, 2012). These procedures yielded a total of 774 adult child participants nested within 299 families.

Telephone interviews were conducted with the children to maintain a single mode of data collection given that many of the children lived in distant parts of the country. These interviews were conducted between January 2002 and August 2003.

For the present analysis, we used the subsample of 746 adult children nested within 293 families, for which there were no missing data on the variables of interest (approximately 96% of the full sample of adult children and 98% of all families). Comparison of those dropped and those remaining in the analytic sample revealed no differences on demographic characteristics or mother-child relationship quality.

See Table 1 for demographic characteristics of adult children and their mothers.

## Measures

### Dependent variable

The seven-item Center for Epidemiological Studies Depression (CES-D) Scale (Ross & Mirowsky, 1984) was used to measure psychological well-being. The CES-D asks respondents how often in the past week they have felt a certain way. The items composing the scale are as follows: Everything I did was an effort, I had trouble getting to sleep or staying asleep, I felt lonely, I felt sad, I could not get going, I felt I could not shake off the blues, I had trouble keeping my mind on what I was doing. Scoring for the seven questions was as follows: 0 points: Rarely or none of the time (<1 day); 1 point: Some or a little of the time (1–2 days); 2 points: Occasionally or a moderate amount

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

Mothers		N = 293
Age in years (mean, <i>SD</i> )		70.9 (3.2)
Black (%)		22.9
Marital status (%)		
Married		50.2
Divorced/separated		12.0
Widowed		37.9
Education (%)		
Less than high school		18.8
High school graduate		41.0
At least some college		18.4
College graduate		21.9
Number of children (mean, <i>SD</i> )		3.8 (1.8)
Adult children		N = 746
Age in years (mean, <i>SD</i> )		42.5 (5.8)
Daughters (%)		56.0
Marital status (%)		
Married		61.8
Divorced/separated		11.8
Widowed		0.8
Cohabiting		7.2
Never married		18.4
Education (%)		
Less than high school		6.2
High school graduate		23.5
Post high school vocational		5.5
At least some college		13.5
College graduate		32.0
Some graduate school		19.3
Employed (%)		84.9
Parents (%)		70.9
CES-D (mean, <i>SD</i> )		4.4 (4.4)

Note: CES-D = Center for Epidemiological Studies Depression.

of the time (3–4 days); 3 points: Most or all of the time (5–7 days). In this sample, the scale ranged from 0 to 21, with a mean of 4.4 (*SD* = 4.4; Cronbach's alpha = .83).

### Independent variables

#### *Current perceived favoritism and disfavoritism*

To create the perceived current maternal favoritism and disfavoritism measures, each respondent was asked to select: (a) "To which child in your family is your mother the most emotionally close?" and (b) "With which child in the family does your mother have the most disagreements or arguments?" For each of these questions, responses were coded: 0 = child does not perceive mother as favoring/disfavoring any particular offspring; 1 = child perceives that mother favors/disfavors him or herself; or 2 = child perceives that mother favors/disfavors another child in the family. Next, 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 favoritism regarding emotional closeness were 38.7% "chose self," 47.3% "chose sibling," and 14.0% "perceived mother did not differentiate"; the distributions of the disfavoritism regarding conflict were 20.5% "chose self," 71.5% "chose sibling," and 8.0% "perceived mother did not differentiate."

#### *Recollections of MDT from childhood*

To measure recollections of maternal differentiation in childhood, the adult children were asked to what extent they agreed with two statements: "When you were a child: (a) Your mother tried to be fair with each of you" and (b) "Your mother tended to play favorites." Response categories ranged from (1) *very true* to (4) *not true at all*. These two items were reverse coded and combined to create a childhood MDT scale, which ranged from 2 to 8 (*M* = 3.1; *SD* = 1.5; Cronbach's alpha = .65) with higher scores indicating more differentiation.

This measure has both strengths and weaknesses in the context of the primary question we are addressing in this article—the relative effects of perceived current MDT and recollections of MDT from childhood. One strength is that it provides a direct measure of recollections of childhood MDT, rather than indirect measures created by using difference scores. Employing a direct measure is advantageous in the present context for two reasons. First, it makes the measures of current and recalled MDT more parallel. Second, recent studies of other dimensions of mother–child relationship quality have found that direct measures are stronger predictors of depressive symptoms than are indirect measures of the same construct (Suitor, Gilligan, & Pillemer, 2011). However, our measure of recalled MDT also has weaknesses. First, it does not take into consideration the "direction" of MDT, yet we know that the effects on depressive symptoms are greater when offspring perceive that they are the children who are favored or disfavored, as opposed to perceiving that a sibling is favored or disfavored. Second, it asks about "global" MDT, without differentiating between "positive favoritism" and "negative disfavoritism." Ideally, we would have preferred to use a measure of recalled MDT that was direct, and did differentiate both the direction and the positive/negative dimensions of MDT. However, such a measure was not available in this data set.

