Investigation of Parents' Views about Middle School Math Homework*

Research Article

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ABSTRACT

Homework is seen as a natural bridge that enables parents to be involved in the learning process of their child. In recent years, studies on homework have emphasized the adoption of a field-specific approach and mathematics homework has come to the fore. In this context, the purpose of this study is to investigate parents' views about middle school math homework and extend prior research. This is a case study. The research sample includes the parents of 174 students attending three middle schools located in a district of a province in the Eastern Anatolian Region of Turkey. In the study, a survey composed of three open-ended questions was used as data collection tool. Qualitative data were subjected to content analysis. Three main themes were determined at the end of the analysis of parental views: Effect of math homework on math achievement, follow-up of math homework by teachers, and parents' helping with math homework. Almost all parents opined that math homework promotes students' math achievement and math homework should be followed up by teachers. But, the analysis of parental views about helping with math homework yielded both positive and negative views. With regard to research findings, suggestions were offered for future studies by emphasizing the necessity for creates a math homework policy.

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Keywords:

Mathematic education, homework, parental involvement, middle school

Introduction

Homework is a task a teacher gives to students for them to complete in the out-of-school process and is seen as an important instructional tool (Cooper, 2001; Cooper, Steenbergen-Hu, and Dent, 2012; Fernández-Alonso, Suárez-Álvarez, and Muñiz, 2015). It is emphasized by researchers that well-designed homework with specific features (e.g., quantity, frequency, goal) increases students' academic achievement (Fernández-Alonso

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et al., 2015; Iflazoğlu and Hong, 2012; Özcan and Erkin, 2015; Rosário et al., 2015a). Cooper (2001) states that homework serves to provide parent-student and parent-school communication besides its instructional goals.

As homework has an effect on both parents and their children, it is pedagogically and socio-culturally important. In addition, homework is a natural channel that enables parents to get involved in learning (Moroni, Dumont, Trautwein, Niggli, and Baeriswyl, 2015; Williams and Williams, 2019). Parental involvement is “the parents’ or caregivers’ investment in the education of their children” (LaRocque, Kleiman, and Darling, 2011). Some studies note that parental involvement in children’s academic life is through homework (Cunha, Xu, Rosario, and Núñez, 2018b; Jay, Rose, and Simmons, 2018; Pomerantz, Moorman, and Litwack, 2007; Silinskas and Kikas, 2019). Therefore, homework is seen as an important strategy to improve academic achievement by many parents, educators, media, and policy makers (Patall, Cooper and Robinson, 2008).

Some researchers have focused on types of parental involvement rather than making a specific definition of it. For example, Epstein (1987) mentions two types of parental involvement: home-based strategies and school-based strategies. Recently, parental homework involvement has appealed to researchers much who wish to reveal better the effect of home-based parental involvement on student learning and achievement (Boonk, Gijssels, Ritzen, and Brand-Gruwel, 2018; Feng, Xie, Gong, Gao, and Cao, 2019; Gonida and Cortina, 2014; Moroni et al., 2015; Patall et al., 2008, Xu, Fan, Du and He, 2017b; Xu, Du, Wu, Ripple, and Cosgriff, 2018). This is not surprising given that homework is the most widespread school activity that requires teacher’s, student’s, and parents’ involvement (Cooper, Robinson, and Patall, 2006; Rosário et al., 2015a).

Parental Homework Involvement

Parental homework involvement is a multi-dimensional structure. Most of the research on parental homework involvement is based on self-determination theory (Ryan and Deci, 2000). According to this theory, there are two different types of parental involvement: parental control and parental support (Dumont, Trautwein, Nagy, and Nagengast, 2014; Núñez et al., 2015b, 2017; Pomerantz et al., 2007; Silinskas and Kikas, 2019).

Parental control can be defined as the pressure and control exerted on students for completing the given task (e.g., checking whether the student has completed the given homework or not, becoming involved in the homework without the student asking for help). Some studies determined that parental homework control perceived by students negatively affects academic achievement (Boonk et al., 2018; Dumont et al., 2014; Fernandez-Alonso et al., 2015; Moroni et al., 2015; Núñez et al., 2015b; Silinskas, Kiuru, Aunola, Lerkkanen, and Nurmi, 2015; Silinskas and Kikas, 2019; Xu et al., 2018). Also, it was found that parental control reduces the student’s sense of autonomy, sense of competence, and effort to tackle difficulties in learning situations (Fernández-Alonso et al., 2015; Pomerantz et al., 2007).

Parental support, on the other hand, can be defined as “the value of parental assistance” determined by children (e.g., sensitivity to the support needed by children when doing homework, helping problem-solving when requested by the student, not getting involved in the homework without the child asking for help, but helping when he needs help...) (Dumont et al., 2014; Núñez et al., 2015a; 2017; Pomerantz et al., 2007; Silinskas ve Kikas, 2019). It was found that perceived parental homework support has a positive effect on student achievement and is positively associated with academic achievement (Moroni et al., 2015; Núñez et al., 2015a; Silinskas et al., 2015).

According to researchers, there are two different types of parental support: content support and autonomy support (Moroni et al., 2015; Xu et al., 2017b). Parents’ content support involves parents’ helping the child about the relevant subject when doing his homework and explaining the conceptual knowledge to the child when he fails to understand (Xu et al., 2017a). The autonomy support provided by the parent to the

child is the family's respect for the choices of the child (Moroni et al., 2015). It was determined that content support has positive effects on students' completing their homework, and autonomy support is positively associated with math achievement and effort (Boonk et al., 2018; Feng et al., 2019; Gonida and Cortina, 2014; Martinez, 2011; Moroni et al., 2015; Xu et al., 2017b, 2018). It can be said that there are a lot of studies showing that different types of parental involvement have different effects on children's educational outcomes (Boonk et al., 2018; Feng et al., 2019; Gonida and Cortina, 2014; Jay et al., 2018; Patall et al., 2008; Pomerantz et al., 2007; Williams and Williams, 2019; Xu et al., 2017b; 2018).

