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Chapter 5

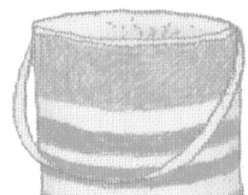
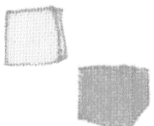


Wait until your mother gets home! Mothers' and fathers' discipline strategies

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ABSTRACT

From a traditional viewpoint, fathers are seen as the main disciplinarian in the family. However, recent studies suggest that these traditional family role patterns may have changed. In this study, we observed discipline strategies of mothers and fathers toward their sons and daughters. Participants included 242 families with two children (1 and 3 years of age). Findings revealed that parental discipline varied by the age of the children, but that mothers disciplined their children more often than fathers. Fathers, conversely, showed more laxness in response to child noncompliance. Gender of the children was only related to physical interference, with mothers using more physical interference with boys than fathers, irrespective of birth order. Taken together, these findings highlight the importance of parent gender for parent-child interactions in early childhood, but also suggest that child age should be taken into account as important explanatory factors.

Keywords: discipline, fathers, mothers, child gender, birth order

INTRODUCTION

Traditionally, fathers are seen as the main disciplinarian in the family (Blakemore, Berenbaum, & Liben, 2009; Maldonado, 2007). However, over the last few decades Western societies have moved toward more egalitarian social and economic relationships between the genders, resulting in changes in traditional family role patterns (Bornstein, 2013; Maume, 2011). Studies have either found that mothers discipline their children more often than fathers do (e.g., Arnold & O'Leary, 1997; Bandon & Volling, 2008; Webster-Stratton & Hammond, 1999) or that the amount of discipline by mothers and fathers is similar (e.g., Domenech Rodríguez, Donovan, & Crowley, 2009; Eddy, Leve & Fagot, 2001; Feldman & Klein, 2003). However, most studies combine different aspects of parental discipline into one construct, which may hamper the interpretation of the results, as it remains unclear whether and how mothers and fathers differ with respect to specific types of discipline. In addition, there is evidence that parents, and especially fathers, treat boys and girls differently when it comes to discipline (e.g., Das Eiden, Leonard, & Morrissey, 2001; Lytton & Romney, 1991), suggesting that both gender of the parent and gender of the child are important to take into account. In the current study, we used a within-family design to test the hypothesis that both parent and child gender and their specific combinations are related to parental discipline strategies. We examined various aspects of parental discipline, including commanding, physical interference, distraction, and laxness.

Mothers' and fathers' discipline strategies

Parental discipline is an important aspect of parenting and refers to strategies that parents use to discourage inappropriate behavior and to gain compliance from their children (Locke & Prinz, 2002; Smith, 2004). Observational studies within intact two-parent families with young children point to mothers using more discipline than fathers (e.g., Arnold & O'Leary, 1997; Bandon & Volling, 2008; Webster-Stratton & Hammond, 1999). Role theory suggests that these findings could be due to shared norms and expectations about how individuals should behave in certain situations (Biddle, 1986), which also applies to the different roles and responsibilities mothers and fathers have in the family and may lead to differences in their interactions with their children. Although there is a trend for fathers to spend more time taking care of their children over the last few decades (Maume, 2011), this does not necessarily imply that mothers and fathers show similar parenting behavior. Mothers still spend two to three times as much time with their children than fathers (Huerta et al., 2013; Sociaal Cultureel Planbureau [SCP], 2011), they spend more time alone with their children, and spend more time in daily child care activities than fathers (Huerta et al., 2013; Monna & Gauthier, 2008), all of

which is likely to lead to more opportunities for discipline by mothers than by fathers.

The two most often researched types of discipline are verbal interference (e.g., commanding) and physical interference (e.g., grabbing child's arm away from forbidden objects). For young children, redirecting the child's attention away from forbidden objects or activities is also a relevant discipline strategy (Reid, O'Leary, & Wolff, 1994). In contrast, laxness refers to a lack of discipline in response to noncompliance and the absence of interference or directiveness (Arnold & O'Leary, 1997). Studies that examine composites of verbal and physical discipline tend to report no differences between mothers and fathers from intact two-parent families (Brody, Stoneman, & McCoy, 1992; Domenech Rodríguez et al., 2009; Feldman & Klein, 2003; Janssen & Dekovic, 1997), whereas studies focusing specifically on verbal discipline generally find that in intact two-parent families mothers do this more often than fathers (Arnold & O'Leary, 1997; Chen, Wu, Chen, Wang, & Cen, 2001; Power, McGrath, Hughes, Manire, 1994; Tulananda & Roopnarine, 2001; Webster-Stratton & Hammond, 1999). In addition, within the same family mothers use more verbal strategies than fathers to control their child's behavior in a non-power assertive way (i.e. gentle guidance; Bandon & Volling, 2008; Volling, Bandon, & Gorvine, 2006). Most studies on physical interference tend to show the same pattern (Day, Peterson, & McCracken, 1998; Gunnoe & Mariner, 1997; Jackson et al., 1999; Xu, Tung, & Dunaway, 2000), but these results are based on self-report measures rather than on observations and may not directly reflect actual parental behavior (e.g., Holden & Edwards, 1989). In addition, none of these studies compared physical interference between mothers and fathers toward the same child. The scarce observational studies on physical interference involving both parents of intact two-parent families did not show differences between mothers and fathers (Power, 1985; Tulananda & Roopnarine, 2001).

