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The Importance of Mothers' and Fathers' Positive Parenting for Toddlers' and Preschoolers' Social-Emotional Adjustment

Ana Okorn , Marjolein Verhoeven , and Anneloes Van Baar 

SYNOPSIS

Objective. Parental support, stimulation, positive discipline, and structure are all important for social-emotional adjustment of toddlers and preschoolers. However, less is known about the relative importance of these positive parenting practices. The current cross-sectional study examines the associations between positive parenting practices and child social-emotional difficulties in relation to child age and parental gender. **Design.** 446 Dutch families (446 mothers, $M_{age} = 33.51$ years; 446 fathers, $M_{age} = 35.63$ years) rearing a child (46.9% boys) between 17 and 48 months of age ($M_{age} = 31.64$) participated. Parents reported on their own positive parenting practices, and mothers reported on child externalizing and internalizing behaviors as an indication of social-emotional difficulties. **Results.** Increased support from both mothers and fathers, and maternal provision of structure are associated with lower levels of child externalizing and internalizing behaviors. Positive discipline from both mothers and fathers, however, is related to higher levels of child externalizing and internalizing behaviors, and stimulation from both mothers and fathers is unrelated to either. These associations are not moderated by child age and are similar for mothers and fathers, except maternal structure is linked to lower levels of child externalizing and internalizing behaviors, whereas paternal structure is unrelated to child social-emotional difficulties. **Conclusions.** The present study underscores the significance of investigating the effects of multiple positive parenting practices simultaneously and calls for involving both mothers and fathers in parenting programs.

INTRODUCTION

Child social-emotional adjustment is determined by the child's ability to regulate emotions and behavior and willingness to participate in positive social interactions (Achenbach & Rescorla, 2000). Child social-emotional difficulties (e.g., externalizing and internalizing behaviors) at an early age often lead to adversities in later childhood and adulthood, including poorer academic performance, lower peer acceptance and well-being, and mental health issues (Keane & Calkins, 2004; Kjeldsen et al., 2016; Van Lier et al., 2012). Intervention studies have shown that positive parenting is of special importance to support child social and emotional growth and to avoid emotional and behavioral difficulties. Specifically, positive parenting practices (e.g., positive reinforcement, positive

and proactive discipline, engagement in play and learning activities with a child) are key mechanisms for desired change in child behaviors (e.g., lower levels of child problem behavior, higher levels of prosocial behavior) for participants in parenting programs (e.g., David, 2014; Dishion et al., 2008; Gardner, Burton, & Klimes, 2006; Jeong et al., 2019). The current study examines the relative importance of a range of positive parenting practices for child social-emotional adjustment and its relations to child age and parental gender. This study advances knowledge about effective parenting practices, relevant for strengthening, tailoring, and developing parenting programs.

To date a range of positive parenting practices has been linked to toddlers' and preschoolers' social-emotional adjustment. Specifically, children of highly supportive (e.g., sensitive, responsive, affectionate) parents show higher levels of social competence (Barnett, Gustafsson, Deng, Mills-Koonce, & Cox, 2012) and prosocial behaviors (Xiao, Spinrad, & Carter, 2018), and lower levels of aggression (Van Aken et al., 2007) or more broader externalizing behaviors (Kerr, Lopez, Olson, & Sameroff, 2004; Verhoeven, Junger, Van Aken, Deković, & Van Aken, 2010a). Furthermore, parental stimulation, such as maternal engagement of children in outside activities, and maternal and paternal engagement in child play, learning, and communication activities, promotes child social development (Gutman & Feinstein, 2010; Jeong et al., 2019). When parents use positive discipline with their preschool child, particularly reminding and reasoning with a child about rules and expectations, the child displays fewer externalizing behaviors (Choe, Olson, & Sameroff, 2013; Kerr et al., 2004) and better moral regulation (Kerr et al., 2004). Additionally, regarding parental structure, when parents are more persistent (i.e., less lax), consistent, and able to control their own emotions when interacting with their child (i.e., less overreactive), their child tends to show lower levels of aggressive behavior (Del Vecchio & O'Leary, 2006; Van Aken et al., 2007) and less negative emotionality (Lipscomb et al., 2011).

Existing research has shown the importance of parental support, stimulation, positive discipline, and structure for social-emotional adjustment of toddlers and preschoolers, but less is known about the relative importance of these practices vis-à-vis one another. Are certain aspects of positive parenting more important than others for child social-emotional adjustment? Does importance vary with child age? Is importance dependent on whether the behavior is shown by the mother or the father? To answer these questions, the current study examines associations between a range of positive parenting practices and toddlers' and preschoolers' social-emotional difficulties in relation to child age and parental gender.

Over time, children gradually reach different social and emotional milestones (Thomann & Carter, 2008). Given that the child's developmental needs change over time, parents who adjust their parenting according to their child's needs are likely to establish a closer relationship with their child and have a stronger

influence on their child's development (Holden & Miller, 1999). Consequently, when the parent's behavior is adjusted to the developmental stage of a child, the child may benefit more from that particular parental behavior and might experience fewer social-emotional difficulties. If parents do not meet the child's needs sufficiently, their parenting, although positive, may be less effective in preventing a child from experiencing social-emotional difficulties. In that sense, the strength of the association between certain positive parenting practices and child social-emotional difficulties might depend on the social-emotional developmental stage of a child at that moment.