The Present Study

Parental homework involvement may differ depending on the subject of the homework (Xu et al., 2018). Students' bad academic performance is one of the reasons for parental homework involvement (Silinskas and Kikas, 2019). In this respect, this study focused on the math class. This is because mathematical literacy was determined as the weighted area in PISA 2012 study. According to PISA 2012 reports, Turkey's average success is below the OECD average (OECD, 2014). One of the reasons for focusing on the math class is that it is one of the subjects on which most homework is given (Xu et al., 2017a). Furthermore, doing math homework is considered challenging by both students and parents. (Silinskas and Kikas, 2019; Xu et al., 2017b).

Despite the importance of math homework, not adequate number of studies have been conducted on math homework in Turkey. Among the accessed studies, only Özcan and Göğebakan-Yıldız (2017) examined parental involvement within the context of the math class. They aimed to determine parents' beliefs and roles in their children's math homework processes. However, they collected parents' views through a survey form composed of close-ended questions. Hence, there is a need for research that makes an in-depth analysis of parents' views about math homework. Besides, it can be said that the number of studies dealing with math homework is quite limited (e.g., Arıkan, 2017; Güven and Akçay, 2019; Özcan and Erkin, 2015). Exploring parents' views about the homework given in the math class may help better design of math homework and contribute to teaching practices.

Some other studies report that teachers' and parents' support to students' homework decreases from elementary school to middle school (Katz, Kaplan, and Gueta, 2010; Patall et al., 2008).. Accordingly, the present study is significant because it shows middle school students' parents' views about math homework in terms of teacher follow-up and feedback and parental support. We consider that the findings of this study will help teachers structure homework follow-up and feedback processes.

This study collected parents' views considering that parents got involved in their children's education through homework (Cunha et al., 2018b; Pomerantz et al., 2007; Wilder, 2014). Parents' views are expected to be guiding in the process of designing preventive educational interventions. For these reasons, we chose parents of middle school children as the source of information for the current research.

Patall et al. (2008) reported that the effect of form of parental homework involvement on student outcomes varies depending on subject content. Therefore, studies on homework conducted in recent years highlight the importance of focusing on a specific subject area (Cunha et al., 2018a, 2018b; Rosário et al., 2019; Xu et al., 2017b). However, most of the studies carried out in Turkey have analyzed parents' views about homework without focusing on a specific subject (e.g., Coşkun-Keskin and Özer, 2016; Duru and Çöğmen, 2017; Turan-Özpolat, Karakoç and Kara, 2017; Yar-Yıldırım, 2018). The findings of the present study, on the other hand, are expected to show, in detail, parents' views about math homework.

Previous studies determined that parents help their children with their different domain homework (Coşkun-Keskin and Özer, 2016; Özcan and Göğebakan-Yıldız, 2017; Turan-Özpolat et al., 2017; Yar-Yıldırım, 2018), but are not sure whether they provide accurate support, or remain incapable of helping (Coşkun-Keskin

and Özer, 2016; Özcan and Göğebakan-Yıldız, 2017) We think that the present study will fill in the gap in the literature by showing the conflicts in results about parental math homework involvement in detail.

Based on the above-mentioned reasons, the purpose of this study is to investigate parents' views about middle school math homework and extend prior research. To this end, the study seeks to answer the following questions:

1. What are parents' views about the effect of middle school math homework on students' math achievement?
2. What are parents' views about teachers' middle school math homework follow-up practices?
3. What are parents' views about their behaviors of helping with middle school math homework?

Method

Research Design

In this study, case study, one of the qualitative research approaches, was used. Case study is a research method that involves the empirical examination of a current phenomenon in a real-life context (Merriam, 2018, p. 40). The case in the case study; is an individual, group, organization, situation, or anything of interest (Robson, 2017, p. 159). The parents, who constitute the sample of this study and whose children were studying at middle school level, were considered as the unit of analysis. In addition, parents' opinions about middle school level math homework constituted the analyzed situation.

Population and Sample

The research population consists of the parents of students attending middle schools located in a district of a province in the Eastern Anatolian Region of Turkey. The research sample includes the parents of 174 students attending three middle schools located in the said district.

The sample was determined through two-stage cluster sampling, which is a stratified sampling method. In two-stage cluster sampling, the first stage involves random selection of a sample of strata. The second stage involves forming a random sample out of the units in the strata chosen in the first stage (Christensen, Johnson, and Turner, 2011). In the present study, in the first stage of two-stage cluster sampling, the names of the schools located in the district determined. Three different service areas in the district were determined as strata, and one school was randomly chosen from each service area.

In the second stage of two-stage cluster sampling, a purposeful sample was formed out of the parents of the schools chosen in the first stage. Criterion sampling, one of the purposeful sampling methods, was used while determining the parent sample. Criterion sampling is situations that provide certain criteria beforehand and guiding criteria should be used (Merriam, 2018, p. 81; Patton, 1990). It is a criterion for parents to be in the classes of teachers who teach math homework at least once a week. Therefore, the math teachers were contacted in the process of determining the parents to be included in the research sample. The parents were chosen from the classes of teachers giving math homework at least once a week. In this regard, 210 parents made up the research sample, with 70 parents hosen from each school. However, since 174 parents (82.86%) of the sample returned the delivered surveys, the research sample consists of 174 people. In qualitative research, the number of samples depends on the questions asked, the data, the analysis and the problem situation of the study (Merriam, 2018, p. 79). For this reason, the sample size was determined by taking into account studies that previously examined parents' views on mathematics homework (e.g., Jay et al., 2018; Knapp, Landers, Liang, and Jefferson, 2017). Table 1 shows the demographic characteristics of the parents participating in the study.

