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Child and Parent Perceptions of Parental Homework Involvement

Abstract

Helping with homework is one of the most typical ways in which parents become involved in their children's schooling. Previous research has mainly focused on the child's perception of parental homework involvement. The present study examined whether parents and their children perceive parental homework involvement differently. We analysed data from 881 children, their mothers, and their fathers in the German-speaking part of Belgium. We found small to moderate associations ($r = .23$ to $r = .60$) between child and parent perceptions, the highest association being for the quantity of parental involvement. Moreover, both mothers and fathers perceived their own involvement more positively than did their children. Further differences were found concerning the gender of parent and child.

Keywords

parental involvement, homework, children's perception, parents' perception

Elterliche Hausaufgabenhilfe aus Kind- und Elternperspektive

Zusammenfassung

Bei der elterlichen Hausaufgabenhilfe handelt es sich um eine der gängigsten Formen wie sich Eltern an der Schullaufbahn ihres Kindes beteiligen. Die bisherige Forschung hat sich allerdings hauptsächlich auf die Wahrnehmung des Kindes bezüglich der elterlichen Hausaufgabenhilfe fokussiert. In der vorliegenden Studie wurde untersucht, ob Eltern und ihre Kinder die elterliche Hausaufgabenhilfe

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unterschiedlich wahrnehmen. Es wurden Daten von 881 Kindern, ihren Müttern und Vätern im deutschsprachigen Teil Belgiens untersucht. Es wurden geringe bis mittlere Zusammenhänge ($r = .23$ bis $r = .60$) zwischen den Wahrnehmungen von Kindern und Eltern gefunden, wobei sich der höchste Zusammenhang für die Quantität der elterlichen Hausaufgabenhilfe finden ließ. Außerdem nahmen sowohl Mütter als auch Väter ihre eigene Hausaufgabenhilfe positiver wahr als ihre Kinder. Weitere Unterschiede wurden für das Geschlecht der Eltern und des Kindes festgestellt.

Schlagworte

Elterliches Engagement, Hausaufgaben, Wahrnehmung der Kinder, Wahrnehmung der Eltern

1. Introduction

From the moment a child enters school, homework becomes a central component of family life. Homework offers parents an insight into their children's everyday school life and an opportunity to support them in their schoolwork. Not surprisingly, helping with homework is one of the most typical ways in which parents become involved in their children's schooling (Pezdek et al., 2002; Walker et al., 2004; Wingard & Forsberg, 2009).

In the past, many studies have examined the quantity of parental homework involvement, that is how often parents help with homework and how much time they invest when doing so. More recently, researchers have shown that the way in which parents participate in their children's homework varies widely (Wingard & Forsberg, 2009) and that more help is not always beneficial for the child (Moroni et al., 2015; Pomerantz et al., 2007). In fact, studies focusing on the quality of parental homework involvement found negative associations with academic achievement when children perceived their parents' homework involvement to be controlling or intrusive (Cooper et al., 2000; Dumont et al., 2012a; Moroni et al., 2015). Studies only found positive associations with academic achievement when parents' homework involvement was perceived by the child as providing support for autonomy, emotional support, and/or a good structure (Boonk et al., 2018; Cooper et al., 2010; Dumont et al., 2012a; Moroni et al., 2015; Xu et al., 2018).

Previous studies on parental homework involvement have mostly examined the child's perception of parental involvement in the homework process. However, a recent meta-analysis of research on parenting showed that children's perceptions can differ significantly from those of their parents (e.g., Hou et al., 2019). Thus, there is reason to believe that children's perceptions concerning parental homework involvement may also differ substantially from their parents' perceptions. If this were the case, researchers may find different associations between parental homework involvement and student outcomes than previously reported. Moreover, when aim-

ing to improve the quality of parental homework involvement through parental interventions, it is important to understand how parents perceive their involvement in the homework process and whether children's perceptions of the quality of their parents' involvement differ in important ways from those of their parents. Therefore, the main aim of the present study is to examine whether children and parents differ in their perceptions of parental homework involvement. The study additionally investigates whether there are differences between mothers' and fathers' homework involvement and differences between boys and girls.

1.1 Parental Homework Involvement

In a narrow sense, homework includes all "tasks assigned to students by school teachers that are meant to be carried out during non-school hours" (Cooper, 1989, p. 7). In a broader sense, homework also includes tasks that are not explicitly given to students as "homework". These tasks are completed outside the classroom but still have a didactic function relevant to the classroom, such as practicing for an exam (Epstein & Van Voorhis, 2001). Most previous studies are based on a narrower definition of homework. In the present study, we also apply a narrower definition of homework.

In recent years, a consensus has developed in the literature on parental homework involvement that the quantity of parental homework involvement (i.e., its frequency and duration) is less meaningful for children's academic development than the quality of parental homework involvement (Moroni et al., 2015; Pomerantz et al., 2007). Regarding the quality of parental homework involvement, a distinction is usually made between different dimensions. Many previous studies were conducted on the basis of the self-determination theory proposed by Deci and Ryan (1985, 1987, 2002), which postulates three basic human needs: the need for competence, the need for autonomy, and the need for relatedness. These innate needs are facilitated when parental behaviour is characterized by structure, support for autonomy, and interpersonal involvement; they are undermined when parental behaviour is controlling, that is, when it is characterized by pressure, intrusiveness, and dominance (Dumont et al., 2014; Grolnick, 2009; Grolnick et al., 1997).

