

ALEXANDER C. JENSEN AND SHAWN D. WHITEMAN *Purdue University*

KAREN L. FINGERMAN *University of Texas at Austin**

KIRA S. BIRDITT *University of Michigan***

“Life Still Isn’t Fair”: Parental Differential Treatment of Young Adult Siblings

Parental differential treatment has been linked to individual well-being and sibling relationship quality in childhood, adolescence, and middle adulthood but has not been examined in young adulthood. Data were collected from 151 pairs of young adult siblings (N = 302, M age = 23.90, SD = 5.02). Two siblings in each family reported on treatment from mothers and fathers, depressive symptoms, and sibling relationship quality. Using multilevel modeling, analyses examined the role of favoritism and the magnitude of differential treatment from both mothers and fathers. Offspring who reported receiving less support relative to their sibling (i.e., less favored) reported more depressive symptoms. Greater amounts of differential treatment were associated with less sibling intimacy. Several associations, however, varied by parent gender, sibling gender composition, and the magnitude of differential treatment. The results suggest that favoritism and magnitude

of differential treatment from both mothers and fathers are salient in young adulthood.

Western culture generally encourages parents to treat their children equally (Kowal, Krull, & Kramer, 2006; Parsons, 1942/1974), yet providing equal treatment is nearly impossible given that offspring generally vary in developmental stages and needs. Parents’ differential treatment (PDT) can occur across a variety of domains (e.g., parental affection, parental conflict, privileges, or types of support) and has consistently been linked with poorer individual well-being and sibling relationship qualities during childhood and adolescence (e.g., Kowal & Kramer, 1997; Scholte, Engels, de Kemp, Harakeh, & Overbeek, 2007; Shanahan, McHale, Crouter, & Osgood, 2008) as well as middle adulthood (Boll, Ferring, & Filipp, 2003; Pillemer, Suito, Pardo, & Henderson, 2010). To date, however, the prevalence and implications of PDT have not been studied during young adulthood. Therefore, the goal of this study was to examine the links among differential treatment, individual well-being, and sibling relationship qualities among young adult siblings.

BACKGROUND

Differential Treatment in Young Adulthood

Young adulthood is a unique period of life. During this life stage, individuals often complete their education, find full-time employment,

Department of Human Development and Family Studies, Purdue University, 1202 W. State St., West Lafayette, IN 47907 (jensena@purdue.edu).

*Department of Human Development and Family Sciences, University of Texas at Austin, 1 University Station, A2702, Austin, TX 78712.

**Institute for Social Research, University of Michigan, 426 Thompson St., Ann Arbor, MI 48104.

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seek out romantic relationships, and establish independent households (Arnett, 2007; White & Riedmann, 1992). Coinciding with these transitions, individuals show improvements in their emotional maturity (Shebloski, Conger, & Widaman, 2005) in addition to their general well-being (Galambos, Barker, & Krahn, 2006). Relationships with siblings also transform during this period, as some researchers have suggested that sibling ties become a matter of choice rather than a forced reality (e.g., Conger & Little, 2010). In fact, research suggests that during early adulthood sibling relationships decline in terms of intimacy (e.g., Milevsky, Smoot, Leh, & Ruppe, 2005), conflict (Whiteman, McHale, & Crouter, 2011), and contact (Conger & Little, 2010; White & Riedmann). With such dramatic changes in both individual and relational functioning during this life stage, it is possible that brothers' and sisters' comparisons of how they are treated by their parents may decline in relevance. Alternately, siblings may be keenly aware of differences in parental allocation of resources and affection because of the importance of parental support during the transitions occurring at this stage of life (Aquilino, 2006; Fingerma et al., 2012). Unfortunately, research has yet to investigate such questions.

The uniqueness of young adulthood requires researchers to consider which domains of PDT to examine. For example, aspects of parenting assessed in studies with children or adolescents, such as differential chores (e.g., Tucker, McHale, & Crouter, 2003), may no longer be applicable to young adult siblings. Similarly, situations in which PDT may occur in later life, such as decisions regarding parental caregiving, may be less likely in young adulthood (Pillemer et al., 2010). Other indices of PDT, such as differences in levels of support, may be particularly relevant during young adulthood. During this life stage, parents often provide instrumental (e.g., financial) as well as expressive (e.g., emotional) support that allow offspring to successfully establish independence out of the home (Aquilino, 2006). Yet the distribution of parents' aid to their multiple young adult offspring is not always equal (Fingerma, Miller, Birditt, & Zarit, 2009). Given that parental support often facilitates important markers of success in early adulthood, such as completion of education and gaining of employment (Aquilino;

Arnett, 2007), differential support may have especially important implications for young adult siblings. Moreover, the examination of support is important; for example, work by Tucker and colleagues (2003) revealed that domain-specific PDT (i.e., support) may be more strongly connected to outcomes than global measures of PDT (i.e., affection).

Parental Favoritism and the Magnitude of Differential Treatment

Beyond considering the domain in which preferential treatment occurs, researchers must also consider how differential treatment operates within families and is linked to young adults' outcomes. Differential treatment is a complex process that can be viewed through multiple lenses, such as focusing on which sibling is treated better, or focusing on the inequality between siblings. Rooted in distinct theoretical frameworks, research on differential treatment has traditionally operationalized PDT in one of two ways: (a) parental favoritism (i.e., which sibling is favored or less favored) or (b) the sheer magnitude of differential treatment (without attention to who was favored).