Since most studies suggest that mothers use more verbal and physical discipline strategies than fathers, we hypothesized that in the current study mothers would show more commanding, physical interference, and distraction in response to their children's noncompliance than fathers. Compared to mothers, fathers have also been found to be less involved in the daily administration of discipline (Day et al., 1998), and we therefore expected fathers to show more laxness in response to their children's noncompliance than mothers.

Role of child gender

There is evidence that parents treat boys and girls differently when it comes to discipline, although results have been inconsistent. Some studies found that parents showed similar levels of observed discipline behavior to boys and girls (Bernstein, Harris, Long, Iida, & Hans, 2005; Eddy et al., 2001; Russel & Russel, 1996), whereas others found evidence for differences in parental discipline toward boys and girls,

with more coercion and control toward boys than girls (Das Eiden et al., 2001; Tam & Lam, 2003), but also more demandingness toward girls than boys (Das Eiden et al., 2001; Domenech Rodríguez et al., 2009). These inconsistencies could be due to methodological differences, as studies differed with respect to age and ethnicity of the children and the procedures to code parental discipline. An older meta-analysis showed that boys receive more physical punishment than girls (Lytton & Romney, 1991). The mechanisms underlying potential gender-differentiated differences may be attributed to both child-driven effects, i.e., boys' higher propensity toward disruptive behavior eliciting more negative discipline (McFadyen-Ketchum, Bates, Dodge, & Pettit, 1996), and parent-driven effects, i.e., parents' gender stereotypes guiding their differential treatment of boys and girls (Bem, 1981; Eagly, Wood, & Diekman, 2000). In the current study, we therefore expected that mothers and fathers would show more discipline behavior toward their sons than toward their daughters.

The idea that both parent gender and child gender appear to play a role in discipline practices suggests that discipline practices in mother-son, mother-daughter, father-son, and father-daughter dyads may be distinct. There is evidence that fathers are more likely than mothers to treat sons and daughters differently and that this pattern is most evident in the area of discipline (Feldman & Klein, 2003; Gjerde, Block, & Block, 1991; Lytton & Romney, 1991), but two other studies found that only mothers showed gender-differentiated discipline practices, with one pointing toward more maternal power discipline for boys than for girls (Kochanska, Barry, Stellern, & O'Blennes, 2009), and the other study showing more maternal control attempts with girls than with boys (Power et al., 1994). Overall, based on previous studies we expected differences among the four parent-by-child gender dyads, but the direction of these differences warrants further research.

Within-family comparisons

An important limitation of previous research is that most studies examining gender-differentiated parenting made comparisons between families. However, when comparing families with boys to families with girls apparent gender differences may also be caused by other underlying factors, which may partly explain why the results of previous studies in this field have been mixed, and thus have to be interpreted with caution. A crucial question is whether boys and girls are treated differently when they grow up in the same family. In a within-family approach, variations in parenting boys *versus* girls are less likely to be caused by other family or parent characteristics (Ball, McKenry, & Price-Bonham, 1983; Rodgers, Cleveland, van den Oord, & Rowe, 2000; Rodgers, 2001).

When examining parenting of siblings within families, birth order and sibling gender constellation are important factors to take into account. It is generally assumed that parents tend to direct more control to the younger child than the older

child (e.g., Brody et al., 1992; McHale, Crouter, McGuire, & Updegraff, 1995), but child age also plays a role. Studies with preschoolers have shown that parents discipline the older sibling more than the younger sibling (Volling, 1997; Volling & Elins, 1998; Volling et al., 2006). This suggests that the amount of discipline directed toward a specific child depends more on the developmental level of that child than on birth order (Volling, 1997; Volling & Ellins, 1998). Therefore, we hypothesized that parents show more discipline behavior toward their oldest child than toward their youngest child.