Many empirical studies have supported these theoretical predictions – they have found positive associations with academic achievement when children perceived their parents' homework involvement as well-structured and supportive of their autonomy and emotional well-being (Boonk et al., 2018; Cooper et al., 2010; Dumont et al., 2012a; Gonida & Cortina, 2014; Moroni et al., 2015; Xu et al., 2018) and negative associations when children reported that their parents were controlling or interfering (Dumont et al., 2012a; Gonida & Cortina, 2014; Karbach et al., 2013; Moroni et al., 2015; Pomerantz et al., 2005; Silinskas & Kikas, 2019b). Furthermore, empirical studies have shown that the quality of parental homework involvement is also associated with students' motivation and engagement with learning (Patall et al., 2008). For example, students' persistence has been shown to be positively as-

sociated with supportive parental homework (e.g., Silinskas & Kikas, 2019a; Viljaranta et al., 2018) and negatively associated with interfering parental homework involvement (e.g., Dumont et al., 2014; Silinskas & Kikas, 2019b). Moreover, Dumont et al. (2012b) found positive associations between parental support and academic self-concept and homework self-efficacy, and negative associations between parental interference and academic self-concept and homework self-efficacy.

It is important to note that these findings are largely based on children's perceptions. However, children's perceptions may be fundamentally different from parents' perceptions.

1.2 Discrepancies Between Children's and Parents' Reports of Parenting

In research on parenting, various studies have focused on discrepancies between parents' and children's perceptions. In the last years, two meta-analyses were published summarizing the empirical evidence. In their meta-analysis of 85 studies, Korelitz and Garber (2016) investigated the degree to which parent-child reports agree or disagree regarding three parenting behaviours: acceptance, psychological control, and behavioural control. They found low to moderate correlations, ranging from $r = .23$ to $r = .29$, depending on the dimensions. With regard to mean-level differences, parents' reports about their parenting behaviours were more favourable than their children's reports. Another meta-analysis of 313 studies by Hou et al. (2019), which focused on adolescents, also found a small to moderate correlation between parent- and adolescent-reported parenting ($r = .28$). Parents perceived their parenting more positively than did children – a difference that was small but statistically significant. Similar findings also exist for parental involvement. Studies have shown that parents perceive themselves to be more involved in their children's academic pursuits than their children do (Marchant et al., 2001) and that parent and child reports showed low correlations (Reynolds, 1992). Initially, these discrepancies were often interpreted as measurement errors (e.g., Jessop, 1981). However, researchers have suggested that such discrepancies may be meaningful, internally consistent, and stable over time (De Los Reyes, 2011; Laird & De Los Reyes, 2013).

Why do parents perceive their relationships with their children and their parental behaviours more positively than the children themselves do? Bengtson and Kuypers (1971) reasoned that these differing perceptions were due to the fact that parents tend to emphasize the positive aspects of the parent-child relationship, while children tend to strive for independence from their parents. This means that children tend to try to distance themselves from their parents' values and therefore tend to devalue the positive aspects of the parent-child relationship. Another possible theoretical explanation for the discrepancies in perceptions of parenting has been offered by De Los Reyes and Ohannessian (2016) in their operations triad model. The model proposes two hypotheses to explain these discrepancies. According to the first hypothesis, because children strive for more autonomy as they grow

older, discrepancies in perceptions of parenting between children and parents may be an indicator of adaptive child development (adaptive hypothesis). However, such discrepancies could also indicate problems in family functioning and/or low relationship quality between children and parents (maladaptive hypothesis). Presumably, children who have a poorer relationship with their parents show less understanding of parental behaviour and rate it less positively.

In summary, the study of perceptual discrepancies between parents and children is thus important to reveal the multiple subjective realities in family relationships (Conway, 2011).

1.3 Parent- Versus Child-perceived Parental Homework Involvement

Previous research on parental homework involvement has mostly focused on children's perceptions (Dumont et al., 2012a; Moroni et al., 2015; Nunez et al., 2017; Silinskas & Kikas, 2019b). Many authors have argued that children's responses or ratings are most appropriate because the child's perception of parenting or parental involvement is most influential for later child outcomes (e.g., Grolnick et al., 1991; Grolnick & Slowiaczek, 1994; Hoover-Dempsey et al., 2005; Keith, 1991). Moreover, previous research has shown that, when compared to external observations, children's reports are more valid and reliable than parents' reports (e.g., Gonzales et al., 1996; Sessa et al., 2001).

Although researchers have had good reasons for focusing on children's perceptions in previous research on parental homework involvement, we should not ignore potential discrepancies between parents' and children's perceptions. It is crucial to know whether and to what extent parents' and children's perceptions differ when designing parent interventions and counselling parents as to their parenting behaviours. However, discrepancies between children's and parents' perceptions of parental homework involvement – the most typical form of parental involvement – have rarely been examined in previous research. The few studies that were conducted found a moderately positive correlation between the parents' and the child's perception at best. For example, Wild and Remy (2002) examined 304 third-graders and their parents. They used the same scales for parents and children as far as possible for the following four dimensions: directive-controlling instruction, autonomy-supporting instruction, emotional support, and structure. Students' and parents' perceptions of autonomy support were not associated with each other, while correlations for the other dimensions ranged from $r = .15$ to $r = .35$. Katz et al. (2011) analysed data for 135 dyads of fourth-grade Jewish-Israeli children and their parents. They found a correlation of $r = .23$ between students' and parents' perceptions of parents' need-supportive behaviour in homework. Tunkkari et al. (2021) examined 847 Finnish adolescents and their mothers ($N = 662$). They found a correlation of $r = .24$ between students' and mothers' perceptions of autonomy support and a

correlation of $r = .44$ between students' and mothers' perceptions of psychological control.

Given these findings, it is likely that children's perceptions differ substantially from those of their parents. Moreover, differences between children's and parents' perceptions may also depend on the gender of the parent and the child. So far, studies have either only considered the mother's perception of her homework involvement, or they have equated the mother's perception with the father's perception. Regarding parenting, previous studies have reported gender differences in parenting style. On average, mothers still spend more time taking care of children than fathers (Cano et al., 2019; Craig, 2006; Jones & Mosher, 2013). For example, Stephens (2009) found that fathers spend less time with their children and engage in more punishment, whereas mothers are more caring, over-protective, and supportive. Furthermore, previous findings have shown that parenting may differ for girls and boys. For example, parents were more authoritarian and controlling with boys and more authoritative with girls (Barnhart et al., 2013; Endendijk et al., 2016). Thus, the question arises of whether there were gender-specific differences between mothers and fathers and between sons and daughters with regard to parental homework involvement. However, to our knowledge, the perceptions of the child, the mother, and the father have not been compared in one single study on parental homework involvement so far.