Using social comparison theory as a foundation (Festinger, 1954; Suls, Martin, & Wheeler, 2002), many past studies have utilized directional measures of parental favoritism. Using this method, the treatment of one sibling is compared with the treatment of the other. Often, this approach contrasts siblings receiving favored treatment with those receiving less favored treatment, with less attention paid to the possibility of equal treatment. Consistent with social comparison theory, research has revealed that siblings receiving favored treatment (i.e., more affection, more support) in general fare better across a range of individual adjustment indices, such as increased self-esteem (e.g., McHale, Updegraff, Jackson-Newsom, Tucker, & Crouter, 2000), diminished externalizing behaviors (e.g., Richmond, Stocker, & Rienks, 2005), less negative emotionality, and better overall adjustment (e.g., Dunn, Stocker, & Plomin, 1990; Feinberg & Hetherington, 2001), as compared to their brothers and sisters who receive less favored treatment (i.e., less affection, less support).

Other work has used Alfred Adler's theory of individual psychology (Ansbacher & Ansbacher, 1956) and postulates that disparities between how siblings are treated by their

parents (e.g., received parental time, affection, resources, and support) fuel hostility and conflict in the sibling relationship. These studies have typically indexed differential treatment at the level of the sibling dyad, measuring the magnitude of the absolute difference in treatment. This approach ignores which sibling receives favored treatment and instead contrasts equal treatment with the magnitude of differential treatment. Research from this tradition shows that greater amounts of differential treatment are generally associated with poorer outcomes, such as maladjustment (e.g., Tamrouti-Makkink, Dubas, Gerris, & van Aken, 2004) and lower sibling relationship quality (i.e., lower intimacy, higher conflict; Boll, Ferring, & Filipp, 2003; Kowal & Kramer, 1997), compared to siblings receiving equal treatment.

In summary, social comparison principles (Festinger, 1954; Suls et al., 2002) suggest that favored treatment will be linked to better individual outcomes. In contrast, research rooted in Adlerian principles (Ansbacher & Ansbacher, 1956) suggests that equal treatment from parents is optimal, with differential treatment linked to poorer sibling relationships and (sometimes) maladjustment. Despite divergent implications, the current body of research on PDT has failed to distinguish between the role of favoritism (i.e., which sibling is favored) and the magnitude of differential treatment (i.e., the degree of PDT that occurs). The present study takes a step in addressing this gap by examining both types of differential treatment simultaneously. The concurrent examination of both favoritism and magnitude of differential treatment may help elucidate the intertwining ways in which these two aspects of parents' behaviors are related to offspring' individual well-being and relationship qualities. Distinguishing between favoritism and magnitude of differential treatment also allows researchers to examine interactions between these features and their implications for offspring outcomes. For example, if favored treatment enhances improvements in well-being that are typical during young adulthood (Galambos et al., 2006; Shebloski et al., 2005), and less favored treatment hinders improvements in well-being, it is possible that such effects may be exacerbated when a parent is particularly discrepant (i.e., engages in a large degree of differential treatment) in his or her provision of support.

The Role of Sibling Gender Composition and Parent Gender

Despite evidence linking PDT to offspring's individual and relational outcomes, differential treatment is a complicated family process, influenced by many factors, such as gender composition of the sibling dyad and parent gender. Social comparison theory suggests that comparisons made with individuals who are objectively similar will have the greatest impact on well-being (Wills, 1991). Consistent with this notion, several studies have found the correlates of PDT to be more pronounced for same-gender dyads (e.g., Coldwell, Pike, & Dunn, 2008; McHale et al., 2000; Scholte et al., 2007). Although these studies were conducted with younger populations, it is likely that the implications of differential treatment will continue to be more pronounced for same-gender dyads in young adulthood.

In addition to gender composition of the sibling dyad, other studies have revealed differences in the prevalence and implications of mothers' and fathers' differential treatment. For example, research suggests that, within families, mothers and fathers may vary in their levels of differential treatment (McHale, Crouter, McGuire, & Updegraff, 1995). Despite these differences, to date most studies have examined only maternal differential treatment (e.g., Coldwell et al., 2008; Pillemer et al., 2010), or maternal and paternal differential treatment in separate models (e.g., Feinberg & Hetherington, 2001; McHale et al., 2000). Of the few studies that have examined maternal and paternal treatment concurrently, some (Brody, Stoneman, & McCoy, 1992; Tamrouti-Makkink et al., 2004) have found that differential treatment from fathers accounted for more variance in adjustment outcomes of children than that from mothers. One study, however, suggested that mothers' differential treatment may be more salient than fathers' differential treatment when associated with adult offspring outcomes (Davey, Tucker, Fingerman, & Savla, 2009). Davey et al., however, examined retrospective reports of differential treatment in childhood, whereas Brody et al. and Tamrouti-Makkink et al. examined maternal and paternal differential treatment concurrent with offspring adjustment outcomes. Given these differences, and the fact that mothers' involvement with offspring tends to be more ubiquitous than that of fathers (McBride & Mills, 1993), it is possible that

differential treatment from fathers will be more salient because fathers tend to be more selective in offspring engagement.