Table 1. The Demographic Characteristics of the Parents

		f	%
Gender	Male	75	43.10
	Female	99	56.90
Education level	Illiterate	14	8.05
	Primary school	75	43.10
	Secondary school	22	12.64
	High school	30	17.24
	Bachelor's degree	27	15.52
	Graduate	5	2.88
	Undetermined	1	.57
Profession	Self-employment	39	22.41
	Officer	33	18.96
	Employee	9	5.17
	Retired	5	2.88
	Other	83	47.70
	Undetermined	5	2.88
Age	28 – 32	18	10.34
	33 – 37	50	28.74
	38 – 42	63	36.21
	43 and above 43	42	24.14
	Undetermined	1	.57
Total		174	100

Collection of Data

For data collection, a survey composed of three open-ended questions was delivered to the parents. When preparing the survey questions, the results of the studies about the same subject in the literature were used (e.g., Coşkun-Keskin and Özer, 2016; Cunha et al., 2018a; Jay et al., 2018; Iflazoglu and Hong, 2012). Since homework-achievement relationship, teacher control, and parental involvement came to the forefront in the previous studies on homework, we decided to create survey questions within this framework.

We received expert opinions (two faculty members specialized in math education, one in curriculum development, and one in assessment and evaluation as well as two math teachers) when preparing the survey questions and made relevant arrangements based on such opinions. For instance, the question “What do you think about teachers’ giving feedback to the homework given in the math class?” was modified as follows: “Do you think it is necessary for teachers to follow-up the homework given in the math class? Could you elaborate on it?”

Five parents whose children studied at different grade levels were asked to fill in the survey form in order to test whether the questions in the form were clear to the participants, and the survey was finalized following their comments. The survey involved the following questions to determine the parents’ views about math homework: “Do you think the homework given in the math class promotes your child’s achievement? Could you elaborate on it?”; “Do you think it is necessary for teachers to follow-up the homework given in the math class? Could you elaborate on it?”; “Do you help your child with his math homework? Could you elaborate on it?” After the necessary permissions were obtained, the survey forms printed on a page were delivered to the parents through students and parent-teacher meetings.

Data Analysis

Qualitative data were subjected to content analysis. Open coding and selective coding, the first stages of the content analysis method, were implemented (Strauss and Corbin, 1990), and deductive and inductive approaches included in the content analysis were used (Bardin, 1996).

Firstly, for one hundred randomly selected surveys (about half of all surveys) the definition of themes, categories, and codes followed a deductive and inductive iterative process. Accordingly, all parents' answers to each question were independently examined by two researcher. In the deductive approach, themes, categories, and codes were created based on the theoretical model (e.g., Cooper, 2001), and the studies conducted on homework in recent years (e.g., Bembenutty, 2011; Coşkun-Keskin and Özer, 2016; Cunha et al., 2018a; Duru and Çoğmen, 2017; Knapp et al., 2017; Rosário et al., 2015a, 2015b; Trautwein, 2007). For example, categories related to "effect of math homework on math achievement" theme were driven by homework researches (e.g., Bembenutty, 2011; Rosário et al., 2015a; Trautwein, 2007), while categories related to "follow-up of math homework by teachers" theme and some codes (e.g., providing feedback and correction, needing for expert feedback) of checking homework were driven by the Cooper (2001) theoretical model. In addition, new categories were added using the statements of the participants during the content analysis (Bardin, 1996). Accordingly, new codes were added during the analysis using participants' words. For example, the codes "not finding time to help due to busy", "self-study and self-challenge" were codes related to "parents' helping with homework" theme build upon parents' words (i.e., inductive approach).

After transcripts were coded by two researchers separately, both met to discuss any discrepancies and come to an interrater agreement. When the researchers were in conflict in a specific code, they explained why they had determined that code. Following such explanations, the code in question was read again, and coding was done again (e.g., the "providing revision and permanence" code was divided into "providing revision and reinforcement" and "providing better comprehension and permanence"). After the codebook was created, two mathematics educators independently of the researchers were asked to evaluate twenty questionnaires using the codebook. For the evaluations of two expert mathematics educators, the formula "Reliability= [Agreements / (Agreements + Disagreements)] x 100" was applied to the codes provided by the two researchers (Miles and Huberman, 1994). The agreement percentage was calculated and found to be 95%. Inter-coder agreement percentage is considered adequate if it is over 70% (Miles and Huberman, 1994).

Finally, two independent researchers read all data to check the joint coding process. Analysis of the remaining surveys brought some information with low frequency (e.g., the code "memorising" related to "the effect of math homework on math achievement" theme), so additions were made to the produced codes. Researchers re-read all transcripts following the co-encoding process to check for the encoded materials (Bardin, 1996). From this viewpoint, the two researchers analyzed the final classification of the data to arrive at a final consensus on coding. To ensure inter-coder reliability, the formula Miles and Huberman's (1994) applied to the codes provided by the two researchers. The inter-coder agreement percentage was calculated to be 92%. Data analysis was considered to be reliable as inter-coder agreement percentage is considered adequate if it is over 70%. In case of a disagreement between the coders, the researchers discussed on relevant codes until they reached an agreement. In addition, the frequencies concerning the codes in all tables indicate the number of codes, not of parents.

Some precautions were taken to increase the validity of the study. To ensure the validity of the study, first, the characteristics of the research sample and processes were defined in a detailed way to allow a comparison with other samples. It was tried to describe the way the data were collected clearly. The literature was taken into consideration when preparing the interview form. Each and every explanation provided by the parents was taken into account. Besides, particular attention was paid to the objective presentation of the themes and the codes included in them. To ensure the verifiability of the results of the present study by other

researchers, the way the themes were created and how the literature was utilized were clearly defined, and the data were theoretically supported. In addition, the quotations supporting the findings are directly presented with an attempt to increase validity. The real names of the parents are not used in direct quotations; instead, codes like P1, P2, ... P174 are used. Furthermore, specific attention was paid to keeping the collected data and data transcriptions under control so that they can be examined by different researchers when necessary.

Findings

Three main themes were determined at the end of the analysis of parental views: Effect of math homework on math achievement, follow-up of math homework by teachers, and parents' helping with math homework. The findings concerning these themes and categories are presented below.

Theme 1: Effect of Math Homework on Math Achievement

Based on the research data, three categories were determined within the "effect of math homework on math achievement" theme: promoting math achievement; partly promoting math achievement; not promoting math achievement. Table 2 presents the categories, codes, and frequencies concerning the "effect of math homework on math achievement" theme.