Current study

In the current study, differences in discipline strategies were examined between all possible parent-child dyads in intact two-parent two-child families: mother-oldest, mother-youngest, father-oldest, and father-youngest dyads. This study adds to the existing literature by including observations of both mothers' and fathers' discipline strategies and by differentiating between various discipline strategies. Observational studies of specific aspects of parental discipline, such as physical interference, distraction, and laxness, are lacking. The few studies that included these strategies used self-report measures, which could be influenced by unknown and possibly biasing third variables (Arnold & O'Leary, 1997) and may not reflect actual parental discipline behavior (e.g., Holden & Edwards, 1989). In addition, our study contributes to the literature by adopting a within-family approach with systematically varying family constellations (boy-boy, girl-girl, boy-girl, and girl-boy).

The following hypotheses were tested: (1) Mothers show more commanding, physical interference, and distraction in response to their children's noncompliance than fathers, and fathers show more laxness in response to their children's noncompliance than mothers; (2) Mothers and fathers show more discipline behavior toward their oldest children than toward their youngest children; (3) Mothers and fathers show more discipline behavior toward their sons than toward their daughters; (4) Parental discipline varies by specific parent-child gender combinations. Since results of previous studies are mixed, no specific hypothesis was formulated with regard to this hypothesis. Differences between the parent-child gender combinations will be examined in an explorative manner.

METHOD

Sample

This study is part of the longitudinal study *'Boys will be Boys?'* examining the influence of mothers' and fathers' gender-differentiated socialization on the socio-emotional development in boys and girls in the first four years of life. Intact families with two children were selected from municipality records in the Western region of

the Netherlands. Families were included if the youngest child was around 12 months of age and the oldest child was between 2.5 and 3.5 years old. Exclusion criteria were single parenthood, severe physical or intellectual handicaps of parent or child, and being born outside the Netherlands (child and parent) or not speaking the Dutch language (parent). The current paper reports on data from the first wave of the study.

Eligible families were invited by mail to participate in a study on the unique role of mothers and fathers on socio-emotional development with two home visits each year over a period of three years. All families received an invitation letter, a brochure with the details of the study, and an answering card to respond to the invitation. Of the 1,249 eligible families 31% were willing to participate ($N = 390$). The participating families did not differ from the non-participating families in age of mothers or fathers, educational level of mothers or fathers, or the degree of urbanization of residence ($ps > .08$). For the current study, families with missing data ($n = 3$) and families with one or more dyads not showing noncompliant behavior during our observation procedure ($n = 145$; see measures for details) were excluded, resulting in a final sample of 242 intact two-parent families. The 148 excluded families did not differ from the participating families with respect to age of mothers or fathers, educational level of mothers or fathers, or the degree of urbanization of residence ($ps > .30$). Furthermore, there were no significant differences between the excluded or participating families in terms of gender of the children or sibling gender combinations ($ps > .35$). In addition, children who showed noncompliant behavior during our observation procedure did not show more externalizing behavior compared to children showing compliant behavior ($ps > .11$). The current sample consisted of families with the following sibling gender constellations: 70 boy-boy (29%), 56 girl-girl (23%), 56 boy-girl (23%), and 60 girl-boy (25%).

At the time of the first home-visit the youngest siblings were 12 months old ($SD = 0.3$) and the age of the oldest siblings ranged from 2.5 to 3.6 years ($M = 3.0$, $SD = 0.3$). The mothers were aged between 22.6 and 45.6 years ($M = 34.0$, $SD = 3.9$) and the fathers were between 25.8 and 63.0 years of age ($M = 36.6$, $SD = 5.1$). Most parents were married (79%), 13% of the couples had a cohabitation agreement or registered partnership, and 8% lived together without any kind of registered agreement. Most mothers finished academic or higher vocational schooling (79%), and the same was true for fathers (77%). Average working hours per week were 25.7 for mothers ($SD = 9.6$, range 0-60) and 37.9 for fathers ($SD = 7.0$, range 0-80), which is comparable to figures in the Dutch general population (SCP, 2012). Most families lived in urban residences (86%).

Procedure

Each family was visited twice within a period of about two weeks: once with the mother and the two children and once with the father and the two children. The

order in which mothers and fathers were visited was counterbalanced. Before the first home visit, both parents were asked to individually complete a set of questionnaires. During the home visits, parent-child interactions and sibling interactions were filmed, and the oldest children and both parents completed computer tests. All home visits were conducted by pairs of trained graduate or undergraduate students. Families received a payment of 30 Euros and small presents for the children. Informed consent was obtained from all participating families. Ethical approval for this study was provided by the Committee Research Ethics Code of the Leiden Institute of Education and Child Studies.