Direction of Effects

When considering the influence of differential treatment, it is important to note that both social comparison theory (Suls et al., 2002) and Adler's theory of individual psychology (Ansbacher & Ansbacher, 1956) intrinsically imply that differential treatment leads to changes in offspring outcomes. Indeed, the bulk of the literature has been framed in this manner, even if the research did not specifically test causal hypotheses. It is important to acknowledge, however, that differences between offspring in well-being and relationship quality can also lead to differential treatment. Indeed, a literature on child effects (e.g., Bell, 1968; Crouter & Booth, 2003; Kuczynski, 2003) highlights how children's individual qualities and characteristics shape family dynamics, including parenting. Consistent with theory and research on the topic, we relied on a top-down model, in which PDT predicts young adults' individual and relational outcomes; however, we recognize that we did not test causal links and that the associations are possibly bidirectional.

The Present Study

In the present study, we examined the prevalence and implications of PDT for young adults' individual well-being (i.e., depressive symptoms) and sibling relationship qualities (i.e., sibling intimacy and conflict). Given differences in theoretical postulations and limitations of previous research, we specifically explored the implications of two approaches to examining differential treatment: (a) parental favoritism and (b) the magnitude of differential treatment. We also controlled for several factors known to be associated with both favoritism and the magnitude of differential treatment, including age, offspring gender, birth order, and age spacing (e.g., McHale et al., 2000; Scholte et al., 2007; Shebloski et al., 2005). We further controlled for factors that may influence parents' provision of support to their offspring, such as offspring education level, offspring marital status, coresidence, and parent income (Fingerman et al., 2009; Schoeni & Ross, 2005).

On the basis of theory and extant research, we posited the following hypotheses: (a) favored offspring would report better well-being (i.e., fewer depressive symptoms) and better sibling relationship quality (i.e., greater sibling intimacy and less sibling conflict); in contrast, less favored offspring would report poorer individual well-being and poorer sibling relationship quality (Hypothesis 1); (b) the magnitude of differential treatment would be negatively related to well-being and sibling relationship quality (Hypothesis 2); (c) favoritism and the magnitude of differential treatment would interact such that less favored offspring would report even poorer outcomes and favored offspring even better outcomes when the difference in treatment was magnified (Hypothesis 3). In addition, we expected that gender composition of the sibling dyad would act as a moderator, such that observed associations among favoritism, magnitude of differential treatment, and outcomes would be stronger for same-gender dyads than for mixed-gender dyads (Hypothesis 4). Last, we expected that paternal favoritism and the magnitude of paternal differential treatment would be more robustly linked to offspring outcomes than maternal favoritism and the magnitude of maternal differential treatment (Hypothesis 5).

METHOD

Participants

Data were drawn from The Family Exchanges Study (Fingerman et al., 2009), which examined familial support provided by and given to three generations of family members. Data were collected January 2008 to September 2008. Potential middle-aged parents with at least one child over age 18 were recruited from the Philadelphia Metropolitan Statistical Area. These participants were identified and contacted via information purchased from the Genseys Corporation and random-digit dialing. Middle-aged parents were asked to provide contact information for up to three of their children who were age 18 years or older. Participating parents provided contact information for a total of 63% of their offspring. Of the offspring referred by the parent, 75% participated; 14.2% declined to participate; for 8.5%, the parent provided information but then requested that we not

contact the offspring; 1.6% could not be located; and 0.7% were incapacitated or deceased (for more details on the sampling procedure, see Fingerman et al., 2009). These participation rates are higher than those obtained in other studies that have recruited grown children through older parents (e.g., Suito, Sechrist, & Pillemer, 2007). Offspring participants mainly resided in Pennsylvania (81%), but others were distributed across 20 other states within the United States.

The final sample included sibling dyads from 151 families with at least two participating offspring ($N = 302$). In families with more than two participating siblings, a sibling pair was selected from the youngest available siblings. Demographic information is presented in Table 1.

Procedure

Parents and young adult offspring completed interviews using a computer-assisted telephone interview system. Interviews lasted approximately 1 hour. Survey sections were presented in a randomized order. Each offspring indicated the amount of support they received from their parents, rated the quality of their relationship with their participating sibling, and provided reports of their individual well-being. Seventeen

percent of the offspring completed a web-based version of the survey. There were no systematic differences between those who completed phone and web-based versions of the survey on demographic, independent, or dependent variables.

Measures

Demographic information. Parents and young adult offspring reported on basic demographic information, including ethnicity, age, parental household income, offspring gender (0 = *female*, 1 = *male*), marital status (0 = *not married*, 1 = *married*), years of education, offspring birth order (0 = *earlier born*, 1 = *later born*), coresidence of parents and offspring (a three-level dummy code with both offspring residing in the parents residence as the reference group for analysis), work status (0 = *not working for pay*, 1 = *working for pay*), and student status (0 = *not a student*, 1 = *student*).