To illustrate, in the infant-to-toddler period children become highly motivated to explore their environment, as well as initiate actions themselves, and do things on their own (Thomann & Carter, 2008; Verhoeven, Van Baar, & Deković, 2019). Therefore, children need parents who encourage their independent behavior by providing them with opportunities to learn and explore (Verhoeven et al., 2019). At the same time, the child's environment becomes more complex and the child needs to learn what is permitted and how to behave in diverse situations (Thomann & Carter, 2008; Verhoeven et al., 2019). Thus, children need parents to maintain an organized and structured family environment, with which they help their children to grasp the complexity of situations and teach them about appropriate behavior (Del Vecchio & O'Leary, 2006; Thomann & Carter, 2008; Verhoeven et al., 2019). Indeed, children of mothers who reported responding to their child's misbehavior in a predictive manner (i.e., staying in control of their own emotions) were observed to display more appropriate responses to parental guidance during a clean-up task (Guajardo, Snyder, & Petersen, 2009). In that sense, both parental stimulation (i.e., encouragement for a child to learn, explore, and interact with others) and parental structure (i.e., provision of clear and consistent rules, without being overreactive) might be particularly important in early toddlerhood.

However, as children grow older, enhanced cognitive abilities allow children to adjust their own actions more to their parents' expectations and gradually shift from external sources of control to more self-regulated behavior in the absence of direct parental guidance (Kopp, 1982). Thus, children need to internalize social rules and expectations. By explaining the consequences of the child's behavior for others, parents can promote child empathic capabilities, and as such contribute to the child's internalization of social rules (Hoffman, 2000; Krevans & Gibbs, 1996; Shen, Carlo, & Knight, 2013). Consequently, parental positive disciplining (i.e., clarification and explanation of social rules and consequences of unwanted behavior) might become more important as children grow older and are more cognitively developed.

To be able to independently explore, comply with rules, and internalize rules later, children need their parents to make them feel secure and supported (Kochanska, Aksan, & Carlson, 2005; Thomann & Carter, 2008; Von Suchodoletz, Trommsdorff, & Heikamp, 2011). Therefore, parental support

(i.e., sensitivity, responsiveness, and affection) is likely to be equally important for child adjustment at toddler as well as preschool ages. Children whose mothers were consistently responsive across early childhood had better social skills by the age of 54 months than children whose mothers were responsive only in early toddlerhood, but not in preschool years, possibly due to their more restrictive parenting attitudes and fewer child-centered perspectives (Landry, Smith, Swank, Assel, & Vellet, 2001).

The relative importance of specific positive parenting practices might depend on child age, as an indication of the child's developmental stage. Therefore, we examined whether child age moderates associations between a range of positive parenting practices (i.e., support, stimulation, positive discipline, and structure) and toddlers' and preschoolers' social-emotional difficulties (i.e., externalizing and internalizing behaviors). We studied these parenting practices simultaneously to be able to draw conclusions about the relative importance of different aspects of parenting and account for possible dependencies among them.

Mothering and Fathering

The importance of parenting practices might also depend on whether the behavior is shown by the mother or the father. Despite the contemporary view that both mothers and fathers play important roles in child development (Cabrera, Fitzgerald, Bradley, & Roggman, 2014), studies examining both mothering and fathering are still relatively scarce (Cabrera, Volling, & Barr, 2018). The few studies that have differentiated the impacts of mothers' and fathers' positive parenting on toddlers' and preschoolers' social-emotional adjustment have shown that the importance of mothering and fathering might depend on the kind of positive parenting practice under study (e.g., Jeong et al., 2019; Kerr et al., 2004; Lipscomb et al., 2011; Van Aken et al., 2007; Wittig & Rodriguez, 2019). For example, a Dutch study on aggression in boys found differences regarding the influence of parental support, with significant associations for maternal but not paternal support, whereas the associations for parental structure were similar for mothers and fathers (Van Aken et al., 2007). Similarly, Kerr et al. (2004) found maternal and paternal positive discipline were associated with U.S. American boys' externalizing behaviors, whereas this was not the case for support: opposite to the study of Van Aken et al. (2007), only paternal and not maternal support was related to boys' externalizing behaviors.

Studies differentiating maternal and paternal impacts on child social-emotional adjustment have often analyzed maternal and paternal positive parenting in separate statistical models (e.g., Kerr et al., 2004; Wittig & Rodriguez, 2019) or focused on one positive parenting practice only (e.g.,

Jeong et al., 2019; Lipscomb et al., 2011). To be able to determine the relation between a certain positive parenting practice and child social-emotional difficulties, indirect relations of that positive parenting practice through the other co-occurring positive parenting practices as well as through positive parenting practices of the other parent need to be controlled. To better understand maternal and paternal roles in child adjustment, we examined whether positive mothering and fathering is differently associated with toddlers' and preschoolers' externalizing and internalizing behaviors by analyzing a range of positive mothering and fathering practices simultaneously in one model.

The Present Study

The present study examines associations between four positive parenting practices (support, stimulation, positive discipline, and structure) and social-emotional difficulties (externalizing and internalizing behaviors) in toddlers and preschoolers, and whether the strength of these associations is moderated by child age and parental gender. All positive parenting practices are expected to be important throughout toddler and preschool ages and therefore negatively associated with child externalizing and internalizing behaviors. Although exploratory, the strength of these associations is hypothesized to vary with child age: the importance of parental stimulation and structure is expected to decrease with child age, as the child gradually becomes more independent and learns about social rules. Positive discipline is expected to become more important with child age as the child begins to internalize social rules. Child age is not expected to moderate the association for parental support, as this parenting practice is expected to remain equally important for social-emotional adjustment at toddler as well as preschool ages. Given the lack of literature, no prior assumptions regarding the differential associations of mothering and fathering with child adjustment are made. Knowing which specific positive parenting practices are uniquely associated with child social-emotional adjustment and whether timing and parental gender play a role (the parenting specificity principle; see Bornstein, 2015), might provide new insights on effective parenting practices at different ages of a child and thus offer new directions for prevention and intervention programs.