Measures

Parental discipline. Parental discipline strategies were measured during a *don't-touch-task*. During this task the parent received a card with instructions to put a set of attractive toys on the floor in front of both children and to make sure the children did not touch the toys for two minutes. After two minutes, the experimenter gave the parent a nonverbal sign (e.g., nodding, waving) to let the parent know that he/she could move to the next phase of the task, during which the children were allowed to play only with the least attractive toy (a stuffed animal) for another two minutes. In case the parent did not notice the nonverbal sign, a verbal sign (e.g., "the first two minutes have passed") was given to signal the start of the second phase. After the second phase of the task a sign was given that the task was finished and the children were allowed to play with all the toys. The total duration of the task was four minutes. The setting of the task is assumed to reflect daily situations in which parents have to keep their young children from touching valuable or breakable objects in their own homes or outside the home (e.g., in the store or when visiting someone) and has been used extensively in previous studies with similar age ranges (e.g. Joosen, Mesman, Bakermans-Kranenburg, & Van IJzendoorn, 2012; Kochanska et al., 2009; Van der Mark, Bakermans-Kranenburg, & Van IJzendoorn, 2002).

Coding procedures were based on Kochanska, Coy, and Murray (2001) and have been used in previous studies with comparable samples (e.g., Blandon & Volling, 2008; Kochanska et al., 2009; Volling et al., 2006). Parental discipline was measured by coding the parent's responses to every occurrence of child non-compliant behavior (the child reaching for or touching the toys) within 10 seconds after its onset. Child noncompliance and parental responses were coded in similar ways for oldest and youngest children. Four types of parental responses were coded as present or absent within those 10-second intervals: command, physical interference, distraction, and laxness. More than one category could be coded within a 10-second interval. Command was coded when the parent made verbal comments concerning the rule of the task (e.g., telling the child not to touch the toys). Physical interference was coded when the parent stopped the child from

reaching for or touching the toys by holding or pushing the child back, moving the toys out of reach, taking the toys from the child's hand, or blocking the way toward the toys. Distraction was coded when the parent attempted to move the child's attention away from the toys, verbally (e.g., talking about something else or singing a song) or nonverbally (e.g., holding the stuffed animal in front of the child in a playful way). Laxness was coded when none of the other responses were present. There was no difference in noncompliant behavior of the children in the presence of mothers and fathers ($p = .55$), but the oldest children showed more noncompliant behavior than the youngest children ($p < .01$) during both the mother and the father visit. Therefore, the total number of times each response type occurred was divided by the total number of noncompliance events to create a relative score for each discipline strategy to allow for valid comparisons between siblings.

Twelve coders rated 968 videotapes for parental discipline. Dyads within the same family were coded by different coders to guarantee independence among ratings. The mean intraclass correlation coefficient (absolute agreement) for number of noncompliant events was .97 (range .92 to 1.00), for command .94 (.90 - .99), for physical interference .93 (.83 - .99), for distraction .85 (.70 - .94), and for laxness .94 (.85 - .98) ($n = 56$). Regular meetings with coders were organized to prevent coder drift.

Data-analysis

The four discipline subscales were inspected for outliers, i.e., values larger than 3.29 *SD* above or below the mean. Ten outliers were found for distraction of father toward the youngest child and for laxness of mother toward the oldest child. The outlying scores were winsorized (Tabachnick & Fidell, 2012). The subscales distraction and laxness were positively skewed and an inverse transformation was used to normalize the distribution (Tabachnick & Fidell, 2012). All other subscales were normally distributed. Paternal educational level was not associated with his discipline strategies ($ps > .06$). Maternal educational level was only positively related to her use of command toward the youngest child, $r(242) = .14$, $p < .05$. Working hours of both parents, used as an inverse proxy for time spent with the child, were not related to discipline strategies ($ps > .11$). Because only one out of thirty-two associations between educational level and working hours was significant, these variables were not included in further analyses.

Analyses of parents' discipline strategies toward their oldest and youngest children were conducted using GLM Repeated Measures analysis. Main effects and the interaction between the within-subjects factor parent gender (mother, father) and child birth order (oldest, youngest) were examined. In addition, two-way interactions between the two within-subjects factors and the between-subjects variable (sibling gender constellation) were examined.