1.4 The Present Study

Research on parenting has recently revealed meaningful discrepancies between parents' and children's reports (Hou et al., 2019; Korelitz & Garber, 2016) and pointed to gender differences between mothers and fathers, as well as between sons and daughters (Barnhart et al., 2013; Endendijk et al., 2016; Stephens, 2009). There is emerging evidence that discrepancies between parents' and children's reports may also exist for the most common form of parental involvement, parental homework involvement (Katz et al., 2011; Tunkkari et al., 2021; Wild & Remy, 2002).

The aim of the present study is thus to examine differences between parents' and children's perceptions of parental homework involvement – in more depth – taking into account both the quantity and the quality of parental homework involvement. Importantly, we differentiate between mothers' and fathers' homework involvement and consider differences between boys and girls. First, we analyse (1a) how strongly children's and parents' perceptions of the quantity and the quality of parental homework involvement are correlated with each other and (1b) whether there are mean-level differences between children's and parents' reports of the quantity and the quality of parental homework involvement. Based on previous results, we expect a moderately positive correlation between the parents' and the children's perception of parental homework involvement. Moreover, we expect parents to perceive their own involvement more positively than their children do.

As the study differentiates between mothers and fathers, we also examine (2a) how strongly the perceptions of the mother and the father correlate with each other and how strongly the child's perception of the mother and the child's perception of the father correlate with each other. Given that mothers' and fathers' help during the homework process may be quite different, we expect low associations. Furthermore, we analyse (2b) whether there are mean-level differences between the mother's perception of her homework involvement and the father's perception of his homework involvement and whether there are mean-level differences between children's perceptions of mothers' and fathers' homework involvement. We expect mothers to engage in their children's homework more often and in a more supportive way than fathers.

Additionally, we looked at mean-level differences (3a) between boys' and girls' perceptions of their fathers and mothers' homework involvement and (3b) between mothers' and fathers' perceptions of their homework involvement with their daughter or their son. Based on previous findings, we expect both parents to show higher levels of parental homework involvement and more intrusive behaviour with sons than with daughters.

2. Method

2.1 Sample and Procedure

The sample used in the present study came from a longitudinal study on private tuition and homework in the German speaking part of Belgium. This study was conducted by the College of Teacher Education Berne, Switzerland. Data were collected in the first to seventh grade at all ten German-speaking secondary schools. Student questionnaires were administered during regular school hours in intact classrooms. At the first measurement point, two parent questionnaires (one for the mother and one for the father) were sent home with the children. Parents were asked to give their consent for their children's participation. All participating students and parents were informed about their right not to participate and assured that their data would be used anonymously and for scientific purposes only. For the present study, we used data from 881 students (46.8% male), their parents (79.1% mothers and 20.9% fathers) which were collected at the first measurement point. At this time, students were $M = 14.11$ ($SD = 1.73$) years old (24.7% seventh grade secondary school, 24.0% eighth grade, 17.7% ninth grade, 15.7% tenth grade, 10.7% eleventh grade, 6.9% twelfth grade, 0.2% thirteenth grade). 14.3% of the students were from immigrant families (defined as both parents born outside of Belgium), and 9.99% indicated that they did not speak German at home.

2.2 Instruments

The student and parent questionnaires allowed us to measure three dimensions of perceived quality of parental homework involvement, that is, supportive involvement, intrusive involvement, and structure. Responses were given on a 4-point Likert scale, ranging from 1 (completely disagree) to 4 (completely agree). All items on the quality of parental homework involvement were adapted from Wild (1999) and published by Dumont et al. (2014) after empirical confirmation of the factor structure. Table 1 shows all items for the three dimensions of parental homework involvement and the internal consistency of the scales used.

Table 1: Items and internal consistency of the quality of parental homework involvement

	Cronbach's alpha	
	Mother	Father
<i>Supportive involvement</i>		
Children's responses	$\alpha = .72$	$\alpha = .84$
Parents' responses	$\alpha = .55$	$\alpha = .68$
1. My mother/father helps me with homework if I ask her.//I help my child with homework if he or she asks me.		
2. My mother/father always helps me with my homework when I struggle.//I always help my child with her/his homework when she/he struggles.		
3. I can always talk to my mother/father about my homework.//My child can always talk to me about her/his homework.		
4. When it comes to homework, my mother/father doesn't tell me what to do immediately but listens to how I would do my homework.//When it comes to homework, I don't tell my child what to do immediately but I listen to how he/she would do her/his homework.		
<i>Intrusive involvement</i>		
Children's responses	$\alpha = .75$	$\alpha = .75$
Parents' responses	$\alpha = .77$	$\alpha = .74$
1. My mother/father always interferes when I'm doing my homework.//I always interfere when my child is doing his or her homework.		
2. My mother/father sometimes helps me with my homework even when I don't need any help.//I sometimes help my child with her/his homework even when she/he doesn't need any help.		
3. My mother/father sits next to me when I'm doing my homework and immediately corrects me if I do something wrong.//I sit next to my child when she/he's doing her/his homework and I immediately correct her/him if she/he does something wrong.		
4. My mother/father threatens me with punishments (e.g., banning me from watching TV) if I don't try hard enough with my homework.//I threaten my child with punishments (e.g., banning me from watching TV) if she/he doesn't try hard enough with her/his homework.		

