

Article

Student and Parental Perception on Homework: Evidence from PIRLS for Slovenia

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Abstract: This study explores homework practices and perceptions among Slovenian fourth-grade students and their parents, using data from PIRLS 2021 and national additions. Homework remains a contentious topic, often debated in terms of necessity and impact. The study examines the degree of parental involvement in their children's homework, focusing on its association with family socioeconomic status (SES) and students' reading achievement, as well as the students' attitudes towards homework. A mixed-methods approach was employed, combining quantitative analyses from reading tests and contextual questionnaires with qualitative insights from open-ended parental responses. The results show that most Slovenian parents actively assist their children with homework, yet frequent involvement correlates with lower reading scores, potentially reflecting increased support for struggling students. Parental motivations emphasize educational purposes, such as reinforcement of knowledge and monitoring progress, and developmental goals like fostering work habits and confidence. Among students, attitudes towards homework are generally positive, with many acknowledging its instructional benefits. However, a significant portion find homework boring or excessive, which negatively correlates with achievement. The study highlights disparities linked to SES, with students from higher SES families demonstrating greater independence and more favorable attitudes. These findings underscore the need for balanced homework practices that consider quality over quantity, individualization in design, and collaborative communication with parents. Implications for policy include fostering autonomy and reducing SES-based inequalities.



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1. Introduction

Although homework plays a significant role in children's learning environments (especially for elementary school children) and studies have yielded even contradictory findings regarding its effects, there is still a lack of research into pupils' and parents' views on the purpose and practice of homework, indicating a clear need for further investigation (Holte, 2016).

This study explored the role of homework in student achievement, student perceptions on its utility, and students' attitudes towards homework, as well as the help they receive from their parents/guardians in Slovenia, leveraging PIRLS 2021 data and national additions. It provides insights regarding the multifaceted relationships between homework, socioeconomic status (SES), academic achievement (reading literacy), and students' and parents attitudes towards homework. Understanding these relationships is crucial for educators, policymakers, and researchers, as they highlight the need for equitable educational

practices and targeted interventions. Also, some literature suggests that when students' learning preferences are acknowledged in homework, their performance, productivity, and attitudes improve, highlighting the importance of teacher–student dialogue to enhance homework effectiveness (Minotti, 2005; Khonamri & Pavlikova, 2020). However, homework is not only a matter between teacher and student. Parental involvement broadly includes support for children's social, emotional, and academic development, ranging from homework help to school presence, though some aspects—like expectations—may reflect underlying factors rather than directly influencing achievement (Castro et al., 2015). While homework offers clear benefits for students within the educational system, research presents mixed evidence concerning its impact on academic achievement (Cheraghi & Rahimi, 2024). Research over recent decades highlights both positive and negative effects of traditional homework. While it can enhance self-efficacy, planning skills, and school engagement, it may also lead to stress, procrastination, and academic pressure—especially when poorly balanced in amount or difficulty (Magalhães et al., 2020), including frequency of homework. Stronger homework–achievement correlations were found in grades 7–12 and when students reported time spent on homework compared to parents' reports, while no strong links were found based on outcome type or subject area (Cooper et al., 2006); however, there are many different perspectives and attributes to homework that needs to be considered when trying to assess its value. These include (i) exogenous factors, such as students' characteristics (ability, motivation, and study habits), subject matter, and grade level; (ii) assignment characteristics (for example, amount, purpose, social context, skill area, completion deadline, etc.); (iii) initial classroom factors; (iv) home community factors (home environment and others' involvement—including parents); (v) classroom follow-up (e.g., feedback, use in class discussion); and (vi) outcomes or effects (including positive academic effects and positive parental/family effects, but also negative effects, such as cheating, parental interference, and many others) (Cooper et al., 2006). In addition, the effects are most probably non-linear (non-causal). However, we can better understand these relationships as part of a cycle, not as a linear process. For example, taking into consideration two main perspectives of our study, namely, parental and student attitudes, Trautwein et al.'s (2006) conceptualization of the model from these two perspectives—parental and student (although there are several other perspectives in their model)—shows that the role of parents in their homework model means academic expectations and interest in school, parent–child communication about school, parental attitudes regarding homework, quantity of homework help (frequency of help, frequency of control, time spent), and quality of homework help (provision of help, unwanted help, content, and pedagogical knowledge of parents), while in the same model, students' characteristics (such as gender, cognitive abilities, conscientiousness) as well as students' level dimension (perception of homework characteristics such as quality, control, adaptivity) are important. However, there is very important interconnectedness between different parameters in the model. Different authors have already pointed out that their model is dynamic, incorporating feedback mechanisms—such as the idea that greater homework effort boosts achievement, which then likely influences parental support, teacher homework practices, students' perception of homework quality, and their motivation (ibid.). As another example, Valle et al. (2016) explain that students who are motivated to learn tend to approach homework with greater depth and manage their time effectively, which leads them to complete more homework and achieve better results. We discuss the key findings and their possible implications in our article, focusing on several, but not all dimensions, such as the role of parents in homework assistance, the educational versus developmental (socialization) functions of homework, students' and parents/guardians' general reports relating to homework, and especially the association between those attitudes (co)related to reading achievements and