Table 2. Codes and Frequencies Concerning the "Effect of Math Homework on Math Achievement" Theme

Category	Codes	f
Promoting math achievement	Providing revision and reinforcement	61
	Providing better comprehension and permanence	33
	Serving as a means of improving achievement	16
	Changing perspectives	11
	Improving computational fluency skill	2
	Obligation to do homework	1
	No explanation	42
Partly promoting math achievement	Doing homework willingly and attentively	7
	Having homework fit for purpose	3
	Understanding the subject in question	2
	No explanation	3
Not promoting math achievement	Memorising	1
	Get boring	1
	No explanation	5
Blank		1

As shown in Table 2, almost all parents opined that the homework given in the math class promotes students' math achievement. Under the "promoting math achievement" category, the view that math homework provides revision and reinforcement ($f=61$) stands out among the participating parents' views. In this regard, P50 expressed his view as follows: *"Of course, it promotes his achievement. That's because he may forget what he learned when he comes home. However, thanks to homework, he may revise and reinforce what he learned more."* Another very frequent view is that homework enables better comprehension of subjects and provides permanence ($f=33$). P54 expressed his view as follows: *"Yes, it promotes it because the student learns better, revises it, and makes it more permanent in his mind."* It can be said that the parents consider math homework as a means of promoting meaningful learning.

Some participating parents denoted that math homework is a means of improving math achievement ($f=16$). P139 expressed this as follows: *"Yes, because revision through homework increases achievement in this class. Homework may be one of the means of improving achievement."* Some participating, on the other hand, noted that

homework changes students' perspectives (f=11). P88 expressed his opinion on this matter as follows: *"It definitely has a positive effect on his achievement. My child sees what he learned at school in his homework, which highly contributes to him. Since the questions in the homework are different, my child tries to solve different questions. Both his mind improves, and he has a chance to see different question types. Hence, homework affects his achievement by changing his perspective."* It is evident that the parents perceive math homework as a factor that affects their children's both academic achievement and perspective.

Very few parents indicated that thanks to math homework, students' computational fluency skills improve, and thus their math achievement increases (f=2). One participating parent opined that students' math achievement increases because of their obligation to do their homework. There were also parents opining that math homework promotes math achievement, but not providing any explanations (f=42). The parental views included in the "no explanation" code involved responses only in the form of "yes" or "no." It is understood from the expressions of the parents that homework is one of the basic elements in increasing the mathematics achievement.

As shown in Table 2, few parents thought that homework given in the math class partly promotes math achievement. The parental views included in this category concentrate in the opinion that math homework promotes math achievement if students do it willingly and attentively (f=7). P167 expressed his opinion as follows: *"Homework promotes achievement if the student does it properly and willingly."* Some parents believed that homework promotes math achievement if its goal is specified and it is fit for purpose (f=3). Two participating parents pointed out that homework promotes math achievement if students have understood the subject covered in the homework. Based on these findings, it can be said that the parents think that homework covering subjects on which students have not attained meaningful learning will not promote achievement. The results reveal that parents think that if some prerequisites are met (e.g., desire, motivation, fitness for purpose), homework will increase students' mathematics achievement.

The findings in Table 2 show that very few parents were of the opinion that math homework does not promote math achievement. Within this category, one of the parents stated that the student does homework by rote, and thus homework does not promote math achievement. P172 expressed his view as follows: *"No, it doesn't promote it. The student considers homework just as a must. He doesn't think on what he does or doesn't consider that he solves better when he follows a particular path. He does homework by rote."* It is clear that this parent thinks that math homework that is done based on only procedural knowledge without any conceptual understanding does not promote achievement. Another parent expressed that homework does not promote achievement as the student is in bored mode when he is doing it. P129 expressed his view as follows: *"Since children are in bored mode when they are doing homework, this hinders their achievement."* It is possible to say that this parent regards students' affective perceptions of homework as a factor that influences their achievement.

Theme 2: Follow-Up of Math Homework by Teachers

The research data show that the "follow-up of math homework by teachers" theme incorporates two categories: Checking homework; not checking homework. Table 3 presents the categories, codes, and frequencies concerning the "follow-up of math homework by teachers" theme.

Table 3. Codes and Frequencies Concerning the “Follow-Up of Math Homework by Teachers” Theme

Category	Codes	f
Checking homework	Providing feedback and correction	85
	Not doing homework without teacher control	43
	Needing for expert feedback	21
	Providing teacher with a reflection on the teaching process	9
	Fostering student’s interest and motivation	1
	No explanation	17
Not checking homework	Checking by students	4
	Teacher’s lack of time / over-crowdedness of classrooms	3
	Checking by parents	2

As shown in Table 3, a great majority of the parents thought that math homework should be followed up by teachers. Under this category, the parental view implying that the homework should be followed up by teachers, since, in this way, students will be provided with feedback and correction on relevant subjects and their own learning stands out (f=85). P118 expressed his view as follows: *“Yes, the teacher should follow up the homework. That’s because it provides the student with feedback on the subject, and the student corrects the mistakes.”* Another very frequent code is “not doing homework without teacher control” (f=43). P163 expressed his view as follows: *“If the student is not followed up, he will not do homework by thinking that the teacher does not follow up somehow or other.”* It can be said that the parents think that teacher’s homework follow-up is a force that enables the completion of homework.

Some of the participating parents noted that expert feedback is necessary in the follow-up of homework (f=21). Based on this finding, it can be said that the parents think that math homework should be followed up by the teacher having enough content knowledge of math, but not by any person. Some parents marked that the follow-up of homework by the teacher provides the teacher with a reflection on the teaching process (f=9). This finding of the study evokes the question how important homework follow-up is important for teachers’ professional development. Only one parent denoted that the follow-up of homework by the teacher fosters the student’s interest and motivation. It can be said that this parent considers teacher’s homework follow-up important for the improvement of students’ affective characteristics. Parents’ views can be interpreted as teacher homework follow-up provides teachers with an opportunity to modify teaching practices in such a way that fulfills student needs.