Parental support. Parental support was indexed using the Intergenerational Support Index (Fingerman et al., 2009). Each offspring reported on both maternal and paternal support received across six dimensions: (a) emotional, (b) practical, (c) communication, (d) advice giving, (e) socializing, and (f) financial support (one item per dimension). Items were rated on an

Table 1. Demographic Characteristics of Participants

Variable	Mothers ($n = 151$)	Fathers ($n = 151$)	Offspring ($n = 302$)
	M (SD) or Proportion	M (SD) or Proportion	M (SD) or Proportion
Age	51.37 (4.40)	52.44 (5.07)	23.90 (5.02)
Income ^a	4.55 (1.38)	4.57 (1.43)	3.90 (1.59)
Years of education	14.46 (2.28)	14.47 (1.94)	13.95 (2.16)
Women			.55
Married	.79	.79	.17
Employment status			
Full time	.62	.83	.36
Part time	.13	.04	.11
Student	.00	.00	.46
Unemployed	.04	.01	.04
Other	.22	.12	.03
Ethnicity			
African American	.23	.17	.25
European American	.74	.81	.68
Hispanic	.01	.01	.01
Other	.02	.01	.06

^aHousehold income in 2007: 1 = less than \$10,000, 2 = \$10,001–\$25,000, 3 = \$25,001–\$40,000, 4 = \$40,001–\$75,000, 5 = \$75,001–\$100,000, 6 = more than \$100,000.

8-point scale, ranging from 1 (*less than once a year or never*) to 8 (*daily*). Items were averaged across the six dimensions to create scores of overall support received from mothers ($M = 3.61$, $SD = 1.49$, Cronbach's $\alpha = .85$) and fathers ($M = 4.40$, $SD = 1.65$, Cronbach's $\alpha = .87$). Sibling reports of maternal support ($r = .38$, $p < .001$) were significantly correlated, as were reports of paternal support ($r = .46$, $p < .001$).

Favoritism. Favoritism was derived from siblings' reports of maternal and paternal support; specifically, difference scores were calculated for each individual so that positive values reflected that the individual received favored treatment (i.e., more support) as compared to his or her sibling. Difference scores based on support given to earlier born offspring minus support given to later born offspring indicated that both mothers ($M = -0.65$, $SD = 1.63$) and fathers ($M = -0.61$, $SD = 1.67$) gave more support to later born offspring. A two-level dummy code reflecting parental favoritism was then created (0 = *equal or favored treatment* [values of 0 or greater on difference scores], 1 = *less favored treatment* [values less than 0 on difference scores]); that is, each offspring had a score indicating his or her relative treatment from each parent compared to his or her sibling.

Magnitude of differential treatment. To index the magnitude of differential treatment, we took the absolute value of the calculated difference scores used to create the favoritism variables (values ranged from 0 to 7). For this scale, scores closer to zero reflect equal treatment and higher values reflect greater differential treatment, regardless of which sibling was favored. This score occurred at the dyad level, indicating the difference between the two siblings' ratings of treatment.

Depressive symptoms. Depressive symptoms were assessed using the 5-item Depression subscale from the Brief Symptom Inventory (Derogatis & Melisarator, 1983). Each offspring rated the extent to which they felt lonely, blue, not interested in things, hopeless about the future, or worthless in the last 7 days, on a scale that ranged from 1 (*not at all*) to 4 (*quite a bit*). Items were averaged for each offspring, with higher scores reflecting greater levels of depressive symptoms. Cronbach's alpha was .86.

Sibling intimacy. Sibling intimacy was measured using five items from Blyth, Hill, and Thiel's (1982) relationship intimacy scale. Each offspring responded to items assessing their intimacy with their participating sibling. Items were rated on a 5-point scale that ranged from 1 (*not at all*) to 5 (*a great deal*). Example items included: "How much do you go to your sibling for advice or support?" and "How much does your sibling understand what you are really like?" On average, siblings' reports were highly correlated ($r = .72$, $p < .001$, Cronbach's $\alpha = .91$).

Sibling conflict. Sibling conflict was measured using three items adapted from a scale of sibling negativity (Stocker & McHale, 1992); specifically, siblings reported how often they argued, got mad or upset with, and got annoyed with each other on a 5-point scale ranging from 1 (*never*) to 5 (*always*). On average, siblings' reports were correlated ($r = .52$, $p < .001$, Cronbach's $\alpha = .93$).

Analytic Strategy

To address our goals, we tested a series of multilevel models. This strategy was advantageous because it accounted for the nested structure of the data (i.e., siblings nested within families). Models were tested separately for each dependent variable (depressive symptoms, sibling intimacy, and sibling conflict). Each model controlled for offspring age, offspring gender, offspring marital status, offspring years of education, birth order, age spacing of the sibling dyad, dyadic gender composition, coresidence with the parents and sibling, and parent income. Offspring current work and student status were initially included as control variables. Neither variable, however, was significantly related to the outcomes and was subsequently removed to preserve parsimony.

Models were tested hierarchically. To test the main effects of favoritism and the magnitude of differential treatment (Hypotheses 1 and 2), in the first step we entered all control variables as well as maternal and paternal favoritism and magnitude of mothers' and fathers' differential treatment. In the second step, we tested whether the effects of favoritism were moderated by the magnitude of differential treatment (Hypothesis 3); specifically, cross-level interactions were added between our measures of favoritism and magnitude of differential treatment for both

Table 2. Mothers' and Fathers' Differential Treatment and Offspring Depressive Symptoms and Sibling Relationship Quality: Descriptive Statistics and Correlations ($n = 300$)

Variable	1	2	3	4	5	6	7
1. Mothers' favoritism	—						
2. Fathers' favoritism	.50***	—					
3. Mothers' magnitude of differential treatment	.04	.03	—				
4. Fathers' magnitude of differential treatment	.03	.03	.41***	—			
5. Depressive symptoms	-.09	.04	.08	.03	—		
6. Sibling intimacy	-.04	-.04	-.21***	-.08	-.06	—	
7. Sibling conflict	-.05	.00	-.15**	-.10	.15**	.01	—
<i>M</i>	0.49	0.52	1.36	1.40	1.68	3.48	2.31
<i>SD</i>	0.50	0.50	1.10	1.10	0.75	0.93	0.81

Note: Favoritism was coded as 0 = equal treatment/favored, 1 = less favored.