RESULTS

Preliminary analysis

The correlations between mothers' and fathers' discipline strategies are presented in Table 1. Mothers and fathers who used more commands in response to noncompliant behavior of their oldest child also used more commands in response to noncompliant behavior of their youngest child. Maternal and paternal use of commands were not associated for either child. The same pattern was found for physical interference and laxness. However, maternal and paternal uses of physical interference were positively correlated for the oldest child. For distraction no significant correlations between the four dyads were found. Within all dyads use of commands was positively correlated with physical interference. Laxness was negatively correlated with both use of commands and physical interference.

Multivariate regression analyses were conducted to test moderation by child gender. In the first set of analyses, maternal discipline, child gender, and their interaction were added to predict paternal discipline (separately for oldest and youngest children). In the second set of analyses, maternal discipline toward the oldest, oldest child gender, and their interaction were entered as predictors of maternal discipline toward the youngest (repeated for paternal behavior). Because of the large number of analyses, conservative p -levels ($p < .01$) were used to evaluate the interaction effects. None of the associations between mothers and fathers and oldest and youngest children were moderated by child gender.

Differences between mothers' and fathers' discipline strategies

With respect to differences between mothers and fathers, significant main effects were found for all discipline strategies (Table 2): use of commands, *Pillai's F* (1, 238) = 11.83, $p < .01$, $\eta_p^2 = .05$, physical interference, *Pillai's F* (1, 238) = 7.94, $p = .01$, $\eta_p^2 = .03$, distraction, *Pillai's F* (1, 238) = 16.63, $p < .01$, $\eta_p^2 = .07$, and laxness, *Pillai's F* (1, 238) = 15.66, $p < .01$, $\eta_p^2 = .06$. Consistent with our first hypothesis, mothers used more commands, physical interference, and distraction with their children than fathers, while fathers showed more laxness in response to child noncompliance than mothers. Analyses with working hours of mothers and fathers added as covariates did not show different results ($ps > .36$).

Table 1.

Correlations for discipline strategies of mothers and fathers towards their oldest and youngest child (N = 242)

Mother	Father							
	1	2	3	4	5	6	7	8
1. Command Oldest	.04	.33**	.48**	.37**	-.08	-.08	-.81**	-.43**
2. Command Youngest	.29**	.06	.11	.46**	-.03	-.06	-.31**	-.54**
3. Physical Interference Oldest	.45**	.06	.20**	.27**	-.02	-.01	-.49**	-.23**
4. Physical Interference Youngest	.44**	.46**	.29**	.07	.06	.03	-.46**	-.90**
5. Distraction Oldest	-.04	-.09	.07	-.02	-.01	.07	-.16*	-.07
6. Distraction Youngest	-.02	-.05	-.06	-.06	.13	.01	.08	-.06
7. Laxness Oldest	-.78**	-.19**	-.45**	-.40**	-.30**	-.04	.07	.50**
8. Laxness Youngest	-.46**	-.54**	-.25**	-.87**	.04	-.12	.40**	.08

Note. Correlations below the diagonal refer to associations among maternal behaviors, correlations above the diagonal refer to associations among paternal behaviors, and correlations on the diagonal refer to associations between maternal and paternal behaviors.

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

Table 2.

Means and Standard Deviations on discipline strategies for mothers and fathers towards their oldest and youngest children for different sibling gender constellations