One might question whether perceptions of current and childhood MDT could be measuring the same construct, and therefore could not be included in the same equation. However, only a weak correlation was found between these variables ( $r = .10$ ).

### Control variables

#### *Family-level characteristics*

*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. For the present analysis, children whose mothers identified themselves as White only were coded as “White” (80.6%) and those whose mothers identified themselves as Black, Asian, Hispanic, or Native American were coded as “non-White” (19.4%). *Family size* was measured by asking mothers for the names of each of their living children ( $M = 3.8$ ;  $SD = 1.8$ ). *Gender composition* was measured by the percent daughters ( $M = 51.0\%$ ). Because we were not concerned with age differences between any particular pair of siblings, we considered age distribution a family-level variable and created *age range* by subtracting the age of the youngest child from the age of the eldest child (range 0–24;  $M = 5.7$ ;  $SD = 5.1$ ).

#### Adult child characteristics

*Gender* was coded 0 = son (44.0%); 1 = daughter (56.0%). *Marital status* was coded as not married = 0 (38.2%), married = 1 (61.8%). *Child's age* was a continuous variable ranging from 21 to 61 ( $M = 42.5$ ;  $SD = 5.8$ ). *Birth order* was based on the ages of all children in the family: 0 = first or middle born (61.0%), 1 = last born (39.0%). *Employment* was measured by asking each respondent whether he or she was currently working for a job with pay: 0 = no (15.1%), 1 = yes (84.9%). Respondents' *educational attainment* was reported by their mothers: 1 = eighth grade or less (0.4%); 2 = 1–3 years of high school (5.8%); 3 = high school graduate (23.5%); 4 = vocational/noncollege, post high school (5.5%); 5 = 1–3 years of college (13.5%); 6 = college graduate (32%); and 7 = graduate work (19.3%).

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

#### Analytic strategy

Each of the 746 adult children is nested within one of 293 families; thus, the observations are not independent. 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 .030, indicating that the family-level factors accounted for only 3.0% 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.

To explore the relative strength of recalled MDT and current favoritism and disfavoritism as predictors, we conducted *F* 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 and only 3.2% missing overall (cf. Allison, 2010). The analyses were conducted using SPSS23.

## Results

Table 2 displays the results of the multilevel regression analysis of respondents' reports of depressive symptoms. In Model 1, perceptions of current favoritism regarding emotional closeness and disfavoritism regarding conflict were the only measures of MDT included in the equation. The findings indicated that perceptions of currently being the child with whom the mother had the greatest conflict predicted depressive symptoms ( $b = 1.94$ ), whereas perceptions of favoritism regarding emotional closeness did not. In fact, besides self-reported health, perceptions of currently being the child with whom the mother had the greatest conflict were the only variable to predict depressive symptoms.

**Table 2.** Mixed Model Results Predicting Adult Children's Depressive Symptoms ( $N = 746$  Within 293 Families)

Predictors	Model 1		Model 2	
	Estimate	SE	Estimate	SE
Family-level characteristics				
Race (1 = non-White)	-0.41	0.44	-0.37	0.44
Family size	-0.05	0.09	-0.08	0.09
Proportion of daughters	0.45	0.68	0.40	0.67
Age range of siblings	0.01	0.03	0.01	0.03
Child-level characteristics				
Health	-1.26**	0.16	-1.19**	0.16
Employment	-0.67	0.44	-0.74	0.43
Age	0.00	0.03	0.00	0.03
Daughter	-0.12	0.37	-0.29	0.37
Last born	0.27	0.37	0.24	0.37
Education	-0.16	0.11	-0.17	0.11
Married	-0.42	0.33	-0.42	0.33
Perceived MDT				
Current perceived MDT (vs. no MDT)				
Most emotionally close				
Chose self	0.68	0.48	0.63	0.48
Chose sibling	0.86	0.47	0.70	0.47
Most tension				
Chose self	1.94**	0.64	1.72**	0.64
Chose sibling	0.88	0.57	0.79	0.57
Recollections of MDT in childhood				
			0.36**	0.11
Model statistics				
BIC	4,247.638		4,238.731	
AIC	4,238.452		4,229.548	

Notes: AIC = Akaike information criterion; BIC = Bayesian information criterion; MDT = maternal differential treatment; VC = variance components. Covariance in the model used VC.