Quite few parents expressed views associated with the “Not checking homework” category. In this regard, parents suggested that homework should be followed up by students (f=4). P123 expressed his view as follows: *“No, the teacher shouldn’t follow up. That’s because if the teacher assigns homework follow-up to any student, that student will check the homework. In other words, teacher’s follow-up is so unnecessary.”* It can be said that the parents attribute homework follow-up responsibility to students. This finding can be interpreted as the need for students to use self-regulation skills such as self-monitoring and self-reflection. Besides, this implies that the parents perceive homework follow-up only as checking whether the homework has been done or not. It may be ignored by these parents that students may remain incapable of providing content check when checking homework. Opining that the teacher is lack of time or classrooms are over-crowded, which prevents the follow-up of homework, P23 expressed his view as follows: *“Since the classrooms are over-crowded, math class teaching time shortens if the teacher follows up homework one by one. The teacher cannot teach and follow up homework at the same time.”* Two participating parents indicated that parents should follow up homework. It can be said that the parents having this view assume responsibility for following up math homework.

Theme 3: Parents' Helping with Math Homework

Two categories were determined based on the views expressed when the parents were asked whether they help their children with their homework: Helping; not helping. Table 4 presents the categories, codes, and frequencies concerning the "parents' helping with math homework" theme.

Table 4. Codes and Frequencies Concerning the "Parents' Helping with Math Homework" Theme

Category	Codes	f
Helping	Helping in unclear, unknown, difficult matters and/or when necessary	38
	Helping sometimes	31
	Helping the subjects he understands, as far as he knows	17
	No explanation	21
Not helping	Being incompetent in math subjects	31
	Being student competent and hardworking and not needing help	15
	Helping by his elder sister/brother	7
	Not finding time to help due to busy	6
	Self-study and self-challenge	4
	No explanation	9

As shown in Table 4, among the views of the parents stating that they help with their children's math homework, the code "helping in unclear, unknown, difficult matters and/or when necessary" stands out ($f=38$). P88 expressed his view as follows: *"Yes, I help. I help by focusing on the questions about which my child doesn't have knowledge and which he has difficulty in solving, explaining it to him, and showing him the solution."* Based on the research findings, it can be said that the parents expressing views included in this code help their children with the content of math homework.

The parental views suggesting that they help with the homework given in the math class sometimes or partly were included in the "helping sometimes" code ($f=31$). On the other hand, some parents stated that they help with homework on the subjects they understand and as far as they know ($f=17$). P109 expressed his view as follows: *"I help, but only when there are subjects I understand and as far as I can do."* This finding also implies parents' helping with the content of homework. In addition, the findings can be interpreted as parents generally believe that helping with children's homework is parent's responsibility.

As shown in Table 4, among the views of the parents stating that they do not help with their child's math homework, the parental views suggesting that they are incompetent in math subjects stand out ($f=31$). P59 expressed his view as follows: *"I can't help because I'm an elementary school graduate. I'm not competent enough to apply those formulas and operations."* This finding suggests that parental educational background and math knowledge level are factors influential on parental math homework involvement. At this point, it can be inferred that inadequate parental math knowledge has a negative effect on parental math homework involvement. Besides, this result implies that most parents perceive helping with homework only as content support. Some parents stated that their children do not need help as they are competent and hardworking, and thus they trust their children ($f=15$). P61 expressed his view as follows: *"He's quite successful in math. We can help if he remains incapable at some point."* This finding implies that the parents support their children's autonomy.

Some parents stated that not they, but the children's elder brothers/sisters help the child with math homework ($f=7$). P100 expressed his view as follows: *"As his mum, I can't help, but his elder sisters help."* This shows that different members of family may help children with math homework in the home environment. Some parents stated that they cannot help their children with math homework because they cannot find time for it as they are so busy. On the other hand, some parents said that students should study by themselves and

force themselves (f=4). P36 expressed his view as follows: *"I don't help. I want him to do it by himself so that he can comprehend it better. If I do it, he will get used to it and not study."* It can be said that the parents offering views included in this code do not consider students' getting help with math homework right for their academic development. Besides, it can be inferred that parents think that students cannot experience coping with difficulties.

Discussion and Results

The first finding of this study, aimed at exploring parents' views of middle school math homework, is about the relationship between homework and math achievement. Almost all parents opined that math homework promotes students' math achievement. Majority of the parents stated that math homework has a positive effect on math achievement by providing revision and reinforcement. The parents also stated that math homework enables students to comprehend math subjects better and have more permanent understanding of them, that it can be regarded as a mean of increasing student achievement, and that it improves cognitive development by changing students' perspectives. Quite few parents stated that math homework improves students' computational fluency skills and that the obligatory nature of homework increases their achievement.

In studies reporting similar results to the findings of the present study, parents stated that homework has a positive effect on students' academic achievement (Özcan and Gögebakan-Yıldız, 2017; Tam and Chan, 2009; Turan-Özpolat et al., 2017; Xu and Yuan, 2003; Yar-Yıldırım, 2018). Özcan and Gögebakan-Yıldız (2017) report that parents believe that homework has a positive effect on math achievement. Tam and Chan (2009) revealed that parents consider homework as a basic component of learning. In Turan-Özpolat et al. (2017), parents thought that homework promotes achievement if it involves the revision of subjects and provides the permanence of knowledge. Similarly, Xu and Yuan (2003) report that parents think homework reinforces what students have learned at school. Cooper et al. (2006) point out that an increasing number of parents, educators, and education policy makers regard homework as an important strategy that promotes students' academic achievement.

In the present study, few parents noted that math homework partly promotes student achievement. The parents think that homework promotes achievement if the student does homework willingly and attentively; the homework is fit for purpose; and the student has completely understood the subject covered in the homework. Some other few parents believe that math homework does not promote math achievement. These parents marked that homework does not promote math achievement because students do it by rote or they are in bored mode when doing it.

Almost all parents stated that math homework should be followed up by teachers. They emphasized that teachers should provide students' homework with feedback and correction. Supporting the results of the present study, Cunha et al. (2018a) indicated the importance of homework feedback provided by teachers especially in the math class. This is because math subjects have a complex structure, and deficiency on any subject may cause a problem in learning new contents. Accordingly, homework follow-up by teachers is an important role of teachers in the homework process (Cunha et al., 2018a; Rosário et al., 2015a, 2019).