	Cronbach's alpha	
	Mother	Father
<i>Structure</i>		
Children's responses	$\alpha = .82$	$\alpha = .88$
Parents' responses	$\alpha = .75$	$\alpha = .81$
1. My mother/father helps me to have all the necessary tools (e.g., ruler, pens, etc.) available when I do my homework.//I help my child to have all the necessary tools (e.g., ruler, pens, etc.) available when he/she does his/her homework.		
2. My mother/my father wants me to do my homework first before I meet up with friends.//I want my child to do her/his homework first before she/he meets up with friends.		
3. It is important to my mother/father that I have enough time to do my homework.//It is important to me that my child has enough time to do her/his homework.		
4. My mother/father ensures that I do my homework in a quiet environment where I am not disturbed by music, TV or phone calls, for example.//I ensure that my child does her/his homework in a quiet environment where she/he is not disturbed by music, TV or phone calls, for example.		
5. My mother/father explained why it is important to do homework at a desk and not in front of the TV, for example.//I explained to my child why it is important to do homework at a desk and not in front of the TV, for example.		
6. My mother/father ensures that I have enough time to do my homework.//I ensure that my child has enough time to do her/his homework.		

The quantity of parental involvement in homework was measured via the question “How often does your mother/father help you with your homework?” (“How often do you help your child with his/her homework?”). Responses were given on a 6-point Likert scale (0 = never, 1 = less than once a week, 2 = about once a week, 3 = about twice, three times a week, 4 = about four, five times a week, 5 = always).

2.3 Statistical Analyses

To address our hypotheses regarding the association between the different perspectives on parental homework involvement (research questions 1a and 2a), we calculated correlations. To address our hypotheses regarding mean-level differences in parental homework involvement between children and parents (research question 1b), mothers and fathers (research question 2b), and boys and girls (research questions 3a and 3b), we tested whether the means of the respective groups differed statistically from one another and calculated effect sizes using Cohen's *d*. All analyses were conducted in Mplus 8 (Muthén & Muthén, 1998–2013), using the full information maximum likelihood estimation (see Enders, 2010). Moreover, we used the analysis option *Type = Complex* implemented in Mplus to account for the multi-level structure of the data.

3. Results

3.1 Differences Between Parent- and Child-perceived Parental Homework Involvement

The associations between parent- and child-perceived parental homework involvement (research question 1a) are shown in Table 2. For both parents, the strongest associations – $r = .60$ for mothers and $r = .56$ for fathers – were found for the quantity of parental homework involvement. The associations between the parent- and child-perceived quality of parental homework involvement were markedly smaller, ranging from $r = .26$ to $r = .36$. The exception was mothers' intrusive involvement, which exhibited a higher association of $r = .51$.

Table 2: Correlations of parent- and child-perceived parental homework involvement

	Quantity of parental homework in- volvement	Supportive involvement	Intrusive involvement	Structure
Mother (Child's response) vs. mother (Mothers' response)	.60***	.26***	.51***	.36***
Father (Child's response) vs. father (Fathers' response)	.56***	.28***	.32***	.30***

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Results for mean-level differences between child and parent reports (research question 1b) are shown in Table 3. Comparing the child's responses with the mother's responses regarding homework involvement, we found that mothers considered themselves as more supportive, more structuring, and less intrusive than did their children. Fathers assessed themselves as more supportive and more structuring than did their children. For both parents, the largest effect sizes were found for perceptual differences regarding the provision of structure during the homework process. No perceptual differences were found for the quantity of parental homework involvement between child and parent reports.

3.2 Differences Between Mothers' and Fathers' Homework Involvement

Regarding our second research question, we first analysed correlations between mothers' and fathers' homework involvement – as perceived by the parents themselves and their children (research question 2a; Table 4). Regardless of whether we looked at the parent or child data, we found moderate to high associations between mothers' and fathers' parental homework involvement perceptions, ranging from $r = .34$ for mothers' and fathers' perceptions of their own supportive involvement to

Table 3: Differences between children and parents' perceptions of parental homework involvement

	Mothers' homework involvement					Fathers' homework involvement								
	Mother		Child		Cohen's <i>d</i>	Father		Child		Cohen's <i>d</i>				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Quantity of involvement	1.74	1.36	1.87	1.71	1.653	.099	.08	1.29	1.16	1.33	1.51	0.573	.567	.03
Supportive involvement	3.53	0.45	3.37	0.63	-5.772	.000	.29	3.36	0.59	3.15	0.85	-5.512	.000	.29
Intrusive involvement	1.42	0.55	1.51	0.64	-2.993	.000	.15	1.38	0.51	1.39	0.59	0.351	.726	.02
Structure	3.30	0.56	3.00	0.72	-9.195	.000	.47	3.11	0.65	2.67	0.88	-10.934	.000	.57

Table 4: Correlations of mothers' and fathers' parental homework involvement

	Quantity of parental homework involvement	Supportive involvement	Intrusive involvement	Structure
Mother (Child's response) vs. father (Child's response)	.62***	.44***	.56***	.68***
Mother (Mothers' response) vs. father (Fathers' response)	.54***	.34***	.51***	.54***

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5: Differences of mothers' and fathers' homework involvement

	Children's responses					Parents' responses								
	Mother		Father		Cohen's <i>d</i>	Mother		Father		Cohen's <i>d</i>				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Quantity of involvement	1.87	1.71	1.33	1.51	6.900	.000	.34	1.74	1.36	1.29	1.16	6.702	.000	.36
Supportive involvement	3.37	0.63	3.15	0.85	6.083	.000	.29	3.53	0.45	3.36	0.59	6.170	.000	.32
Intrusive involvement	1.51	0.64	1.39	0.59	4.027	.000	.20	1.42	0.55	1.38	0.51	1.422	.155	.08
Structure	3.00	0.72	2.67	0.88	11.071	.000	.41	3.30	0.56	3.11	0.65	5.937	.000	.31

$r = .68$ for the structure provided by mothers and fathers as perceived by the child. In each case, we found higher correlations when using the children's responses than when using the parents' responses.