Discipline strategy	Dyad	Sibling gender constellation				Total (n = 242)		Pillai's F and contrasts	η_p^2	
		Boy-Boy (n = 70)	Girl-Girl (n = 56)	Boy-Girl (n = 56)	Girl-Boy (n = 60)	M (SD)	Range			
Command	<u>Parent</u>							11.83**	.05	
	Mother (M)	.61 (0.26)	.63 (0.26)	.59 (0.24)	.68 (0.24)	.63 (0.25)	.00 - 1.00	> F**		
	Father (F)	.50 (0.25)	.54 (0.29)	.55 (0.28)	.61 (0.24)	.55 (0.27)	.00 - 1.00			
	<u>Child</u>							191.10**		
Physical Interference	Oldest (O)	.70 (0.20)	.70 (0.21)	.70 (0.21)	.74 (0.21)	.71 (0.21)	.00 - 1.00	> Y**	.45	
	Youngest (Y)	.41 (0.22)	.48 (0.26)	.44 (0.27)	.55 (0.27)	.47 (0.26)	.00 - 1.00			
	<u>Parent</u>							7.94*		.03
	Mother (M)	.63 (0.26)	.55 (0.26)	.60 (0.25)	.61 (0.25)	.60 (0.26)	.00 - 1.00	> F**		
Father (F)	.57 (0.30)	.47 (0.28)	.53 (0.28)	.55 (0.26)	.53 (0.28)	.00 - 1.00				
<u>Child</u>							151.08**			
Distraction	Oldest (O)	.51 (0.24)	.36 (0.25)	.45 (0.24)	.44 (0.27)	.45 (0.26)	.00 - 1.00		.39	
	Youngest (Y)	.68 (0.24)	.66 (0.26)	.68 (0.25)	.72 (0.27)	.69 (0.25)	.00 - 1.00	> O**		
	<u>Parent</u>							16.63**		.07
	Mother (M)	.17 (0.11)	.14 (0.10)	.14 (0.10)	.16 (0.11)	.15 (0.11)	.00 - .48	> F**		
Father (F)	.11 (0.09)	.12 (0.09)	.11 (0.08)	.13 (0.10)	.12 (0.09)	.00 - .39				
<u>Child</u>							71.70**			
Laxness	Oldest (O)	.17 (0.10)	.16 (0.11)	.16 (0.10)	.18 (0.10)	.17 (0.10)	.00 - .46	> Y**	.23	
	Youngest (Y)	.11 (0.08)	.09 (0.09)	.09 (0.09)	.11 (0.10)	.11 (0.09)	.00 - .41			
	<u>Parent</u>							15.66**		.06
	Mother (M)	.11 (0.12)	.11 (0.13)	.11 (0.13)	.08 (0.11)	.10 (0.12)	.00 - .48			
Father (F)	.16 (0.16)	.17 (0.14)	.15 (0.15)	.13 (0.13)	.15 (0.15)	.00 - .50	> M**			
<u>Child</u>							14.24**			
	Oldest (O)	.11 (0.11)	.12 (0.11)	.12 (0.11)	.10 (0.11)	.11 (0.11)	.00 - .41		.06	
	Youngest (Y)	.15 (0.12)	.16 (.013)	.15 (0.14)	.11 (0.11)	.14 (0.13)	.00 - .46	> O**		

Note. M (Mother), F (Father), O (Oldest), Y (Youngest).

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

Differences in discipline strategies toward oldest and youngest children

With respect to differences between oldest and youngest children (Table 2), significant main effects were found for use of commands, *Pillai's F* (1, 238) = 191.10, $p < .01$, $\eta^2 = .45$, physical interference, *Pillai's F* (1, 238) = 151.08, $p < .01$, $\eta^2 = .39$, distraction, *Pillai's F* (1, 238) = 71.70, $p < .01$, $\eta^2 = .23$, and laxness, *Pillai's F* (1, 238) = 14.24, $p < .01$, $\eta^2 = .06$. In line with our second hypothesis, parents used more commands and distraction with their oldest children than with their youngest children and were more lax toward their youngest child than toward their oldest child. In contrast to our hypothesis, parents used more physical interference with their youngest children than with their oldest children.

A significant interaction between parent gender and child birth order was found for use of commands, *Pillai's F* (1, 238) = 6.24, $p = .01$, $\eta^2 = .03$, and physical interference, *Pillai's F* (1, 238) = 7.41, $p = .01$, $\eta^2 = .03$. As illustrated in Figure 1, follow-up paired *t*-tests revealed that the difference between mothers and fathers was only significant for the youngest child ($ps < .01$), and not the oldest child ($ps > .15$).

Differences in discipline strategies toward boys and girls

In contrast to our third hypothesis, child gender was not related to parental discipline strategies. None of the two-way interactions between the within-subjects factor (parent or child) and the between-subjects variable (sibling gender constellation) were significant ($ps > .10$).

Discipline strategies within families with boys and girls

To make optimal use of our within-family design, we compared parental discipline practices toward the two siblings in boy-girl families ($n = 56$) and girl-boy families ($n = 60$) to examine whether within-family child gender effects were present above and beyond the birth order and parent gender effects. Findings were mainly consistent with those of the main set of analyses, except for the finding that for physical interference a significant interaction between parent gender and child gender was found beyond birth order, *Pillai's F* (1, 115) = 6.77, $p = .01$, $\eta^2 = .06$. Follow-up *t*-tests showed that mothers used more physical interference with boys than fathers ($p < .01$), irrespective of birth order.