METHOD

Participants

A sample of 446 Dutch families rearing a child between 17 and 48 months of age ($M = 31.64$ months, $SD = 8.87$, 209 [46.9%] boys, 429 [99.5%] of children were Dutch) provided information about both maternal and paternal parenting and mother-reported child social-emotional adjustment. Of the parents who reported their nationality, all mothers ($n = 422$) and fathers ($n = 418$)

were Dutch. On average, mothers were 33.51 years old ($SD = 4.22$) and fathers were 35.63 years old ($SD = 4.90$). Additionally, 59.4% of the mothers and 57.2% of the fathers had at least a college degree, and 99.3% of the mothers lived together with their partner (i.e., the father) at the time of the data collection. In 62.9% of the families, mothers had the larger share in rearing their child, compared to 0.9% of families in which the fathers spent more time with children, and 36% of families in which childcare was equally divided between mothers and fathers (0.2% of families indicated ‘other situation’). The average number of children living in the family was 1.98 ($SD = .85$), ranging from one to six. The birth order of the children reported on varied between families.

Procedures

Data were collected as part of the ‘Parenting in the Netherlands’ – study; a cross-sectional study examining psychometric properties of the Comprehensive Early Childhood Parenting Questionnaire and providing insights into parenting behaviors of Dutch mothers and fathers rearing a child between 0 and 4 years of age (Verhoeven, Deković, Bodden, & Van Baar, 2017). The study was conducted in accord with ethical guidelines of the Faculty Ethical Review Board of Utrecht University (FERB). Families were recruited through day care centers and preschools. Invitation letters were used to inform parents about the aim of the project. Parents provided informed consent for participation in the study. Thereafter, paper-pencil questionnaires were sent to families. Mothers and fathers were asked to fill out the questionnaires about the same child independently and to return the self-report questionnaires within 2 weeks. Questionnaire data were coded anonymously. No compensation for the participation in the study was offered.

Measures

Toddlers’ and Preschoolers’ Social-Emotional Difficulties

Mothers filled out the Dutch version of the Child Behavior Checklist for ages 1.5–5 (CBCL 1½–5; Achenbach & Rescorla, 2000) to examine toddlers’ and preschoolers’ difficulties in social interactions and in behavioral and emotional regulation. Specifically, the two broad scales of externalizing and internalizing problem behaviors were used. Externalizing behaviors were assessed with 24 items about the child’s attention problems and aggressive behavior. Sample items included “child can’t sit still, is restless, or hyperactive” and “child is disobedient”. Internalizing behaviors were assessed with 36 items about the child’s emotional reactivity, anxiousness, somatic complaints, and social withdrawal. Sample items included “child is upset by new people or situations” and “child is withdrawn, doesn’t get involved with others”. Mothers responded

to the items on a 3-point Likert scale, indicating how often their child showed the described behavior in the last 2 months (0 = *not true*, 1 = *somewhat or sometimes true*, 2 = *very true or often true*). Mean scores, based on raw scores, were created for externalizing and internalizing behaviors, with higher scores indicating more problem behaviors. The externalizing and internalizing scales had high internal consistencies, with Cronbach's Alphas of .90 and .83, respectively.

Positive Parenting

Mothers' and fathers' parenting practices were measured by the five subscales of the Comprehensive Early Childhood Parenting Questionnaire (CECPAQ; Verhoeven et al., 2017). In this study, the four positive parenting subscales, support (13 items; e.g., "I notice when my child is sad or doesn't feel good."), stimulation (13 items; e.g., "I tell my child stories or read books to him/her."), positive discipline (4 items; e.g., "I explain to my child why certain rules must be followed."), and structure (12 items; e.g., "When my child misbehaves, I let my child out of a punishment early." (reversed-coded)), were used. Parents indicated how often they show the described parenting behavior on 6-point scale, ranging from 1 (*never*) to 6 (*always*). For eight items, ratings were made on 6-point scales that were anchored by one effective and one ineffective response to the presented parenting situation. For each subscale, a mean score was created based on the raw scores, with higher scores indicating higher levels of specific parenting practices. The subscales of parental support, stimulation, positive discipline, and structure all showed good internal consistencies, with Cronbach's Alphas of (mothers/fathers) .86/.88, .83/.87, .75/.77, and .70/.73, respectively.

Demographic Variables

Both parents reported on their age, nationality, and education level, and mothers reported on their child's age, gender, and nationality, and their own marital status. Mothers also indicated the number of children in the family. Based on the distribution (29.8% of families with one child, 47.4% families with two children, 18.7% families with three children, 3.2% of families with four children, 0.5% families with five children, and 0.5% families with six children (with numbers rounded off)), an ordinal variable representing the number of children in the family with three values (0 = *one child*, 1 = *two children*, 2 = *three children or more*) was computed.

Analytic Plan

Handling of the Missing Data

Missing data on toddlers' and preschoolers' social-emotional difficulties and positive parenting occurred at item level and was highly limited (< 1% missing

across all the values, with no missing pattern observed). Missing data analysis in IBM SPSS version 20, with Little's MCAR test, showed that at item-level data were not missing completely at random, $\chi^2(9187, N = 446) = 9604.64$, $p = .001$. As suggested in the literature (Mazza, Enders, & Ruehlman, 2015), multiple imputation was performed to handle the item-level missing data. To maximize the information used to generate the imputed values, the procedure was done prior to computing the scale scores (Mazza et al., 2015). Specifically, based on the fraction of missing information ($< .10$), 20 imputations were performed (Graham, Olchowski, & Gilreath, 2007). As SPSS indicated raising the number of draws allowed, 500 draws were applied. Finally, we used the Bar Procedure to compress the multiply imputed data-frame results into a single pooled data-frame (Baranzini, 2018) before calculating the scale-level scores.