Regarding mean-level differences between mothers' and father's homework involvement (research question 2b; Table 5), both the children and parents themselves reported similar differences. That is, children reported a higher quantity of parental homework involvement, more supportive involvement, and more structure from their mothers compared to their fathers, but they also reported more maternal interference. Regarding the parents' responses, mothers reported a higher quantity of parental homework involvement, more supportive involvement, and more structure than fathers. Interestingly, mothers and fathers themselves did not report different levels of intrusive involvement, but children did perceive their mothers to be more intrusive than their fathers.

3.3 Gender Differences Regarding Parental Homework Involvement

Finally, we investigated whether there were mean-level differences between boys' and girls' perceptions of their fathers' and mothers' homework involvement (research question 3a) and mother's and father's perceptions of their homework involvement with their daughter or son (research question 3b). Overall, we found that children and parents had similar perceptions regarding gender differences (Table 6). That is, boys reported more homework involvement, more intrusive involvement, and more structure on the part of the mother than girls. Moreover, boys assessed their father's homework involvement as less supportive and more intrusive than female students. Regarding the parents' responses, mothers of boys assessed themselves as more involved, as more intrusive, and as more structuring than mothers of girls. Additionally, fathers of boys considered themselves more intrusive and structuring than fathers of girls. The largest effect sizes were found for differences between boys and girls in mothers' intrusive involvement, which was the case for both the child's and the mother's perspective.

Table 6: Differences for male and female students

	Children's responses						Parents' responses								
	Male			Female			Male			Female					
	M	SD		M	SD		M	SD		M	SD				
<i>Mothers' homework involvement</i>															
Quantity of involvement	2.01	1.80	1.73	1.63	1.63	-2.269	.024	.16	1.89	1.43	1.59	1.28	-2.985	.003	.22
Supportive involvement	3.34	0.67	3.39	0.59	1.224	1.224	.221	.08	3.53	0.43	3.52	0.47	0.314	.753	.02
Intrusive involvement	1.66	0.75	1.37	0.49	-6.598	.000	.46	.46	1.56	0.61	1.30	0.45	-6.422	.000	.49
Structure	3.05	0.73	2.95	0.71	-2.125	.034	.14	.14	3.35	0.54	3.25	0.58	-2.398	.017	.18
<i>Fathers' homework involvement</i>															
Quantity of involvement	1.32	1.54	1.33	1.49	0.032	.974	.01	.01	1.31	1.20	1.25	1.11	-0.691	0.49	.05
Supportive involvement	3.08	0.88	3.22	0.83	2.318	.021	.16	.16	3.41	0.57	3.32	0.60	-1.911	.056	.15
Intrusive involvement	1.49	0.66	1.30	0.49	-4.657	.000	.33	.33	1.44	0.54	1.33	0.48	-2.882	.004	.22
Structure	2.70	0.89	2.64	0.88	-0.924	.356	.07	.07	3.18	0.63	3.04	0.67	-2.864	.004	.22

4. Discussion

4.1 Differences in Children's and Parents' Perceptions of Parental Homework Involvement

Previous research on parental homework involvement has mainly focused on children's perceptions of their parents' involvement in the homework process. Even though there are good reasons for doing so – information provided by children is considered a valid source of information for recording parental parenting behaviour (Gonzales et al., 1996; Sessa et al., 2001) and the child's perception of parental involvement may influence later child outcomes (e.g., Grolnick et al., 1991; Grolnick & Slowiaczek, 1994; Keith, 1991) – it is important to note the meaningful differences in children's and parents' perceptions. While there is now quite robust evidence for discrepancies between children's and parents' perceptions of general parenting (Hou et al., 2019; Korelitz & Garber, 2016), very few studies have investigated such differences for parental homework involvement – the most common form of parental involvement.

Therefore, in the present paper, we investigated differences between the perceptions of children and parents regarding the quantity and quality of parental homework involvement, while distinguishing between mothers' and fathers' involvement. At best, we found small to moderate positive associations between perceptions, with larger associations emerging for the quantity of parental homework involvement. These results are consistent with the limited findings to date concerning the associations between the different perceptions of parental homework involvement (Katz et al., 2011; Tunkkari et al., 2021; Wild & Remy, 2002). In line with previous research on parenting (Hou et al., 2019), parents perceived their own homework involvement more positively than children did. Consistent with previous studies on parental homework involvement (Tunkkari et al., 2021), the correlation between children's and parents' perception for intrusive involvement was stronger than for supportive involvement. This may be due to the fact that, as children strive for more autonomy as they grow older, they perceive their parents as less autonomy supportive. Finding the largest correlations regarding the quantity of parental homework involvement is probably related to the fact that it is easier for both children and parents to assess the quantity rather than the quality of parental homework help.

Moreover, our analyses showed that mothers assessed their own involvement in the homework process more positively than fathers did. These differences were also reported by children. However, children also reported that mothers were more intrusive than fathers during homework. One possible reason for this finding may be that mothers are more likely than fathers to take on cognitive demands in everyday family life (e.g., Harrington & Reese-Melancon, 2022), such as reminding children about their homework. This may lead children to perceive their mothers as more intrusive.

Finally, we found gender-specific differences in the perception of parental homework involvement: Mothers of boys helped more often with homework than moth-

ers of girls – a finding which was consistent across the mothers’ and the children’s perspective. Moreover, boys assessing their mothers reported more supportive involvement and more structure, but also more interference, than female students did, whereas female students experienced their fathers as less interfering and more supportive than boys. We found almost the same gender differences in parents’ responses. Bhanot and Jovanovic (2005) found similar gender-specific differences regarding intrusive involvement: In a study with 38 fifth- to eighth-grade students and their parents, boys reported more interfering homework involvement than girls. Given that intrusive involvement has been shown to lead to lower achievement (Dumont et al., 2014), the observed differences in the quality of parental homework involvement between boys and girls are alarming, as they may eventually contribute to gender-related educational inequalities.