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

In Model 2, MDT recalled from childhood was included in the equation, along with current favoritism regarding emotional closeness and disfavoritism regarding conflict. The findings revealed that, in presence of current perceptions of MDT, recalled MDT from childhood predicted depressive symptoms ( $b = 0.36$ ). The findings also indicated that the strength of the association between perceptions of current maternal disfavoritism and CES-D scores basically did not change after the inclusion of recalled MDT from childhood.

We conducted  $F$  tests to explore the relative strength of recalled MDT and perceptions of current disfavoritism; these tests revealed no significant differences (tables not shown).

Last, we conducted a series of interaction tests to assess whether the associations between depressive symptoms and current or recalled MDT were moderated by children's gender or birth order. These analyses provided no evidence that either of these factors moderated the relationship between CES-D scores and perceptions of either current or recalled MDT.

## Discussion

The central question addressed in this article is whether children's perceptions of current maternal favoritism and disfavoritism (MDT) in midlife and their recollections of their mothers' differentiation in childhood make independent contributions to psychological well-being. In framing this question, we drew from theories of social comparison and the life course to argue that adverse experiences in childhood, as well as in adulthood, have a significant negative impact on adult mental health outcomes (Felitti et al., 1998; Morton et al., 2014).

The findings show that both childhood MDT and perceptions of current MDT, particularly disfavoritism, have independent negative effects on adult children's psychological well-being in midlife. Thus, they complement previous studies showing that perceived maternal favoritism and disfavoritism in childhood and adulthood predict psychological well-being well into midlife (Davey et al., 2009; Pillemer et al., 2010; Suito et al., 2015); however, they extend this line of research by demonstrating that MDT at each of these life course stages makes a unique contribution to well-being in adulthood. Furthermore, an important contribution of this study is providing evidence that MDT in childhood constitutes a form of disadvantage that, alongside other dimensions of childhood adversity (Elder, 1998; Felitti et al., 1998; Morton et al., 2014), has long-ranging effects on well-being.

The findings also contribute to our understanding of the role of MDT in well-being in adulthood by demonstrating that the pattern of effects does not differ by children's gender or birth order. Given the greater closeness, contact, and history of exchange between mothers and daughters in adulthood (Rossi & Rossi, 1990; Suito & Pillemer, 2006; Suito et al., 2015), we anticipated that both perceptions

of current favoritism and disfavoritism and MDT recalled from childhood would be stronger predictors of depressive symptoms for daughters than sons. Furthermore, because mothers tend to be closest to their last borns (Suito & Pillemer, 2007; Suito et al., 2013), and later-born siblings are affected more strongly by parental differential treatment in adolescence, we proposed that MDT would have stronger effects on last borns in midlife. However, neither of these characteristics of children moderated the associations between depressive symptoms and current or recalled MDT. We interpret the absence of moderating effects as further evidence of the important role that perceived favoritism and disfavoritism play across the life course, regardless of salient social and family structural positions.

We were surprised to find that perceiving oneself as most emotionally close to one's mother did not predict higher depressive symptoms, as has been found in some other recent studies of MDT and depressive symptoms (Suito et al., 2015). Specifically, Suito and colleagues (2015) found that perceiving oneself as the child to whom the mother was most emotionally close predicted higher CES-D scores, while also taking into consideration perceptions of being disfavored regarding conflict and disappointment. To assess whether the absence of effects might be due to variance shared with perceptions of mothers' disfavoritism, we conducted a separate analysis in which we omitted perceptions of highest conflict with mother; however, perceptions of being most emotionally close still did not predict depressive symptoms.