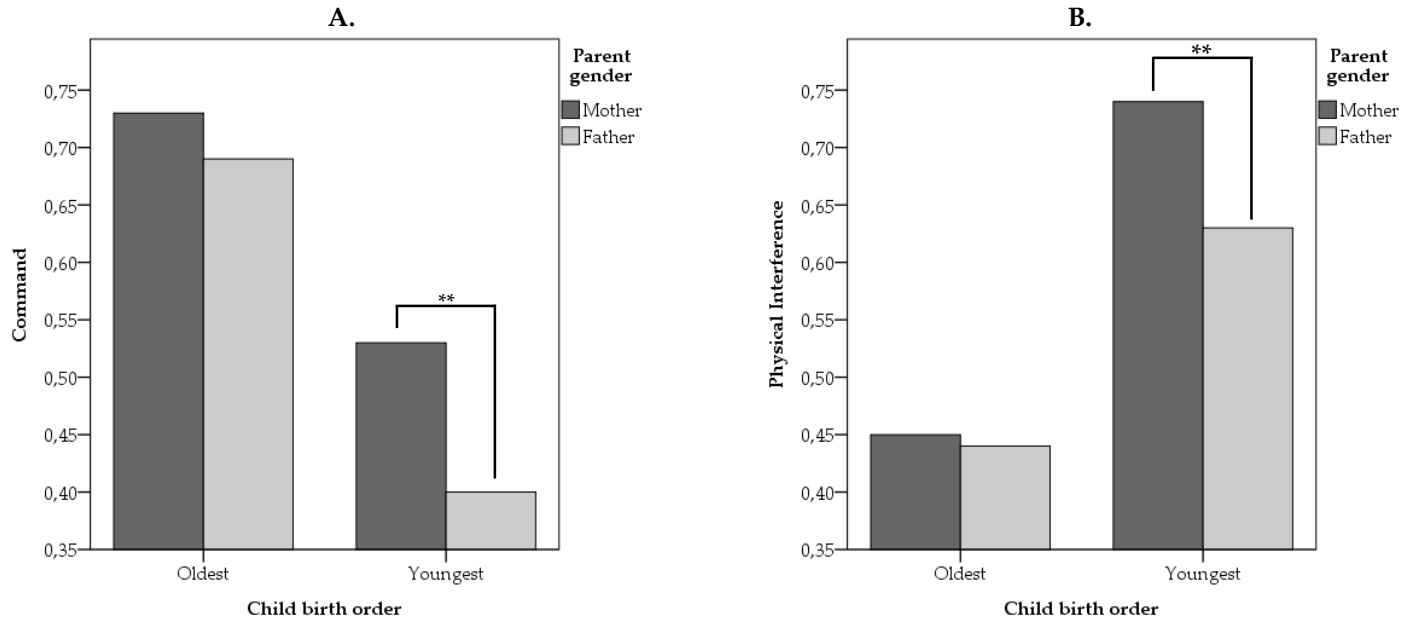


Figure 1. Interaction between parent gender and child birth order for use of commands (A) and physical interference (B).

** $p < .01$

DISCUSSION

In our large study using a within-family design, mothers disciplined their children more often than fathers, and fathers showed more laxness in response to children's noncompliance than mothers. Both parents made more use of commands and distraction toward their oldest than toward their youngest children, whereas physical interference and laxness were more often used with youngest than with oldest children. Gender of the children was only related to physical interference, with mothers using more physical interference with boys than fathers, irrespective of birth order.

In line with previous studies (e.g., Arnold & O'Leary, 1997; Bandon & Volling, 2008; Webster-Stratton & Hammond, 1999), we found that mothers used more commands, distraction, and physical discipline than fathers. In addition, fathers showed more laxness in response to their children's noncompliance than mothers. Consistent with role theory, these differences may be explained by the fact that mothers almost always adopt the role of primary caregivers of the children and spend more time with their children than fathers (Huerta et al., 2013; SCP, 2011). As a result, mothers have more opportunities for discipline, whereas fathers are less likely to experience situations in which they have full responsibility for their children and be the active disciplinarian. Although parental working hours were not related to their discipline practices in this study, this may not be an accurate indicator of the time a parent spent with their children. There is evidence that mothers spend two to three times as much time with their children than fathers, even when mothers work full-time (Huerta et al., 2013; SCP, 2011). In addition, fathers' time with children tends to center more around playful interactions, whereas mothers are more often involved in daily child care routines (Huerta et al., 2013; Monna & Gauthier, 2008) that are likely to provoke situations in which they have to discipline their children (e.g., conflicts about eating or bedtime). This is in line with findings that fathers tend to engage more often in parenting behavior that support mothers' efforts, but are less involved in the daily administration of discipline themselves (Day et al., 1998). Fathers might feel that the responsibility of disciplining young children lies with the mother.