The participating parents pointed out that students will not do homework if it is not followed up by teachers, and there is a need for expert feedback on homework. Previous studies offer consistent results with the present study (Cunha et al., 2018a; Jay et al., 2018; , Núñez et al., 2015a; Rosário et al., 2019; Xu, 2011). According to Rosário et al. (2019), teacher homework follow-up affects students' homework behaviors and academic achievement. Núñez et al. (2015a) concluded that the stronger students' teacher homework feedback perception is, the more they complete their homework. Furthermore, Jay et al. (2018) report that parents regard teachers as expert in specialized content knowledge required to teach math.

The parents denoted that the follow-up of math homework by teachers contributes to them by providing them with a reflection on the teaching process. This finding of the study is consistent with the research results suggesting that homework follow-up will give teachers feedback about the effectiveness of teaching methods (Cunha et al., 2018a; Güven and Akçay, 2019; Rosário et al., 2019).

Quite few parents said that teachers should not follow up math homework. They stated that math homework should be followed up by students or parents. Additionally, the parents denoted that teachers cannot follow up homework because they have limited time and classrooms are over-crowded. The literature contains studies reporting parallel results to the findings of the present study (Cooper, 2001; Cunha et al., 2018a; Ramdass and Zimmerman, 2011; Rosário et al., 2019). Ramdass and Zimmerman (2011) suggested that students should play an active role in the homework follow-up process. While Cooper (2001) emphasizes the heavy work load of teachers, Rosário et al. (2019) argue that teachers encounter certain constraints such as keeping up with math curricula in the homework follow-up process. This may hinder teacher homework follow-up.

The follow-up of homework by teachers and the provision of feedback on homework by teachers are hot topics in the academic world (Cunha et al., 2018a; Núñez et al., 2015a; Rosário et al., 2019). Previous studies report that there is a fall in the amount of feedback provided by teachers from elementary school to middle school, but middle school students are still in need for teacher feedback (Cunha et al., 2018a; Katz et al., 2010). The findings of the present study also show that parents' expectancy for the follow-up of middle school math homework by teachers is still ongoing.

The analysis of parental views about helping with math homework yielded both positive and negative views. Majority of the parents expressing positive views (I help) stated that they help their children with their homework on the subjects they do not understand or have difficulty in and when necessary. Thus, it can be said that parents display supportive involvement in students' homework and provide content support. The findings of previous studies revealing that parents help with homework are consistent with the findings of the present study (Coşkun-Keskin and Özer, 2016; Jay et al., 2018; Knapp et al., 2017; Özcan and Gögebakan-Yıldız, 2017; Turan-Özpolat et al., 2017; Yar-Yıldırım, 2018). Another result obtained in the context of the parents' helping with math homework is that some parents help children with their math homework sometimes, not always. Consistently with this, Yar-Yıldırım (2018) determined that parents help with homework when necessary.

The parents stressed that they can provide help with math content on subjects they have knowledge about. Thus, parental math knowledge affects their homework involvement. Another striking result of the present study is that a considerable number of parents stated that they do not help with math homework. A great majority of the parents expressing negative views said that they are incompetent in math subjects. This finding is consistent with Martinez (2011) and Knapp et al. (2017). Martinez (2011) reports that provision of content support by parents in students' homework has positive effects on their homework completion. Likewise, Knapp et al. (2017) note that parents should have adequate knowledge of mathematical subjects to be able to help them with math homework.

In the present study, some parents highlighted that they do not help students because their children do not need help; their knowledge is adequate; and thus, they trust their children. The results of previous studies are consistent with this finding of the present study. The results of studies conducted at middle school level indicate that teachers and parents expect students to be more autonomous and responsible as they get older. Therefore, parents reduce their help with students' homework in the adolescence period (Katz et al., 2010; Núñez et al., 2015a; Patall et al., 2008).

Some participating parents stated that children's elder sisters/brothers help with their math homework. Jay et al. (2018) and Özcan and Göğebakan-Yıldız (2017) support this finding of the study. Jay et al. (2018) reports that parents turn to elder children's consultancy for the completion of homework. In Özcan and Göğebakan-Yıldız (2017), parental views indicated that the amount of receiving support from people or institutions other than parents in the homework process increased at middle school level. This may be because math subjects get more difficult then.

The analysis of the parental views suggesting that the parents do not help with children's math homework demonstrated that some parents cannot help their children because of their busyness and think that students should do the homework by themselves and force themselves. The results of studies conducted in recent years and supporting the findings of the present study report that distal parental involvement and autonomous completion of homework by students promote their math achievement (Fernández-Alonso, Álvarez-Díaz, Woitschach, Suárez-Álvarez, and Cuesta, 2017). Accordingly, it is important that parents refrain from homework involvement gradually when students reach adolescence. Parents should get involved in homework in such a way that supports children's own autonomy efforts (Patall et al., 2008).

Implications

We have some recommendations for practice based on the results of the present study. Parents are expected to get involved in homework, but they should not put themselves in teachers' place. They should remember that homework responsibility is children's (Gonida and Cortina, 2014). They should get information about homework involvement from teachers and always be in contact with them on this matter. In this regard, teachers may give parents feedback about how parental homework involvement affects learning processes. Teachers may also provide parents who want to play a more active role in the homework process with necessary guidance. Parents' awareness may be raised with regards to the goal of math homework, its duration, expectations from them, etc. In parallel with these recommendations, Knapp et al. (2017) suggest the implementation of math-oriented parental involvement programs.

Regardless of their technical skills, parents may be described as both learners and teachers that make active contribution to children's learning (Williams and Williams, 2019). Based on this, programs and policies aimed at parental involvement in math may focus on home-based practices that do not require technical mathematical skills. The present study also determined that parents' content knowledge about math subjects and their educational levels affect their homework involvement. At this point, parents may be taught that homework involvement does not only involve content support and that they may also give autonomy support. Additionally, education policy makers should create a math homework policy in Turkey by considering scientific data besides the views of school administrators, teachers, students, and parents.