We suggest that the inconsistency in the findings for emotional closeness in these two studies reflects different points in the adult life course. In Suito and colleagues' (2015) study, mothers were in their 70s and 80s, and the majority had already begun receiving some care from their adult offspring. In the present study, mothers were in their 60s–70s and more than three quarters reported their health as good to excellent. We suggest that being most emotionally close to mothers in later stages of the life course may impose greater expectations for being available for support, which may affect well-being. Although we might expect that expectations of future caregiving would impact children's depressive symptoms as mothers age, this is not the case. Separate analyses have revealed that expectations regarding future care do not predict adult children's depressive symptoms, whereas awareness of mothers' expectations for emotional support and confiding when facing serious problems do increase children's depressive symptoms (Suito et al., 2015). Furthermore, tension with siblings has been found to be especially high when adult children are both favored and provide care to their mothers (Suito, Gilligan, Johnson, & Pillemer, 2014), which may lead to increased distress (Lincoln, 2008; Umberson, 1992).

## Directions for Future Research

The present study has shed new light on the relative roles of perceptions of current MDT and MDT recalled from

childhood on psychological well-being in midlife. However, it has left several questions unanswered that we hope will be addressed in future research. First, in this study, we did not consider fathers' favoritism. Gilligan, Suito, Kim, and Pillemer (2013) found that perceptions of fathers' current favoritism had more negative effects on sibling relationships than did mothers' favoritism in later-life families in which both parents were alive. It is possible that MDT recalled from childhood has different effects on well-being depending on whether the source is the mother or the father. Moreover, mothers' and fathers' differential parenting may interact with each other. For instance, what is the effect when mothers' and fathers' patterns of differentiation differ from one another in the same family? We hope that future research will pose these questions.

Second, due to the nature of cross-sectional data, we cannot ascertain the causal direction in the relationship between childhood maternal differentiation and psychological well-being. It is possible that if an adult child is depressed, she or he may be more likely to view childhood parental treatment as unequal. The difficulty with assessing causality in the present article is further exacerbated by use of retrospective data. Some scholars found that individual's mood state at the time of the retrospective reporting may influence their memories (Bower, 1981; McFarland & Buehler, 1998). However, Hardt and Rutter (2004) reviewed evidence of the validity of adult retrospective reports of adverse childhood experiences and concluded that such bias is not sufficiently great to invalidate retrospective data. Thus, despite these limitations, the current study suggests that recollections of maternal differentiation in childhood independently predict current psychological well-being across midlife.

Third, our measures of perceptions of current favoritism and disfavoritism and recollections of MDT differ methodologically and, to some extent, conceptually. Most obvious, the measure of recollections of MDT from childhood does not allow us to disaggregate "favoritism" from "disfavoritism" nor to identify which children in the family were favored or disfavored. The consequences of recalled MDT on well-being may differ depending upon both whether the differentiation involved favoritism or disfavoritism, as well as whether the respondent or a sibling was the perceived target of the differentiation. This suggestion is supported by Davey and colleagues' (2009) research in which they were able to disaggregate recalled domain and direction of MDT and found that the consequences for psychological well-being in midlife differed along these lines.

However, even if the measure of recollections we used could distinguish between favoritism and disfavoritism, it would be impossible to know whether it captured the range of dimensions of MDT that are highly salient in childhood. Although studies of younger families typically include measures of closeness and conflict (Jensen et al., 2015; Kowal et al., 2002; Kowal, Krull & Kramer, 2006), they generally also include questions regarding praise, listening,

discipline, and blame (Kowal & Kramer, 1997; Kowal et al., 2006). Thus, midlife adults who report on their recollections of MDT from childhood may be taking into consideration a much wider range of issues than only emotional closeness and conflict, in contrast to our measures of current perceptions of MDT. Therefore, we suggest that future studies comparing the effects of current and recalled MDT use a more refined measure of recollections, such as that used by Davey and colleagues (2009), which provides for differentiation between favoritism and disfavoritism and asks about MDT across a wide range of dimensions salient in childhood. Such an approach would also provide the opportunity to make comparisons on the effects of the same dimensions of MDT in childhood and adulthood.

In summary, the present article makes a unique contribution to the literature on intergenerational relationships and well-being by showing that both current perceptions of maternal disfavoritism and maternal differentiation recalled from childhood play important roles in psychological well-being in midlife. These findings contribute to a growing body of evidence that adverse experiences in childhood as well as adulthood, including negative dimensions of family relationships, should be taken into consideration in studies of well-being in midlife. Recent studies have shown both that parental differential treatment in adulthood is relatively stable (Suito et al., 2013) and is often transmitted intergenerationally (Jensen, Whiteman, Rand, & Fingerman, 2016), making it even more important that attention be given to understand within-family differences in parent-child relationships across the life course.

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