Data Analyses

Data were analyzed in *Mplus* (version 8.4; Muthén & Muthén, 1998–2017). Due to the non-normality of internalizing behaviors (see Table 1, for skewness and kurtosis), maximum likelihood estimation with robust standard errors (MLR) was used (Muthén & Muthén, 1998–2017). Model fit was based on several goodness-of-fit indices: root mean square error of approximation (RMSEA; value close or below .06 indicates an adequate model fit), comparative fit index (CFI; value close or above .95 indicates an adequate model fit), Tucker-Lewis index (TLI; value close or above .95 indicates an adequate model fit), and standardized root mean square residual (SRMR; value close or below .08 indicates an adequate model fit) (Hu & Bentler, 1999). Chi square test was not used as a model fit indication, as it may not perform adequately given its sensitivity to the sample size (Hu & Bentler, 1998). Additionally, the “define” command in *Mplus* was used to center all continuous independent variables around the grand mean and to create the relevant interaction terms (Muthén & Muthén, 1998–2017).

First, to examine whether positive parenting practices were related to child externalizing and internalizing behaviors and whether those associations were moderated by child age treated as a continuous variable, a multiple-regression analysis with two-way interactions was performed (Stride, Gardner, Catley, & Thomas, 2015). Due to the model's complexity, the model was run for mothers and fathers separately. Child externalizing and internalizing behaviors were simultaneously regressed on centered child age, the four centered parenting practices, and the four interaction terms among centered positive parenting practices and centered child age. Additionally, possible covariates (i.e., child gender, number of children in the family) were considered. In the model all covariances between independent variables were estimated, with the exception of covariances between the parenting practices and the interaction terms. Likewise, the two outcome variables were allowed to covary. Significant interaction effects would be plotted with the loop option within the model

Table 1. Means, standard deviations, skewness, kurtosis, and correlations across study variables.

Child	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	-.00											
2. Gender	-.13**	-.16**										
3. Externalizing behaviors	.06	-.05	.64**									
4. Internalizing behaviors												
Mother												
5. Support	.03	.09	-.20**	-.15**								
6. Stimulation	-.13**	.05	.01	-.01	.39**							
7. Positive discipline	.21**	-.03	.04	.07	.40**	.23**						
8. Structure	-.09*	-.01	-.22**	-.20**	.37**	.24**	.24**					
Father												
9. Support	-.06	.10*	-.11*	-.10*	.30**	.14**	.10*	.14**				
10. Stimulation	-.13**	.01	.01	-.01	.17**	.26**	.13**	.17**	.45**			
11. Positive discipline	.13**	.11*	.06	.08	.19**	.10*	.26**	.13**	.43**	.44**		
12. Structure	-.06	.05	-.03	-.04	.15**	.10*	.13**	.27**	.38**	.21**	.27**	
M	31.64		.43	.15	5.06	4.89	4.87	4.80	4.76	4.43	4.62	4.69
SD	8.87		.29	.14	.44	.50	.68	.43	.53	.63	.73	.49
Skewness	.19		.79	1.91	-.41	-.24	-.58	-.19	-.44	-.34	-.50	-.30
Kurtosis	-1.10		.49	7.09	.66	-.07	.09	-.00	.26	.25	.20	.01

Note: Child gender (0 = boy, 1 = girl). Externalizing and internalizing behaviors range from 0 (not true) to 2 (very true or often true). Positive parenting practices range from 1 (never) to 6 (always). * $p < .05$. ** $p < .01$.

constraint command in *Mplus*, which uses the Johnson-Neyman technique to indicate how the effect of a predictor on an outcome varies across the full range of a moderator (i.e., child age; Lin, 2020).

Second, to examine whether maternal and paternal practices were differentially associated with child social-emotional difficulties, a multiple-regression analysis was performed, with child externalizing and internalizing behaviors regressed on centered mothering and fathering predictors simultaneously. Additionally, possible covariates (i.e., child gender, child age, number of children in the family) were considered. In the model all covariances between independent variables were estimated, with the exception of covariances between mothering and fathering practices depicting different parenting practices. Likewise, the two outcome variables were allowed to covary. To analyze whether parameters of interest are equal between mothers and fathers, models in which those parameters were allowed to differ were compared to models in which unstandardized estimates were constrained to be equal (Muthén & Muthén, 1998–2017). Due to the use of Maximum Likelihood estimation, the model comparison was performed using Satorra-Bentler scaled chi-square difference (TRd) which includes a scaling correction factor (Bryant & Satorra, 2012). After establishing a model with the best model fit, parameters of interest were studied.

RESULTS

Preliminary Analyses

The means, standard deviations, and correlations across study variables are shown in Table 1. In general, both mothers and fathers reported high levels of positive parenting practices. Paired *t*-tests revealed that mothers reported on average higher scores on all positive parenting practices than fathers, $t_{support}(445) = 10.83, p < .001, d = .51$; $t_{stimulation}(445) = 13.93, p < .001, d = .66$; $t_{positive\ discipline}(445) = 6.32, p < .001, d = .30$; $t_{structure}(445) = 4.07, p < .001, d = .19$. Effect sizes were found to be small to moderate. All positive mothering and fathering practices were significantly positively correlated, with low to moderate correlations. Furthermore, child age negatively correlated with maternal and paternal stimulation and maternal structure, and positively with maternal and paternal positive discipline. This finding means that mothers were likely to use less structure and both parents were likely to use less stimulation and more positive discipline for older children. No significant correlations were observed between maternal and paternal support and child age, indicating that the level of parental support was independent of child age.