It is suggested for future research to investigate the structure of parental math homework involvement and to focus on which involvement types yield better results for students. Future studies that will address the question how parental homework involvement can be made more effective may set ground for training programs that are to be arranged for teachers, students, and parents. The study is that it is a descriptive survey study. Different methods that are fit for purpose may be employed in future research. For instance, well-designed longitudinal studies may explore parental math homework involvement in the short and long terms. What is more, future research may measure students' perceptions of their parents' involvement in math homework or examine their views on this matter.

REFERENCES

- Arıkan, S. (2017). TIMSS 2011 verilerine göre Türkiye'deki ev ödevi ve matematik başarısı arasındaki ilişki. *International Journal of Eurasia Social Sciences*, 8(26), 256-276.
- Bardin, L. (1996). *The content analysis*. Paris: PUF.
- Bembenutty, H. (2011). Meaningful and maladaptive homework practices: The role of self-efficacy and self-regulation. *Journal of Advanced Academics*, 22, 448-473.
- Boonk, L., Gijssels, H. J. M., Ritzen, H., & Brand-Gruwel, S. (2018). A review of the relationship between parental involvement indicators and academic achievement. *Educ. Res. Rev.* 24, 10-30. doi: 10.1016/j.edurev.2018.02.001.
- Christensen, L. B., Johnson, R. B., & Turner, L. A. (2011). *Research methods, design, and analysis* (11th ed.). Boston, MA: Pearson.
- Cooper, H. (2001). Homework for all - in moderation. *Educ. Leadership*, 58, 34-38.
- Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987-2003. *Rev. Educ. Res.* 76, 1-62. doi: 10.3102/00346543076001001.
- Cooper, H., Steenbergen-Hu, S., & Dent, A. L. (2012). Homework. In K. R. Harris, S. Graham, & T. Urdan (Eds.), *APA educational psychology handbook: Application to learning and teaching* (Vol. 3, pp. 475-495). Washington, DC: American Psychological Association. doi:10.1037/13275-019.
- Coşkun-Keskin, S., & Özer, Ü. (2016). Velilere göre araştırmaya dayalı ödev anlayışı. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 16, (USBES Özel Sayı II), 1491-1512.
- Cunha, J., Rosário, P., Núñez, J. C., Nunes, A. R., Moreira, T., & Nunes, T. (2018a). "Homework feedback is...": Elementary and middle school teachers' conceptions of homework feedback. *Frontiers in Psychology*, 9, 1-20. doi:10.3389/fpsyg.2018.00032.
- Cunha, J., Xu, J., Rosario, P., & Núñez, J. C. (2018b). Validity and reliability of the parental homework management scale. *Psicothema*, 30, 337-343. doi: 10.7334/psicothema2017.426.
- 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, 144-161. doi:10.1037/a0034100.
- Duru, S., & Çoğmen, S. (2017). İlkokul ve ortaokul öğrencileri ile velilerin ev ödevlerine ilişkin görüşleri. *İlköğretim Online*, 16(1), 354-365. doi: 10.17051/ıo.2017.76577.
- Epstein, J. L. (1987). Toward a theory of family-school connections: Teacher practices and parent involvement. In K. Hurrelman, F. X. Kaufman, & F. Losel (Eds.). *Social intervention: Potential and constraints* (pp. 121-136). Berlin: de Gruyter.
- Feng, X., Xie, K., Gong, S., Gao, L., & Cao, Y. (2019). Effects of parental autonomy support and teacher support on middle school students' homework effort: Homework autonomous motivation as mediator. *Front. Psychol.*, 10, 1-11. doi: 10.3389/fpsyg.2019.00612.
- Fernández-Alonso, R., Álvarez-Díaz, M., Woitschach, P., Suárez-Álvarez, J., & Cuesta, M. (2017). Parental involvement and academic performance: Less control and more communication. *Psicothema*, 29(4), 453-461. doi:10.7334/psicothema2017.181.
- Fernández-Alonso, R., Suárez-Álvarez, J., & Muñiz, J. (2015). Adolescents' homework performance in mathematics and science: Personal factors and teaching practices. *Journal of Educational Psychology*, 107, 1075-1085. doi:10.1037/edu0000032.
- 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. doi:10.1111/bjep.12039.

- Güven, U., & Akçay, A. O. (2019). Trends of homework in mathematics: comparative research based on TIMSS study. *International Journal of Instruction*, 12(1), 1367-1382.
- Iflazoglu, A., & Hong, E. (2012). Homework motivation and preferences of Turkish students. *Research Papers in Education*, 27(3), 343-363, doi: 10.1080/02671522.2010.529581.
- Jay, T., Rose, J., & Simmons, B. (2018). Why is parental involvement in children's mathematics learning hard? Parental perspectives on their role supporting children's learning. *SAGE Open*, 8(2), 1-13. doi: 10.1177/2158244018775466.
- Katz, I., Kaplan, A., & Gueta, G. (2010). Students' needs, teachers' support, and motivation for doing homework: A crosssectional study. *The Journal of Experimental Education*, 78, 246-267. doi:10.1080/00220970903292868.
- Knapp, A., Landers, R., Liang, S., & Jefferson, V. (2017). We all as a family graduate tonight: A case for mathematical knowledge for parental involvement. *Education Studies in Mathematics*, 95(1), 79-95. doi: 10.1007/s10649-016-9741-4.
- LaRocque, M., Kleiman, I., & Darling, S. M. (2011). Parental involvement: The missing link in school achievement. *Preventing School Failure: Alternative Education for Children and Youth*, 55, 115-122. doi:10.1080/10459880903472876.
- Martinez, S. (2011). An examination of Latino students' homework routines. *J. Latinos Educ.*, 10, 354-368.
- Merriam, S.B. (2018). *Nitel araştırma: Desen ve uygulama için bir rehber*. (S. Turan, Çev. Ed.). Ankara: Nobel Yayıncılık.
- Miles, B. M., & Huberman, A. M. (1994). *Qualitative data analysis* (21nd ed.). London: Sage Publication.
- Moroni, S., Dumont, H., Trautwein, U., Niggli, A., & Baeriswyl, F. (2015). The need to distinguish between quantity and quality in research on parental involvement: The example of parental help with homework. *Journal of Educational Research*, 108, 417-431. doi:10.1080/00220671.2014.901283.
- Núñez, J. C., Epstein, J. L., Suárez, N., Rosário, 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. doi:10.3389/fpsyg.2017.01217.
- Núñez, J. C., Suárez, N., Rosário, P., Vallejo, G., Cerezo, R., & Valle, A. (2015a). Teachers' feedback on homework, homework related behaviors, and academic achievement. *The Journal of Educational Research*, 108(3), 204-216. doi:10. 1080/00220671.2013.878298.
- Núñez, J. C., Suárez, N., Rosário, P., Vallejo, G., Valle, A., & Epstein, J. L. (2015b). Relationships between perceived parental involvement in homework, student homework behaviors, and academic achievement: Differences among elementary, junior high, and high school students. *Metacognition and Learning*, 10, 375-406. doi:10. 1007/s11409-015-9135-5.
- OECD (2014). *PISA 2012 Results in focus: what 15-year-olds know and what they can do with what they know*, PISA. Paris: OECD Publishing.
- Özcan, B. N., & Göğebakan-Yıldız, D. (2017). Velilerin çocuklarının matematik ödevlerine karşı görüş ve katılımlarının incelenmesi. *TÜBAV Bilim*, 10(4), 58-70.
- Özcan, Z. Ç., & Erkin, E. (2015). Enhancing mathematics achievement of elementary school students through homework assignments enriched with metacognitive questions. *Eurasia Journal of Mathematics, Science & Technology Education*, 11(6), 1415-1427.
- Patall, E. A., Cooper, H., & Robinson, J. C. (2008). Parent involvement in homework: A research synthesis. *Rev. Educ. Res.*, 78, 1039-1101. doi: 10.3102/0034654308325185.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