** $p < .01$. *** $p < .001$.

maternal and paternal treatment. In addition, in this step we examined the moderating role of gender composition of the sibling dyad (Hypothesis 4) by entering two-way interactions between gender composition and favoritism and between gender composition and the magnitude of differential treatment. Finally, in the third step, for both mothers' and fathers' differential treatment, we included a three-way interaction among favoritism, the magnitude of differential treatment, and gender composition. Given the limited variability at Level 2, our models included only fixed effects. Data were missing for only two participants; those cases were listwise deleted.

RESULTS

Means, standard deviations, and bivariate correlations of the independent variables (maternal favoritism, paternal favoritism, magnitude of maternal differential treatment, and magnitude of paternal differential treatment) and dependent variables (depressive symptoms, sibling intimacy, and sibling conflict) are presented in Table 2. The results indicate relatively low levels of differential treatment, low levels of depressive symptoms, moderately high sibling intimacy, and low sibling conflict. In addition, maternal and paternal favoritism were significantly correlated, as were the magnitude of maternal differential treatment and the magnitude of paternal differential treatment.

Individual Well-Being

As can be seen in Table 3, significant main effects emerged regarding favoritism from both

mothers and fathers and the magnitude of mothers' differential treatment. In line with Hypothesis 1, receiving less favorable treatment from fathers (i.e., less support compared to a sibling) was associated with greater depressive symptoms. The main effect of fathers' favoritism was further qualified by a two-way interaction with the magnitude of differential support and a three-way interaction including sibling dyadic gender composition (see Figure 1). Patterns suggest that in dyads consisting of two brothers or two sisters, less favored offspring reported even greater depressive symptoms when fathers differentiated to a greater degree between the siblings. Furthermore, for the favored offspring in same-gender dyads, greater magnitude of fathers' differential treatment was associated with fewer depressive symptoms. For offspring in same-gender dyads, these findings are also consistent with Hypothesis 3, which predicted that favored offspring would report fewer depressive symptoms, and less favored offspring even more depressive symptoms, when the magnitude of differential treatment was greater.

A different pattern of findings emerged for mothers. Inconsistent with Hypothesis 1, and divergent from patterns of fathers' favoritism, was the finding that receiving less favored treatment from mothers was associated with fewer depressive symptoms. Beyond favoritism, a main effect of mothers' magnitude of differential treatment also emerged. Consistent with Hypothesis 2, greater magnitude of differential treatment from mothers was positively associated with more depressive symptoms for both favored and less favored offspring. In other words, siblings receiving equal treatment from mothers reported fewer depressive symptoms

Table 3. Multilevel Model Results Predicting Young Adults' Depressive Symptoms From Favoritism, the Magnitude of Differential Treatment, and Gender Composition Variables Using Full Maximum Likelihood Estimation (n = 300)

Predictors and Control Variables	Model 1		Model 2		Model 3	
	γ	SE	γ	SE	γ	SE
Individual level						
Years of education	-.06**	.02	-.06**	.02	-.06**	.02
Marital status	-.38**	.12	-.36**	.12	-.34**	.12
Mothers' favoritism (M-Fav)	-.26**	.09	-.06	.15	-.01	.07
Fathers' favoritism (F-Fav)	.26**	.09	-.04	.16	.20	.19
Dyad level						
Gender composition	.12	.08	.10	.17	.38	.21
Mothers' magnitude of PDT (M-Mag)	.10*	.04	.11	.07	.11	.08
Fathers' magnitude of PDT (F-Mag)	-.07	.04	-.15*	.04	-.06	.09
Interactions						
M-Fav × M-Mag			-.07	.08	-.06	.11
F-Fav × F-Mag			.16*	.08	-.03	.12
M-Fav × gender composition			-.33	.18	-.48	.25
F-Fav × gender composition			.24	.18	-.20	.26
M-Mag × gender composition			.04	.08	.02	.11
F-Mag × gender composition			.01	.09	-.16	.12
M-Fav × M-Mag × gender composition					.02	.16
F-Fav × F-Mag × gender composition					.36*	.17
-2 Log likelihood	600.6		593.1		587.1*	

Note: The following nonsignificant controls are omitted from this table: age, offspring gender, birth order, coresidence, sibling dyad age difference, parents' income. PDT = parents' differential treatment.

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

than siblings receiving either favored or less favored treatment.