4.2 Limitations and Implications for Future Research

Even though our study had several strengths – most notably, it simultaneously assessed responses from children, mothers, and fathers concerning parental homework involvement – several limitations need to be noted. First, due to the voluntary nature of participation, the results of the present study should be replicated with larger representative samples. Second, the present data do not allow us to draw any conclusions about the relative importance of child vs. parent perceptions for children’s learning and their achievement development. Third, while it would have been interesting to systematically investigate moderator variables of the observed differences between children and parents other than gender (e.g., age of the child, family structure), we were unable to do so due to the lack of data in this regard. For example, future studies could investigate whether parents and children tend to converge in their perceptions as children age or whether they differ more and more from each other. For example, it may be that adolescents, who increasingly strive for more autonomy, perceive parental homework involvement as interfering much more quickly than younger children.

Fourth, we measured the quality of parental homework involvement via the three dimensions *supportive involvement*, *intrusive involvement*, and *structure*. Future research should investigate whether parental homework involvement can be supplemented by other dimensions, such as autonomy-supportive structure (see Dettmers et al., 2020). Finally, it should be noted that the present study was conducted before the Covid-19 pandemic. The pandemic has led to changes in home-based parental involvement, for example, an increase of parental involvement during the school closures (e.g., O’Connor et al., 2021; Ribeiro et al., 2021). Parents’ approaches to guiding their children’s learning at home appear to have changed as well. For example, Suárez et al. (2022) found that parents increased their emotional and motivational support for their children compared to normal circumstances, but also higher levels of conflict and stress within the family.

Despite these limitations, we believe that our study has the potential to advance future research on parental homework involvement because it demonstrates that children's and parents' perceptions differ in meaningful ways. Thus, our findings suggest that in future research on parental homework involvement, it may be useful to include both child and parent perceptions when investigating the consequences of parental homework involvement for student outcomes. Another interesting and important avenue for future research would be to directly investigate why parents and children tend to disagree with each other. Finally, more studies should examine parental homework involvement through observations rather than questionnaire surveys (for a good example, see e.g., Hyde et al., 2006), in order to gain a more objective view on how parents become involved in the homework process.

4.3 Implications for Practice

The results of our study are also important for improving the quality of parental homework involvement through interventions that advise parents on how to help their children with homework – in particular since homework involvement is often a highly stressful, emotionally charged, and conflict-provoking situation in families (Wingard & Forsberg, 2009). Given that parents' perceptions can differ fundamentally from those of their children, teachers and counsellors who aim to improve the homework situation in families should not rely on one source of information alone but should always take both children's and parents' perceptions into account and address potential discrepancies. Parents need to be made aware that their children may perceive their involvement very differently from how they do. Thus, parents are well advised to directly ask their children how they perceive their homework involvement.

References

- Barnhart, C.M., Raval, V.V., Ashwin, J., & Raval, P.H. (2013). Perceptions of parenting style among college students in India and the United States. *Journal of Child and Family Studies*, 22, 684–693. <https://doi.org/10.1007/s10826-012-9621-1>
- Bengtson, V.L., & Kuypers, J.A. (1971). Generational difference and the developmental stake. *Ageing and Human Development*, 2, 249–260.
- Bhanot, R., & Jovanovic, J. (2005). Do parents' academic gender stereotypes influence whether they intrude on their children's homework? *Sex Roles*, 52(9/10), 597–607. <https://doi.org/10.1007/s11199-005-3728-4>
- Boonk, L., Gijsselaers, H.J.M., Ritzen, H., & Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement. *Educational Research Review*, 24, 10–30. <https://doi.org/10.1016/j.edurev.2018.02.001>
- Cano, T., Perales, F., & Baxter, J. (2019). A matter of time: Father involvement and child cognitive outcomes. *Journal of Marriage and Family*, 81(1), 164–184. <https://doi.org/10.1111/jomf.12532>
- Conway, K.E. (2011). *Perceptions of parenting: A comparison of parents' and children's perceptions of the importance of parenting characteristics*. Pace University.

- Cooper, H. (1989). *Homework*. Longman. <https://doi.org/10.1037/11578-000>
- Cooper, C.E., Crosnoe, R., Suizzo, M., & Pituch, K.A. (2010). Poverty, race, and parental involvement during the transition to elementary school. *Journal of Family Issues*, 31(7), 859–883. <https://doi.org/10.1177/0192513X09351515>
- Cooper, H., Lindsay, J.J., & Nye, B. (2000). Homework in the home: How student, family, and parenting-style differences relate to the homework process. *Contemporary Educational Psychology*, 25, 464–487. <https://doi.org/10.1006/ceps.1999.1036>
- Craig, L. (2006). Does father care mean fathers share? A comparison of how mothers and fathers in intact families spend time with children. *Gender and Society*, 20(2), 259–281. <https://doi.org/10.1177/0891243205285212>
- De Los Reyes, A. (2011). Introduction to the special section. More than measurement error: Discovering meaning behind informant discrepancies in clinical assessments of children and adolescents. *Journal of Clinical Child and Adolescent Psychology*, 40(1), 1–9. <https://doi.org/10.1080/15374416.2011.533405>
- De Los Reyes, A., & Ohannessian, C.M. (2016). Introduction to the special issue: Discrepancies in adolescent-parent perceptions of the family and adolescent adjustment. *Journal of Youth and Adolescence*, 45, 1957–1972. <https://doi.org/10.1007/s10964-016-0533-z>
- Deci, E.L., & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press. <https://doi.org/10.1007/978-1-4899-2271-7>
- Deci, E.L., & Ryan, R.M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology*, 53(6), 1024–1037. <https://doi.org/10.1037//0022-3514.53.6.1024>
- Deci, E.L., & Ryan, R.M. (2002). *Handbook of self-determination research*. University of Rochester Press.
- Dettmers, S., Yotyodying, S., & Jonkmann, K. (2020). Elterliche schulbezogene Erziehung in der Retrospektive: Zusammenhänge zwischen autonomieunterstützender Struktur bei der Hausaufgabenerledigung und Interesse, Persistenz und Wohlbefinden im Studium. *Psychologie in Erziehung und Unterricht*, 67(4), 279–293. <https://doi.org/10.2378/peu2020.art21d>
- Dumont, H., Trautwein, U., & Lüdtke, O. (2012a). Familiärer Hintergrund und die Qualität elterlicher Hausaufgabenhilfe. *Psychologie in Erziehung und Unterricht*, 59, 109–121. <https://doi.org/10.2378/peu2012.art08d>
- Dumont, H., Trautwein, U., Lüdtke, O., Neumann, M., Niggli, A., & Schnyder, I. (2012b). Does parental homework involvement mediate the relationship between family background and educational outcomes? *Contemporary Educational Psychology*, 37, 55–69. <https://doi.org/10.1016/j.cedpsych.2011.09.004>
- Dumont, H., Trautwein, U., Nagy, G., & Nagengast, B. (2014). Quality of parental homework involvement: Predictors and reciprocal relations with academic functioning in the reading domain. *Journal of Educational Psychology*, 106(1), 144–161. <https://doi.org/10.1037/a0034100>
- Endendijk, J.J., Groeneveld, M.G., Bakermans-Kranenburg, M.J., & Mesman, J. (2016). Gender-differentiated parenting revisited: Meta-analysis reveals very few differences in parental control of boys and girls. *PLOS ONE*(11), 1–33. <https://doi.org/doi.org/10.1371/journal.pone.0159193>
- Enders, C.K. (2010). *Applied missing data analysis*. Guildford.
- Epstein, J.L., & Van Voorhis, F.L. (2001). More than minutes: Teachers' roles in designing homework. *Educational Psychologist*, 36(3), 181–193. https://doi.org/10.1207/S15326985EP3603_4
- Gonida, E.N., & Cortina, K.S. (2014). Parental involvement in homework: Relations with parent and student achievement-related motivational beliefs and achievement. *British Journal of Educational Psychology*, 84, 376–396. <https://doi.org/10.1111/bjep.12039>