On average children scored low on both externalizing and internalizing behaviors ($M_{externalizing} = .43, SD = .29$; $M_{internalizing} = .15, SD = .14$), with children showing more externalizing than internalizing problems.

Externalizing and internalizing behaviors were highly, positively correlated. Child age negatively correlated with externalizing behaviors, but not internalizing behaviors.

Finally, ANOVAs were performed to study differences on the outcome variables, based on child gender, the number of children in the family, and parental education. When the assumption of homogeneity of variance was violated, a Welch-ANOVA was employed. Compared to boys, girls showed lower levels of externalizing behaviors ($M_{girls} = .39$, $SD = .25$; $M_{boys} = .48$, $SD = .31$), *Welch's* $F(1, 400.74) = 11.88$, $p = .001$, *est.* $\omega^2 = .02$. No gender difference was observed for child internalizing behaviors ($M_{girls} = .14$, $SD = .14$; $M_{boys} = .16$, $SD = .14$), $F(1, 444) = 1.20$, $p = .27$, $\omega^2 = .00$. Furthermore, significant differences between children from families with different numbers of children were observed for both child externalizing, $F(2, 440) = 4.82$, $p = .009$, $\omega^2 = .02$, and internalizing behaviors, *Welch's* $F(2, 274.82) = 13.11$, $p < .001$, *est.* $\omega^2 = .05$. Specifically, compared to children from families with one or two children, children from families with three or more children showed significantly ($ps < .05$) lower levels of both externalizing ($M_{one\ child} = .45$, $SD = .28$; $M_{two\ children} = .46$, $SD = .29$; $M_{three\ children\ or\ more} = .36$, $SD = .27$) and internalizing ($M_{one\ child} = .16$, $SD = .13$; $M_{two\ children} = .17$, $SD = .15$; $M_{three\ children\ or\ more} = .10$, $SD = .09$) behavior. Additionally, ANOVAs revealed no significant differences in externalizing or internalizing behaviors of children from parents with different education levels ($ps > .05$). Based on these findings, child age and gender and the number of children in the family were considered in all further analyses.

Main Analyses

Moderation Analyses

The models examining whether positive parenting practices are related to child externalizing and internalizing behaviors and whether those associations are moderated by child age, were run separately for mothers and fathers. Both the model including maternal positive parenting, $\chi^2(18, N = 446) = 13.65$, $p = .751$, RMSEA = .00, CFI = 1.00, TLI = 1.00, SRMR = .02, and the model including paternal positive parenting, $\chi^2(18, N = 446) = 29.16$, $p = .047$, RMSEA = .04, CFI = .96, TLI = .95, SRMR = .03, showed adequate fit to the data. The results of both regression models are reported in [Table 2](#).

Being a girl, an older age, and more children in the family were all related to lower levels of externalizing behaviors, but only more children in the family was related to lower levels of internalizing behaviors. Maternal support and structure were negatively associated, and maternal positive discipline was positively associated, with child externalizing and internalizing behaviors. Maternal stimulation was not related to child social-emotional difficulties. Furthermore, paternal support was negatively associated, and paternal positive

Table 2. Results of the mother and the father model for externalizing and internalizing behaviors separately.

	Mother model						Father model					
	Externalizing behaviors			Internalizing behaviors			Externalizing behaviors			Internalizing behaviors		
	B	SE _B	β	B	SE _B	β	B	SE _B	β	B	SE _B	β
Child gender	-.08**	.03	-.15	-.01	.01	-.04	-.10***	.03	-.17	-.02	.01	-.06
Child age	-.01***	.00	-.15	.00	.00	.06	-.00**	.00	-.14	.00	.00	.07
Number of children	-.03	.02	-.08	-.03***	.01	-.16	-.04*	.02	-.11	-.03***	.01	-.16
Support	-.12***	.04	-.19	-.05**	.02	-.15	-.09*	.04	-.17	-.04*	.02	-.15
Stimulation	.04	.03	.07	.01	.01	.04	-.02	.03	-.04	-.01	.01	-.02
Positive discipline	.08***	.02	.18	.03**	.01	.15	.08**	.02	.19	.03**	.01	.16
Structure	-.16***	.03	-.24	-.06***	.02	-.20	-.01	.03	-.02	-.01	.02	-.03
Support x age	-.00	.00	-.02	.00	.00	.00	-.00	.00	-.02	.00	.00	.03
Stimulation x age	.00	.00	.03	.00	.00	.09	.00	.00	.04	.00	.00	.01
Positive discipline x age	.00	.00	.02	.00	.00	.03	.00	.00	.01	.00	.00	.03
Structure x age	-.00	.00	-.04	-.00	.00	-.03	.00	.00	.01	-.00	.00	-.05

Note. Child gender and the number of children (in the family) were added as control variables for externalizing and internalizing behaviors. Child gender (0 = boy, 1 = girl). Number of children (in the family) (0 = one child, 1 = two children, 2 = three children or more), x = interaction between two variables. **p* < .05. ***p* < .01. ****p* < .001.

discipline was positively associated, with child externalizing and internalizing behaviors. Neither paternal stimulation nor paternal structure was associated with child social-emotional difficulties. Additionally, child age did not interact with any maternal or paternal positive parenting practices to predict child social-emotional difficulties. In sum, higher levels of both maternal and paternal support and maternal structure, and lower levels of both maternal and paternal positive discipline, were related to lower levels of child social-emotional difficulties. None of the associations was moderated by child age.