Sibling Relationships

Intimacy. As can be seen in Table 4, and consistent with Hypothesis 2, analyses revealed a main effect between the magnitude of maternal differential support and sibling intimacy, with more differential treatment being associated with less sibling intimacy. Although there were no main effects of either paternal favoritism or the magnitude of paternal differential treatment, two 2-way interactions emerged. First, an interaction of paternal favoritism and gender composition revealed that offspring in same-gender dyads (i.e., two brothers or two sisters) reported greater intimacy than mixed-gender siblings (i.e., a brother and a sister); in same-gender dyads, however, less favored offspring reported higher intimacy as compared to those who were favored. Second, an interaction between paternal favoritism and the magnitude of differential support emerged. As can be seen in Figure 2, a greater discrepancy in treatment from fathers

was negatively associated with sibling intimacy for less favored offspring. In contrast, for favored offspring there was no association between the magnitude of paternal differential treatment and sibling intimacy. This pattern partially supports Hypothesis 3, that the effects of favoritism would be greater when the magnitude of differential treatment was larger.

Conflict. Neither favoritism from mothers or fathers nor the magnitude of maternal or paternal differential treatment was significantly associated with sibling conflict.

DISCUSSION

Differential treatment from parents is associated with both individual and relational outcomes in childhood, adolescence, and later life (Boll et al., 2003; McHale et al., 2000; Richmond et al., 2005), yet research has not examined differential treatment in young adulthood, leaving the question, does differential treatment matter among young adult siblings? The results of the present study suggest unique and continued links among parents' favoritism,

FIGURE 1. THE ASSOCIATION BETWEEN THE MAGNITUDE OF FATHERS' DIFFERENTIAL SUPPORT AND YOUNG ADULTS' DEPRESSIVE SYMPTOMS, MODERATED BY FATHERS' FAVORITISM AND SIBLING DYADIC GENDER COMPOSITION.

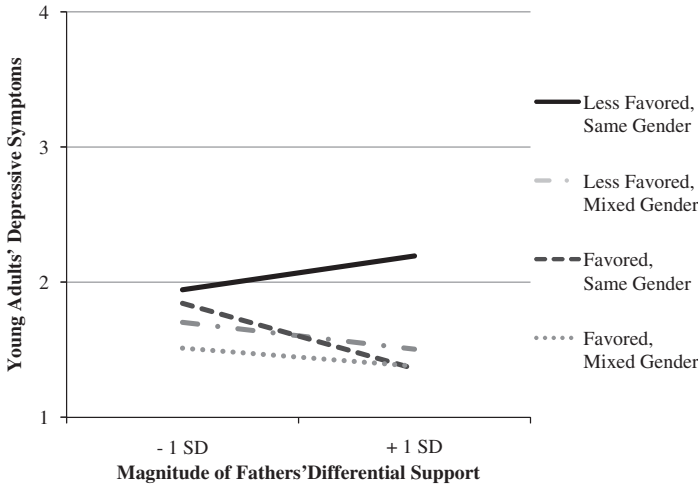


Table 4. Multilevel Model Results Predicting Young Adults' Sibling Intimacy From Favoritism, the Magnitude of Differential Treatment, and Gender Composition Variables Using Full Maximum Likelihood Estimation (n = 300)

Predictors and Control Variables	Model 1		Model 2	
	γ	SE	γ	SE
Individual level				
Years of education	-.03	.02	-.02	.02
Marital status	.01	.12	-.01	.12
Mothers' favoritism (M-Fav)	-.03	.07	.09	.11
Fathers' favoritism (F-Fav)	-.10	.06	-.06	.11
Dyad level				
Gender composition	-.03	.14	.16	.26
Mothers' magnitude of PDT (M-Mag)	-.19**	.07	-.08	.11
Fathers' magnitude of PDT (F-Mag)	-.05	.08	.03	.11
Interactions				
M-Fav \times M-Mag			-.05	.06
F-Fav \times F-Mag			-.13*	.12
M-Fav \times gender composition			-.10	.12
F-Fav \times gender composition			.26*	.12
M-Mag \times gender composition			-.18	.14
F-Mag \times gender composition			-.03	.15
-2 Log likelihood	662.3		647.8*	

Note: The following nonsignificant controls are omitted from this table: age, offspring gender, birth order, coresidence, sibling dyad age difference, parents' income. PDT = parents' differential treatment.

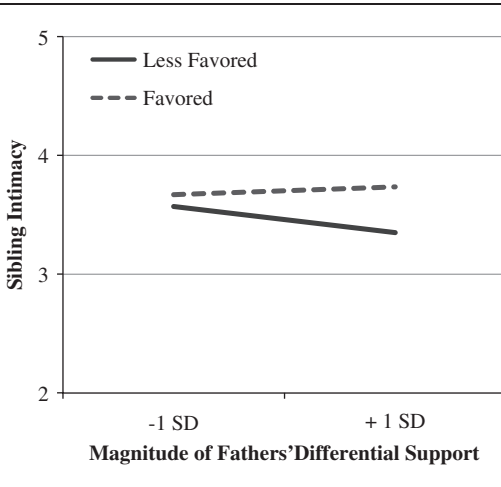
* $p < .05$. ** $p < .01$.

the magnitude of differential treatment, and young adults' individual well-being and sibling relationship qualities. Our findings indicate the relevance of treatment from both mothers and fathers.