- Gonzales, N. A., Cauce, A. M., & Mason, C. A. (1996). Interobserver agreement in the assessment of parental behavior and parent-adolescent conflict: African American mothers, daughters, and independent observers. *Child Development, 67*(4), 1483–1498. <https://doi.org/10.2307/1131713>
- Grolnick, W. S. (2009). The role of parents in facilitating autonomous self-regulation for education. *Theory and Research in Education, 7*(2), 164–173. <https://doi.org/10.1177/1477878509104321>
- Grolnick, W. S., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting an childrens' internalization of values* (pp. 135–161). Wiley.
- Grolnick, W. S., Ryan, R. M., & Deci, E. L. (1991). Inner resources for school achievement: Motivational mediators of children's perceptions of their parents. *Journal of Educational Psychology, 83*, 508–517. <https://doi.org/10.1037//0022-0663.83.4.508>
- Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: a multidimensional conceptualization and motivational model. *Child Development, 65*(1), 237–252. <https://doi.org/10.1111/j.1467-8624.1994.tb00747.x>
- Harrington, E. E., & Reese-Melancon, C. (2022). Who is responsible for remembering? Everyday prospective memory demands in parenthood. *Sex Roles, 86*, 189–207. <https://doi.org/10.1007/s11199-021-01264-z>
- Hoover-Dempsey, K. V., Walker, J. M. T., & Sandler, H. M. (2005). Parents' motivations for involvement in their children's education. In E. N. Patrikakou, R. P. Weissberg, S. Redding, & H. J. Walberg (Eds.), *School-Family partnerships for children's success* (pp. 40–56). Teachers College Press.
- Hou, Y., Benner, A. D., Kim, S. Y., Chen, S., Spitz, S., Shi, Y., & Beretvas, T. (2019). Discordance in parents' and adolescents' reports of parenting: A meta-analysis and qualitative review. American Psychologist. Advance online publication. *The American Psychologist, 75*, 329–348. <https://doi.org/dx.doi.org/10.1037/amp000463>
- Hyde, J. S., Else-Quest, N. M., Alibali, M. W., Knuth, E., & Romberg, T. (2006). Mathematics in the home: Homework practices and mother-child interactions doing mathematics. *Journal of Mathematical Behavior, 25*(2), 136–152. <https://doi.org/10.1016/j.jmathb.2006.02.003>
- Jessop, D. J. (1981). Family relationships as viewed by parents and adolescents : A specification. *Journal of Marriage and Family, 43*(1), 95–107.
- Jones, J., & Mosher, W. D. (2013). *Fathers' involvement with their children: United States, 2006–2010 (National Health Statistics Reports, No. 71)*. National Center for Health Statistics.
- Karbach, J., Gottschling, J., Spengler, M., Hegewald, K., & Spinath, F. M. (2013). Parental involvement and general cognitive ability as predictors of domain-specific academic achievement in early adolescence. *Learning and Instruction, 23*, 43–51. <https://doi.org/10.1016/j.learninstruc.2012.09.004>
- Katz, I., Kaplan, A., & Buzukashvily, T. (2011). The role of parents' motivation in students' autonomous motivation for doing homework. *Learning and Individual Differences, 21*(4), 376–386. <https://doi.org/10.1016/j.lindif.2011.04.001>
- Keith, T. Z. (1991). Parent involvement and achievement in high school. *Advances in Reading and Language Research, 5*, 125–141.
- Korelitz, K. E., & Garber, J. (2016). Congruence of parents' and children's perceptions of parenting: A meta-analysis. *Journal of Youth and Adolescence, 45*(10), 1973–1995. <https://doi.org/10.1007/s10964-016-0524-0>
- Laird, R. D., & De Los Reyes, A. (2013). Testing informant discrepancies as predictors of early adolescent psychopathology: Why difference scores cannot tell you what you want to know and how polynomial regression may. *Journal of Abnormal Child Psychology in the Schools, 41*(1), 1–14. <https://doi.org/10.1007/s10802-012-9659-y>