Maternal and Paternal Positive Parenting Practices

The model examining whether positive parenting of mothers and fathers is differentially associated with child social-emotional difficulties, by considering all eight parenting practices (four of mothers and four of fathers) simultaneously, showed a moderate fit to the data, $\chi^2(14, N = 446) = 40.73, p < .001$, RMSEA = .07, CFI = .92, TLI = .86, SRMR = .06. Only TLI did not fully indicate an adequate model fit. Next, in a stepwise manner, unstandardized estimates of similar mothering and fathering practices were constrained to be equal, and the model fit was then compared to that of the model in which these paths were freely estimated. When the constraint did not result in a significantly worse model fit ($\Delta\chi^2$ (TRd): $p > .05$), the adjustment was kept in further model modification (see Table 3 for model comparison).

Model 7, where only pathways from parental structure to externalizing behaviors and from parental structure to internalizing behaviors were allowed to be different for mothers and fathers, yielded the best fit, $\chi^2(20, N = 446) = 42.73, p = .002$, RMSEA = .05, CFI = .93, TLI = .92, SRMR = .06. As all model fit indices indicated an adequate model fit, this model was considered as the final model in our analyses (see Figure 1 for unstandardized and standardized regression coefficients). In this model, being a girl and an older age were both related to lower levels of externalizing behaviors, whereas more children in the family was related to lower levels of internalizing behaviors. Moreover, results showed no significant differences between mothers and fathers in the strength of associations between parental support, stimulation, and positive discipline and child social-emotional difficulties. Specifically, maternal and paternal support were equally strongly associated with lower levels of externalizing and internalizing behaviors. Furthermore, maternal and paternal positive discipline were equally strongly associated with more externalizing and internalizing behaviors. No associations were found for maternal nor paternal stimulation and child social-emotional difficulties. Significant differences between mothers and fathers, however, were found for parental structure. Only maternal structure was associated with lower levels of externalizing and internalizing behaviors, whereas paternal structure was unrelated to these social-emotional difficulties.

Table 3. Stepwise procedure of constraining parameters to equality.

	Fit indices					Model comparison				
	χ^2	df	p	RMSEA	CFI	TLI	SRMR	$\Delta\chi^2$ (TRd)	Δdf	p
Model 1	40.73	14	< .001	.065	.916	.862	.055			
Model 2	40.81	15	< .001	.062	.919	.875	.054	.52	1	> .05
Model 3	40.58	16	< .001	.059	.923	.889	.054	.09	1	> .05
Model 4	41.91	17	< .001	.057	.922	.894	.055	1.36	1	> .05
Model 5	41.93	18	.001	.055	.925	.904	.055	.02	1	> .05
Model 6	42.21	19	.002	.052	.927	.912	.055	.04	1	> .05
Model 7	42.73	20	.002	.050	.928	.918	.055	.05	1	> .05
Model 8	60.74	21	< .001	.065	.875	.863	.057	16.83	1	< .001
Model 9	52.42	21	< .001	.058	.901	.892	.056	8.90	1	< .01

Note. Model 1 = parameters all unconstrained; Model 2 = paths between maternal support and externalizing behaviors and paternal support and externalizing behaviors constrained to equality; Model 3 = Model 2 with an addition of paths between maternal support and internalizing behaviors and paternal support and internalizing behaviors constrained to equality; Model 4 = Model 3 with an addition of paths between maternal stimulation and externalizing behaviors and paternal stimulation and externalizing behaviors constrained to equality; Model 5 = Model 4 with an addition of paths between maternal stimulation and internalizing behaviors and paternal stimulation and internalizing behaviors constrained to equality; Model 6 = Model 5 with an addition of paths between maternal positive discipline and externalizing behaviors and paternal positive discipline and externalizing behaviors constrained to equality; Model 7 = Model 6 with an addition of paths between maternal positive discipline and internalizing behaviors and paternal positive discipline and internalizing behaviors constrained to equality; Model 8 = Model 7 with an addition of paths between maternal structure and externalizing behaviors and paternal structure and externalizing behaviors constrained to equality; Model 9 = Model 7 with an addition of paths between maternal structure and internalizing behaviors and paternal structure and internalizing behaviors constrained to equality; χ^2 = chi square; df = degrees of freedom; TRd = Satorra-Bentler scaled chi-square difference; RMSEA = root mean square error of approximation; CFI = comparative fit index; TLI = Tucker-Lewis index; SRMR = standardized root mean square residual.

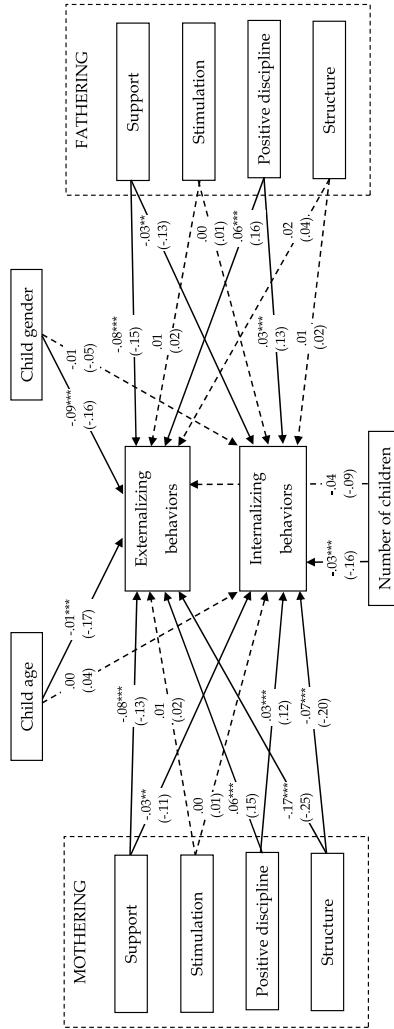


Figure 1. The final model examining mothering and fathering and child adjustment. Note. $\chi^2(20, N = 446) = 42.73, p = .002, RMSEA = .05, CFI = .93, TLI = .92, SRMR = .06$. Child age and gender, and the number of children (in the family) were added as control variables for externalizing and internalizing behaviors. Child gender (0 = boy, 1 = girl). Number of children (in the family) (0 = one child, 1 = two children, 2 = three children or more). Covariances are not depicted for clarity. Unstandardized regression coefficients and standardized regression coefficients are reported outside parentheses and inside parentheses. Dashed lines = non-significant paths. $**p < .01$. $***p < .001$.