Individual Well-Being

On the basis of theory (Festinger, 1954; Suls et al., 2002) and previous research (e.g., Coldwell et al., 2008; McHale et al., 2000; Richmond et al., 2005), we hypothesized

FIGURE 2. THE ASSOCIATION BETWEEN THE MAGNITUDE OF FATHERS' DIFFERENTIAL SUPPORT AND YOUNG ADULTS' SIBLING INTIMACY MODERATED BY FATHERS' FAVORITISM.



that parents' favoritism would be associated with young adults' well-being. Specifically, we hypothesized that favored treatment would be linked to fewer depressive symptoms, whereas less favored treatment would be associated with more depressive symptoms (Hypothesis 1). Consistent with this hypothesis, offspring receiving comparatively less support from their fathers reported greater depressive symptoms, and offspring receiving comparatively equal or greater amounts of paternal support reported fewer depressive symptoms.

The association with depressive symptoms was moderated, however, by the magnitude of the differential treatment and the gender composition of the sibling dyad. For same-gender dyads, the associations were consistent with our hypothesis and past research (e.g., Richmond et al., 2005), showing that less favored offspring report poorer outcomes and favored offspring report better outcomes. Our findings add to the current literature by suggesting the disparities between less favored and favored offspring on individual well-being are larger when the magnitude of differential treatment is greater, at least for same-gender dyads.

In addition, this study also considered equal treatment compared to being favored or less favored. In comparisons of different families, it appears that parental favoritism may be

beneficial to the favored sibling. Among same-gender dyads (two sisters or two brothers), the favored sibling reported better well-being than siblings in families in which parents treated the siblings comparably. Those who receive equal treatment, however, may fare better than those who receive less favored treatment. In line with social comparison principles that comparisons are more likely to be made with those who are objectively similar (Festinger, 1954; Suls et al., 2002), these patterns were observed only for same-gender dyads. Given their objective differences, it is possible that mixed-gender siblings are less likely to compare their treatment in young adulthood.

The notion that offspring are more likely to compare themselves to a same gender sibling is consistent with some past research (e.g., Coldwell et al., 2008; McHale et al., 2000; Scholte et al., 2007). Beyond this one finding, however, our analyses as a whole did not support this hypothesis, and they are perhaps more in line with others that did not find evidence of the moderating role of gender composition (Boll et al., 2005; Richmond et al., 2005). It is possible that the importance of gender composition diminishes in young adulthood and other personal characteristics become more important (e.g., similarity personality). It is also possible that gender composition mainly plays a role in the link between PDT and individual outcomes, and not relational outcomes. Such notions, however, are in need of further examination.

To date, most of the literature on parents' favoritism has focused on mothers only or examined the implications of maternal or paternal differential treatment separately. In this study, we improved on this tradition and considered maternal and paternal differential treatment concurrently. Inconsistent with our hypothesis that treatment from fathers would be more salient (Hypothesis 5), our results revealed that favoritism from both parents was uniquely associated with offspring well-being, but sometimes in opposite directions. As discussed above, receiving less favored treatment from fathers was related to greater depressive symptoms, whereas less favored treatment from mothers was linked to fewer depressive symptoms. Such patterns may exist because parents provide their successful and needy young adult offspring with the most support (Fingerman et al., 2009). Perhaps depressive

symptoms can be viewed as a measure of emotional need or success. It is possible, then, that mothers, in trying to help their young adult offspring successfully start their adult lives, provide the most support to offspring who are most in need (i.e., report more depressive symptoms). Given our findings, and past research showing that fathers are less likely to engage with depressed offspring (Hawkins, Amato, & King, 2007), it is possible that fathers provide the most support to offspring who are the most emotionally successful (i.e., report fewer symptoms of depression) and may achieve the greatest success in their adult lives.

The idea that mothers provide the most support to offspring in emotional need and fathers to those who are emotionally successful is inconsistent with social comparison theory. Social comparison theory suggests that PDT influences changes in individual outcomes. Combined with the work of Fingerman and colleagues (2009) and past research on child-driven effects (e.g., Bell, 1968; Crouter & Booth, 2003; Kuczynski, 2003), the current data suggest that differences in offspring characteristics may also be relevant in predicting parents' treatment of grown offspring. Certainly future research needs to consider these implications in examining data and using theoretical frameworks to interpret findings. Longitudinal data, however, will be necessary to fully establish the direction of effects.

It is also possible that the implications of mothers' and fathers' treatment differ because parents may compensate for each others' treatment. For example, a mother may recognize a father's relative lack of involvement with their depressed child and increase her involvement and support for that child. Such situations may carry different implications for offspring compared to a sibling receiving less favored treatment from both their mother and father. Given the interconnectedness of family systems (Cox, 2010), examinations of such issues are of theoretical and empirical importance. As such, future work should consider the role of mothers' and fathers' differential treatment in concert by examining their interactive effect instead of examining only their unique associations with offspring outcomes.

Aside from maternal favoritism, the magnitude of mothers' differential support was significantly associated with offspring's depressive symptoms. Consistent with Hypothesis 2 and

past research (e.g., Tamrouti-Makkink et al., 2004), greater discrepancies in treatment were associated with more depressive symptoms for both favored and less favored offspring, suggesting that those receiving equal treatment fare better. Despite this one finding regarding the magnitude of differential treatment, overall findings were more robust regarding favoritism. It is possible that being favored or less favored is more salient regarding individual well-being than is the overall inequality between siblings.