- Marchant, G. J., Paulson, S. E., & Rothlisberg, B. A. (2001). Relations of middle school students' perceptions of family and school contexts with academic achievement. *Psychology in the Schools, 38*(6), 505–519. <https://doi.org/10.1002/pits.1039>
- Moroni, S., Dumont, H., Trautwein, U., Niggli, A., & Baeriswyl, F. (2015). The need to distinguish between quantity and quality in parental involvement research. *The Journal of Educational Research, 108*(5), 417–431. <https://doi.org/10.1080/00220671.2014.901283>
- Muthén, B. O., & Muthén, L. K. (1998–2013). *Mplus user's guide*. Author.
- Nunez, J. C., Epstein, J. L., Suarez, N., Rosario, P., Vallejo, G., & Valle, A. (2017). How do student prior achievement and homework behaviors relate to perceived parental involvement in homework? *Frontiers in Psychology, 8*, 1–13. <https://doi.org/10.3389/fpsyg.2017.01217>
- O'Connor, U., Bates, J., Finlay, J., & Campbell, A. (2021). Parental involvement during COVID-19: Experiences from the special school. *European Journal of Special Needs Education, 37*(6), 936–949. <https://doi.org/10.1080/08856257.2021.1967297>
- Patall, E. A., Cooper, H., & Robinson, J. C. (2008). Parent involvement in homework: A research synthesis. *Review of educational research, 78*(4), 1039–1101. <https://doi.org/10.3102/0034654308325185>
- Pezdek, K., Berry, T., & Renno, P. A. (2002). Children's mathematics achievement: The role of parents' perceptions and their involvement in homework. *Journal of Educational Psychology, 94*(4), 771–777. <https://doi.org/10.1037/0022-0663.94.4.771>
- Pomerantz, E. M., Moorman, E. A., & Litwack, S. D. (2007). The how, whom and why of parents' involvement in children's academic lives: More is not always better. *Review of educational research, 77*(3), 373–410. <https://doi.org/10.3102/003465430305567>
- Pomerantz, E. M., Wang, Q., & Ng, F. F.-Y. (2005). Mothers' affect in the homework context: The importance of staying positive. *Developmental Psychology, 41*(2), 414–427. <https://doi.org/10.1037/0012-1649.41.2.414>
- Reynolds, A. J. (1992). Comparing measures of parental involvement and their effects on academic achievement. *Early Childhood Research Quarterly, 7*(3), 441–462. [https://doi.org/10.1016/0885-2006\(92\)90031-S](https://doi.org/10.1016/0885-2006(92)90031-S)
- Ribeiro, L. M., Cunha, R. S., Silva, M. C. A. e., Carvalho, M., & Vital, M. L. (2021). Parental involvement during pandemic times: Challenges and opportunities. *Education Sciences, 11*(6), 302. <https://doi.org/10.3390/educsci11060302>
- Sessa, F. M., Avenevoli, S., Steinberg, L., & Morris, A. S. (2001). Correspondence among informants on parenting: preschool children, mothers, and observers. *Journal of Family Psychology, 15*(1), 53–68. <https://doi.org/10.1037/0893-3200.15.1.53>
- Silinskas, G., & Kikas, E. (2019a). Math homework: Parental help and children's academic outcomes. *Contemporary Educational Psychology, 59*, 1–13. <https://doi.org/10.1016/j.cedpsych.2019.101784>
- Silinskas, G., & Kikas, E. (2019b). Parental involvement in math homework: Links to children's performance and motivation. *Scandinavian Journal of Educational Research, 63*(1), 17–37. <https://doi.org/10.1080/00313831.2017.1324901>
- Stephens, M. A. (2009). *Gender differences in parenting styles and effects on the parent-child relationship*. Unpublished Thesis of University Honors Program.
- Suárez, N., Fernández, E., Regueiro, B., Rosário, P., Xu, J., & Núñez, J. C. (2022). Parental involvement in homework during COVID-19 confinement. *Psicothema, 34*(3), 421–428. <https://doi.org/10.7334/psicothema2021.532>
- Tunkkari, M., Aunola, K., Hirvonen, R., Silinskas, G., & Kiuru, N. (2021). The quality of maternal homework involvement: The role of adolescent and maternal factors. *Merrill-Palmer Quarterly, 67*(1), 94–122. <https://doi.org/10.13110/merrpalm-quar1982.67.1.0094>
- Viljaranta, J., Silinskas, G., Lerkkanen, M. K., Hirvonen, R., Pakarinen, E., Poikkeus, A. M., & Nurmi, J. E. (2018). Maternal homework assistance and children's task-

- persistent behavior in elementary school. *Learning and Instruction*, 56, 54–63. <https://doi.org/10.1016/j.learninstruc.2018.04.005>
- Walker, J.M.T., Hoover-Dempsey, K.V., Whetsel, D., & Green, C.L. (2004). *Parental involvement in homework: A review of current research and its implication for teachers, after school program staff, and parent leaders*. Harvard Family Research Project.
- Wild, E. (1999). *Elterliche Erziehung und schulische Lernmotivation* University of Mannheim]. Mannheim, Germany.
- Wild, E., & Remy, K. (2002). Affektive und motivationale Folgen der Lernhilfen und lernbezogenen Einstellungen von Eltern. *Unterrichtswissenschaft*, 30(1), 27–51.
- Wingard, L., & Forsberg, L. (2009). Parent involvement in children's homework in American and Swedisch dual-earner families. *Journal of Pragmatics*, 41(8), 1576–1595. <https://doi.org/10.1016/j.pragma.2007.09.010>
- Xu, J., Du, J., Wu, S., Ripple, H., & Cosgriff, A. (2018). Reciprocal effects among parental homework support, effort, and achievement? An empirical investigation. *Frontiers in Psychology*, 9, 2334. <https://doi.org/10.3389/fpsyg.2018.02334>