With respect to the use of commands and physical interference, mothers used more commands and physical interference than fathers, but only toward the youngest children. It may be that fathers have problems to adjust their discipline behavior in a way fitting the developmental level of 1-year-old children, which may lead to differences in responses to noncompliant behavior for mothers and fathers. In a related vein, previous work suggests that fathers show a later increase in verbal instructions with their maturing children than mothers (Fagot & Hagan, 1991). In addition, the distribution of caregiving between parents is especially skewed

toward mothers with very young children, while fathers become more involved as the child gets older (Bailey, 1994; Furman & Lanthier, 2002), indicating larger differences between mothers and fathers interacting with younger rather than older children.

Our finding that both mothers and fathers used more commands and distraction toward the oldest child than toward the youngest child is in line with results from previous studies (e.g., Volling et al., 2006). Both mothers and fathers used more physical interference with their youngest child than with their oldest child, which is in line with findings that parents are sensitive to the developmental differences between siblings (Dunn, Plomin, & Daniels, 1986; Grolnick, Kurowski, McMenemy, Rivkin, & Bridges, 1998). Since there is an important developmental gap between one-year-old and three-year-old children, it is likely that parents adjust their discipline behavior accordingly. Older children have greater understanding of language and are expected to be better able to comply with parental verbal requests (Berk, 2006), whereas one-year-old children have only limited language understanding, eliciting more physical interference from parents. Furthermore, physical interference may be more socially accepted with infants than with older children (Day et al., 1998; Gershoff, 2002). Parents were also found to show more laxness in response to noncompliant behavior of the youngest child than of the oldest child, which may reflect parents' evaluation of the *don't-touch-task* as too difficult for 1-year-old children. Since inhibitory control starts to develop after 12 months of age (Edwards & Liu, 2002), parents may feel it is not appropriate to expect a 1-year-old to be able to not touch the toys. As a result, they may react with more laxness, but instead expect their 3-year-olds to be able to comply with the task.

Our within-family design allowed for a comparison of parental discipline strategies in families with a boy and a girl. We did not find evidence for gender-differentiated discipline as found in previous studies (e.g., Das Eiden et al., 2001; Domenech Rodríguez et al., 2009; Tam & Lam, 2003). However, these previous studies used between-family comparisons, meaning that between-family differences on third variables cannot be ruled out as alternative explanations for gender differences between groups (Rodgers et al., 2000; Rodgers, 2001). By adopting a within-family approach, our study suggests that whereas parent gender does influence parental discipline strategies toward young children, child gender is less salient in early childhood discipline.

In families with a boy and a girl, we found that mothers used more physical interference than fathers toward boys, but no difference was found between parents toward girls. Consistent with gender stereotypes, parents may feel that punishment is the appropriate strategy to change a boy's behavior (McKee et al., 2007), and physical punishment is also seen as a way to prepare boys for a world in which toughness and the ability to cope with hardship is expected (Day et al., 1998). Since mothers are generally the primary caregivers, they may encounter more situations

in which they have to discipline their children than fathers. As a result, especially mothers may bring this gender stereotypical idea about rearing boys into practice.

Our study has some limitations. First, the sample consisted of mostly Caucasian families with predominantly high educational levels. Because discipline practices may vary by ethnicity or social class (Pinderhughes, Dodge, Zelli, Bates, & Pettit, 2000), it is important to examine gender differences in more diverse samples. Second, child characteristics other than child gender and birth order (e.g., child temperament or problem behavior) may influence discipline practices, and need to be included in future research in this area. Third, in our study we could not control for the time mothers and fathers spend with their children, whereas there is some evidence that differences between mothers and fathers may be partly due to differences in time spent in child rearing (Arnold & O'Leary, 1997). Future research should take this aspect into account. Last, although parental discipline strategies for each dyad were coded independently, both children were present during the don't-touch-task. As a result, parents had to respond to noncompliant behavior of both children at the same time. It is possible that the levels of discipline behavior are higher or lower in a situation in which the parent has to discipline only one child. However, the setting used in this study is thought to resemble daily family life in which parents have to deal with the behavior of both children at the same time, thus increasing the ecological validity of the observations.

To conclude, parental discipline varies by the age and developmental level of the children. We found evidence that mothers discipline their children more often than fathers. However, parents did not show gender-differentiated discipline behavior, suggesting that child gender plays a less prominent role in parental discipline practices than is generally assumed. Our findings provide evidence for the notion that traditional family role patterns have changed over the last decades with respect to parental discipline. Mothers rather than fathers appear to be the main disciplinarian in families with young children. Whether these differences between mothers and fathers in parental discipline have differential impact on young children's development is an important direction for future research, and research into this question should also take the role of child age into account.