Sibling Relationship Quality

Rooted in previous research (e.g., Boll et al., 2003; Kowal & Kramer, 1997) and theory (Ansbacher & Ansbacher, 1956), Hypothesis 3 predicted that, regardless of which sibling was favored, greater inequality between how siblings are treated would be associated with lower sibling intimacy and higher sibling conflict. Consistent with this hypothesis, when mothers provided more overall support to one sibling as compared to another, siblings' intimacy was lower. Findings regarding the magnitude of maternal differential treatment support the notions of Adler's theory of individual psychology (Ansbacher & Ansbacher); that is, more equal treatment (or less differential treatment) was associated with higher sibling intimacy. Findings regarding paternal favoritism and the magnitude of paternal differential treatment were more nuanced. An interaction between favoritism and the magnitude of differential treatment revealed that the magnitude of differential treatment was negatively associated with sibling intimacy for those who were less favored, but not for those receiving favored treatment. Indeed, these results support social comparison notions of favoritism, suggesting that less favored offspring will report poorer outcomes (Suls et al., 2002), even with regard to the same relationship that a favored sibling views positively. In addition, an interaction between paternal favoritism and gender composition suggested that although less favored offspring in same-gender dyads reported the highest levels of intimacy, regardless of favoritism, those from same-gender dyads reported higher intimacy than those in mixed-gender dyads. This finding is consistent with past research suggesting that same-gender siblings in adulthood may be emotionally closer than those in mixed-gender

dyads (Connidis & Campbell, 1995; Spitze & Trent, 2006).

Beyond intimacy, there were no observed associations with sibling conflict. As previously discussed, young adult offspring often do not coreside (Arnett, 2007; White & Riedmann, 1992) and have less contact with each other than at earlier life stages; thus, overt conflict may be less common than in childhood or adolescence. Our measures of favoritism and the magnitude of differential treatment were based on difference scores, and not direct assessments measuring offspring's perception of their treatment compared to a sibling. Because many siblings no longer coreside, they may be less aware of how they are being treated differently, reducing the likelihood of favoritism and the magnitude of differential treatment based on difference scores being linked to sibling conflict. This may especially be the case with sibling conflict, as opposed to individual well-being or sibling intimacy, because our measures of conflict focused more on active forms of conflict, as opposed to passive conflict. It is further possible that, instead of engaging in conflict fueled by PDT, siblings in this life stage simply withdraw from each other, while maintaining hurt feelings.

Limitations and Conclusions

The current study was not without limitations. For example, measurement issues may have influenced the results. First, our measure of sibling conflict (Stocker & McHale, 1992) contained only three items and has not been previously validated with young adult populations. As such, the items may not have tapped how conflict may manifest itself during young adulthood or how it is linked to differential treatment.

Overall, our measures were also limited because they relied on self-report. Each measure was reported individually by the offspring, and although measures of both favoritism and the magnitude of differential treatment were indexed via difference scores calculated using reports from multiple informants, common variance among the self-reported items may have inflated the observed associations. For example, depressed young adults may be less likely to recall support received from parents than offspring who are not depressed. Furthermore, the use of difference scores fails to assess

individuals' perception of how they are treated in reference to their sibling. Although studies that have used both difference scores (e.g., Brody et al., 1992; McHale et al., 2000) and siblings' individual perceptions of PDT (e.g., Kowal & Kramer, 1997; Scholte et al., 2007) have come to similar conclusions, these two methods may matter in different ways (Coldwell et al., 2008). Therefore, future work should assess the role of both difference scores and siblings' individual perceptions of PDT.

Another potential weakness of this study stems from the sampling procedure. Parents nominated offspring to participate in the study. It is possible that parents were more likely to nominate offspring whom they treat better, or with whom they have better relationships. In turn, those offspring who chose to participate may have done so because they also perceive a better relationship with their parent. Differential treatment, however, is a complex family process involving at least three people, and often more. Future studies would benefit from the inclusion of as many offspring in the family as possible, which would provide a clearer view of this family process.

The present study was also limited by the fact that the data were cross-sectional. As discussed earlier, individual characteristics may influence the way offspring are treated by parents as much or more than the way parents' treatment influences offspring's adjustment. This notion has the potential to influence the way researchers understand family processes surrounding PDT as well as the theoretical foundations used to explain such processes. Longitudinal data are essential in order to understand the possible bidirectional nature of the associations, whether differences between siblings influence how parents treat their offspring, and/or whether differential treatment shapes individual outcomes. In addition, future longitudinal studies should be conducted in multiple life stages, because the direction of effects may differ for young children as opposed to young adults.

Notwithstanding these limitations, the current study contributes to the extant literature in meaningful ways. First, it reveals that PDT continues to occur in young adulthood and is associated with individual well-being and sibling relationship qualities. Second, the data suggest that differential treatment from both mothers and fathers was significantly and

uniquely associated with both individual and relational outcomes of young adult siblings; however, parents may in fact compensate for the treatment that each other provide. Last, the present study revealed that both favoritism and the magnitude of differential treatment have unique and sometimes interacting effects on young adults' adjustment and relationship qualities. This novel approach to measuring PDT provides unique insights into the complexities of this family process. Overall, these findings have important implications, such as considering the direction of effects, how PDT is measured and operationalized, and developing a clearer understanding of PDT in young adulthood. Future research will need to consider these implications in striving to understand the complex process of differential treatment in a multifaceted stage of life.

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