DISCUSSION

The relative importance of positive parenting practices for toddlers' and preschoolers' social-emotional adjustment was studied. Specifically, the current study addressed associations between parental support, stimulation, positive discipline, and structure, and child social-emotional difficulties. Additionally, we examined whether the importance of specific positive parenting practices for child social-emotional adjustment depended on child age and parental gender. Parental support, positive discipline, and structure were uniquely related to child externalizing and internalizing behaviors across toddler and preschool ages, whereas parental stimulation was not. Results showed no age-related variations in the associations between positive parenting practices and child social-emotional difficulties. Moreover, for most parenting practices, the associations with child adjustment were similar for mothers and fathers, with exception of structure, where maternal structure was associated with child externalizing and internalizing behaviors, whereas paternal structure was unrelated to child social-emotional difficulties. Taken together, our findings provide support for the parenting specificity principle (see Bornstein, 2015), as some, but not all positive parenting practices were uniquely and specifically related to child social-emotional difficulties, which also was dependent on parental gender.

The Relative Importance of Positive Parenting

By simultaneously examining a range of positive parenting practices, the current study highlights the relative importance and specificity of those positive parenting practices. Regarding parental support, children display fewer social-emotional difficulties when growing up with highly supportive mothers and fathers. This finding is in line with our expectations and prior research showing that socially and emotionally well-adjusted children have parents who are supportive (Barnett et al., 2012; Kerr et al., 2004; Van Aken et al., 2007; Verhoeven et al., 2010a; Xiao et al., 2018). Thus, by being affectionate, sensitive, and responsive to the child's emotions, parents strengthen their child's regulation of emotion and behavior (Eisenberg, Cumberland, & Spinrad, 1998; Jennings et al., 2008; Von Suchodoletz et al., 2011), which may in turn serve as a foundation for child healthy social-emotional adjustment.

Only maternal structure was associated with lower levels of child externalizing and internalizing behaviors; paternal structure was unrelated to child social-emotional difficulties. Our findings on the role of maternal structure are consistent with our expectations and prior research as well (Del Vecchio & O'Leary, 2006; Lipscomb et al., 2011; Van Aken et al., 2007), showing that children are less likely to display social-emotional difficulties when living with mothers who provide an organized environment and external structure for

their children. Hence, with establishment of consistent and persistent rules and by staying in control of their own emotions when interacting with their child, mothers might help children grasp the complexity of situations, minimize fear, promote development of self-regulatory abilities, and model and reinforce appropriate behavior (Del Vecchio & O'Leary, 2006; Grolnick & Farkas, 2002; Thomann & Carter, 2008).

Contrary to our expectations and previous research signifying the benefits of parental positive discipline for child social-emotional adjustment (Choe et al., 2013; Kerr et al., 2004), greater parental use of positive discipline was evident for children in our study who showed more social-emotional difficulties. Considering the cross-sectional nature of our data, a possible explanation for this finding is that children who experience more difficulties in regulating emotions and behaviors elicit more of reminding and reasoning about rules from their parents. Future research should utilize longitudinal designs to examine the direction of effects and clarify previously supported benefits of positive discipline for toddlers' and preschoolers' social-emotional adjustment across time.

Last, in contrast to our expectations, no associations among maternal or paternal stimulation and child social-emotional difficulties were found. A possible reason for a lack of these relations might be the mismatch between the content of the constructs of parental stimulation in the CECPAQ and child social-emotional difficulties. The domain of parental stimulation used in the current study focuses mainly on parental stimulation of child cognitive, motor, and language development, rather than on parental stimulation of child regulation of emotions and behaviors (Verhoeven et al., 2017). Future research could therefore consider using a measure that also focusses on parental stimulation of emotional and behavioral regulation when examining the association between parental stimulation and child social-emotional adjustment.

The Role of Child Age

This study further explored whether the importance of specific positive parenting practices for child social-emotional difficulties depended on child age. Our findings did not support the theorized possibility of age-related variations in associations between positive parenting and child social-emotional difficulties: the relative importance of parental stimulation, positive discipline, and structure did not vary across toddler and preschool ages. This was found for both maternal and paternal positive parenting practices.

Nonetheless, in line with previous studies (e.g., Verhoeven, Junger, Van Aken, Deković, & Van Aken, 2010b), mothers were likely to use less structure and both parents were likely to use less stimulation and more positive discipline with increasingly older children. This finding suggests that in our sample, child age played a role and parents may have adjusted their parenting in accordance with

their child's developmental needs. Although these adjustments might be a reason for not finding sufficient evidence for a moderation effect, in our highly functioning sample a mediation -rather than a moderation - effect is occurring, in which the parents adjust their parenting practices to their child's age. Future research should try to replicate our findings on samples of parents who are at risk for showing dysfunctional parenting practices and examine the possibility of such a mediation model.