- 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, 373–410. doi: 10.3102/003465430305567.
- Ramdass, D., & Zimmerman, B. J. (2011). Developing self-regulation skills: The important role of homework. *Journal of Advanced Academics*, 22, 194-218.
- Robson, C. (2017). *Bilimsel araştırma yöntemleri: Gerçek dünya araştırması*. (Ş. Çinkır, & N. Demirkasımoğlu, Çev. Ed.). Ankara: Anı Yayıncılık.
- Rosário, P., Cunha, J., Nunes, A. R., Moreira, T., Núñez, C., & Xu, J. (2019). "Did you do your homework?" Mathematics teachers' perspectives of homework follow-up practices at middle school. *Psychol. Sch.*, 56, 92–108. doi:10.1002/pits.22198.
- Rosário, P., Núñez, J. C., Vallejo, G., Cunha, J., Nunes, T., Mourão, R., et al. (2015a). Does homework design matter? The role of homework purposes on students' mathematics achievement. *Contemp. Educ. Psychol.*, 43, 10–24. doi: 10.1016/j.cedpsych.2015.08.001.
- Rosário, P., Núñez, J. C., Vallejo, G., Cunha, J., Nunes, T., Suárez, N., et al. (2015b). Teachers' homework follow-up practices and students' EFL performance: A randomized group design. *Frontiers in Psychology*, 6(1528), 1–11. doi:10.3389/fpsyg.2015.01528
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. doi:10.1037/0003-066X.55.1.68.
- Silinskas, G., & Kikas, E. (2019). Parental involvement in math homework: links to children's performance and motivation. *Scandinavian Journal of Educational Research*, 63(1), 17-37. doi: 10.1080/00313831.2017.1324901.
- Silinskas, G., Kiuru, N., Aunola, K., Lerkkanen, M. K., & Nurmi, J. E. (2015). The developmental dynamics of children's academic performance and mothers' homework-related affect and practices. *Developmental Psychology*, 51, 419–433. doi:10.1037/a0038908.
- Strauss, A. L., & Corbin, J. (1990). *Basics of qualitative research: grounded theory procedures and techniques*. Thousand Oaks, CA: Sage.
- Tam, V. C., & Chan, R. M. (2009). Parental involvement in primary children's homework in Hong Kong. *The School Community Journal*, 19(2), 81-100.
- Trautwein, U. (2007). The homework-achievement relation reconsidered: Differentiating homework time, homework frequency, and homework effort. *Learning and Instruction*, 17, 372–388. doi:10.1016/j.learninstruc.2007.02.009.
- Turan-Özpolat, E., Karakoç, B., & Kara, K. (2017). İlkokulda verilen ev ödevlerine ilişkin öğretmen ve veli görüşlerinin değerlendirilmesi. *International Journal of Eurasia Social Sciences*, 8(30), 1849-1890.
- Xu, J. (2011). Homework completion at the secondary school level: A multilevel analysis. *Journal of Educational Research*, 104(3), 171–182. doi:10.1080/00220671003636752.
- Xu, J., Du, J., & Fan, X. (2017a). Self-regulation of mathematics homework behavior: An empirical investigation. *The Journal of Educational Research*, 110(5), 467-477. doi:10.1080/00220671.2015.1125837.
- 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, 1-11. doi:10.3389/fpsyg.2018.02334.
- Xu, J., Fan, X., Du, J., & He, M. (2017b). A study of the validity and reliability of the parental homework support scale. *Measurement*, 95, 93–98. doi: 10.1016/j.measurement.2016.09.045.
- Xu, J., & Yuan, R. (2003). Doing homework: Listening to students', parents', and teachers' voices in one urban middle school community. *School Community Journal*, 13(2), 25–44.

- Wilder, S. (2014). Effects of parental involvement on academic achievement: A meta-synthesis. *Educational Review*, 66(3), 377-397. doi:10.1080/00131911.2013.780009.
- Williams, K., & Williams, H. (2019). Mathematics problem-solving homework as a conduit for parental involvement in learning. Evaluation of a pilot study. *Educational Review*, 1-20. doi: 10.1080/00131911.2019.1566210.
- Yar-Yıldırım, V. (2018). Öğretmen, öğrenci ve velilerin ortaokul düzeyinde verilen günlük ödevler hakkındaki görüşleri. *Milli Eğitim*, 220, 201-224.