Another reason for the lack of a moderating effect of child age may be that chronological age is not necessarily a good index of social-emotional developmental stage of a child. Although social-emotional milestones in early childhood are believed to emerge at relatively specific ages and in the same order, there is also a considerable amount of individual variability (Thomann & Carter, 2008). That is, children of the same age might be at different stages in their development. Future research should conceptualize child development in terms of child biopsychosocial functioning (i.e., developmental age), rather than chronological age, to examine if the developmental stage of a child determines which parenting practices a child needs most.

Maternal and Paternal Parenting Practices

Grounded in the contemporary view on parenting which emphasizes the importance of fathers as well as mothers in child development (Cabrera et al., 2014; Parke & Cookston, 2019), a valuable aspect of the current study was to examine the differential associations of mothering and fathering with child adjustment. Similar to findings from previous studies (e.g., Kerr et al., 2004; Lipscomb et al., 2011), mothers scored on average higher on all positive parenting practices than fathers. Despite these differences in maternal and paternal practices, the associations of mothers' and fathers' support and positive discipline with child externalizing and internalizing behaviors were similar in direction and strength. This result is in line with previous research showing both maternal and paternal support (Verhoeven et al., 2010a) and positive discipline (Kerr et al., 2004) are related to child externalizing behaviors.

Contrary to previous research showing both maternal and paternal structure are related to toddlers' social-emotional adjustment (Lipscomb et al., 2011; Van Aken et al., 2007), only maternal and not paternal structure was associated with child social-emotional adjustment. A possible explanation for this finding is that, for parental structure to have an effect, the amount of time children spend with their parents is likely to be of importance. Children need to spend enough time with their parents to learn that their parents set and follow consistent rules. In the majority of families in our sample, mothers were the primary caregiver, indicating that children spent more time with their mothers and less with fathers. This may be the reason that maternal structure was more important for child social-emotional adjustment than paternal

structure. In future research, time parents spend with their children should be controlled to provide a clearer explanation to these findings.

Limitations and Future Research

Our findings should also be viewed in light of the limitations of the study. First, due to the cross-sectional nature of our data, the interpretations of our results are limited, and the direction of the effects cannot be established. It is unclear whether parenting predicts child social-emotional difficulties or whether changes in the child's level of social-emotional functioning lead to changes in parenting practices. A longitudinal approach, specifically a cross-lagged panel design, is needed to shed light on potentially bi-directional and transactional links between positive mothering and fathering practices and child social-emotional difficulties.

Second, parental self-reports were used to assess parental practices and child social-emotional difficulties. Although parents are in the unique position to report on their own and their child's behavior, these reports may be an indication of parents' perceptions of their own and their child's behavior, rather than an indication of actual behaviors. Moreover, only mothers but not fathers reported on child social-emotional difficulties, which may have caused an overestimation of associations between mothering and child adjustment (i.e., informant bias). Additionally, previous research found slight differences in the associations between maternal and paternal parenting and child adjustment depending on the informant (i.e., mother, father, teacher) used to measure child behavior (i.e., Kerr et al., 2004). Thus, using only one informant per variable, only one type of measurement (i.e., self-reports), and obtaining the information only at one measurement point might have led to common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Future studies are likely to benefit from implementing multi-informant (i.e., mothers, fathers, teachers), multi-method (i.e., self-reports, observational methods), and multi-time-points measurements of parenting and child behavior in their procedures (Bornstein, 2002).

Last, our sample consisted of well-educated, intact families with children with low scores regarding social-emotional difficulties. As the associations might be different in clinical samples or in samples of more demographically diverse, non-intact, non-traditional families, future research is needed to determine the generalizability of our findings. In addition, we had no information on certain parental characteristics, such as the level of depression, mood, and personality. As such parental characteristics affect child social-emotional adjustment, both directly and indirectly through parenting quality (Karazsia & Wildman, 2009; Kiernan & Huerta, 2008; Kuckertz, Mitchell, & Wiggins, 2018; Middleton, Scott, & Renk, 2009; Van Aken et al., 2007), future studies might benefit from taking them into account, when examining relations between parenting and child adjustment. Moreover, we controlled for child gender in

our models, but studying child gender as a moderator was beyond the scope of this study. As previous research has shown associations between parenting and child social-emotional difficulties to differ between boys and girls (Barnett & Scaramella, 2013; Caughy, Peredo, Owen, & Mills, 2016; Kerr et al., 2004), child gender as a determinant of differential associations between mothering and fathering and child adjustment should be considered in the future.

IMPLICATIONS FOR PRACTICE

By studying the relative importance of positive parenting for child social-emotional adjustment during early childhood, this study advances knowledge of effective parenting practices relevant for parenting practice and parenting programs. The continuing importance of a supportive and structured environment for child social-emotional adjustment across toddler and preschool ages and the importance of mothers as well as fathers for child adjustment are evident in our findings. These findings point to the significance of addressing and enhancing parenting quality of both the mother and the father in programs aiming to prevent or reduce toddlers' and preschoolers' social-emotional difficulties. Specifically, clinicians should focus on educating parents about the importance of being affectionate, sensitive, and responsive to their child's needs and demands, while providing an organized environment and external structure, regardless of child age.

ADDRESSES AND AFFILIATIONS

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Each author signed a form for disclosure of potential conflicts of interest. No authors reported any financial or other conflicts of interest in relation to the work described.

Ethical Principles

The authors affirm having followed professional ethical guidelines in preparing this work. These guidelines include obtaining informed consent from human participants, maintaining ethical treatment and respect for the rights of human or animal participants, and ensuring the privacy of participants and their data, such as ensuring that individual participants cannot be identified in reported results or from publicly available original or archival data.

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