the SES of the families of students. Therefore, these findings could enrich the understanding that homework is not a neutral task but one deeply entangled with contextual, motivational, and equity-related factors that is associated with learning outcomes. It needs to be noted that our results are relevant for grade 4 students for homework that includes reading. Homework is a much-discussed topic in Slovenia. If educators and researchers in the field of education are convinced that the benefits of homework are obvious, in society or in everyday debates we often question not only its function but also discuss that homework may not even be needed, that families are too busy with it, that students are overwhelmed by homework, etc. There are also frequent reports that successful education systems “do not know” homework. The latter has been repeatedly proven to be a myth (Klemencic Mirazchiyski, 2023). One of the large-scale student assessments that proves this myth is actually the Progress in International Reading Literacy Study (PIRLS), from which data are used for our article, but we mainly use data from national additions.

Homework allows teachers to extend instruction and assess student learning. The assignment of homework varies between and within countries. Teachers who assign homework can discuss it in class and provide feedback. Since 2001, PIRLS has surveyed teachers on how often they assign reading homework and the time expected for completion. In 2011, PIRLS also began asking about how homework is used (Mullis et al., 2019).

The analysis within the European Union (EU) contexts of participating countries/educational systems in PIRLS 2021 shows that when asking teachers “How often do children have to read something for homework (for any subject)?” and “How much time do teachers generally expect students to spend on homework that involves reading (for any subject) assigned by them?”, Slovenia does not deviate from the EU average, and this refutes the statement that there is no homework in other educational systems in the EU (Klemencic Mirazchiyski, 2023).

However, if we focus on the homework itself, we can identify four main dimensions—the purpose, effect, characteristics (homework design), and homework evaluation—which represents also our analytical model for this article, including the point of parents’ and students’ attitudes toward the homework. Homework dimensions (adapted from Žakelj & Ivanuš-Grmek, 2010, pp. 86–96, 103–104 (except for the evaluation); Vatterott, 2018; Griffin & Townsley, 2022) are therefore as follows:

1. Purpose—the purpose of homework can be divided into three main goals:
 - a. for strengthening knowledge, including repeating the learning unit, deepening the knowledge, expanding knowledge, systematizing knowledge, knowledge transfer, and applying knowledge in new situations;
 - b. to prepare for a new learning unit, such as engaging with new material before it is taught in class;
 - c. for independent learning—when students work on part or all of a new learning unit by themselves.
2. Effects—homework has several potential effects on students, including students’ achievement (improvements in academic performance); independence and responsibility (development of self-discipline and accountability); participation in the learning process (encouragement of active engagement); personal development (fostering skills like time management and perseverance); and connecting school and family (strengthening communication and involvement of families in learning).
3. Characteristics—the design of homework tasks includes time (how much time students are expected to spend); frequency (how often homework is assigned per week); help needed (whether assistance is required or the task is meant to be independent); learning aids (tools or resources students may use); and the type of task determined by the purpose (e.g., practice, exploration, preparation).

4. Evaluation—the evaluation of homework involves feedback (providing students with responses to their work); monitoring (tracking homework completion and effort); and assessment (evaluating the quality or correctness of the homework) (ibid.).

This framework illustrates that homework is a multifaceted educational tool, impacting not only academic outcomes but also students' personal growth and the connection between school and home environments. And all of this can be studied from four stakeholder perspectives: national/school policies, teachers, pupils, and parents.

1.1. Purpose, Research Questions, and Contributions of the Article

The purpose of this article is to investigate fourth-grade student attitudes towards reading homework and the help they receive from their parents or guardians. More specifically, the aim of the article is to answer the following research questions:

- R1: How much do parents/guardians help with homework at grade 4 in Slovenia, and does the amount of help correlate with the family socioeconomic status (SES) and why they are helping their children?
- R2: What are the attitudes towards homework amongst fourth-grade students in Slovenia and do these attitudes correlate with reading achievements and the student family SES?

The article makes several significant contributions to the field of education research, particularly in understanding attitudes toward homework and its impact in Slovenia, as follows:

1. Insights into Parental Involvement and SES

The study examines how often parents or guardians help grade 4 students in Slovenia with homework and how this relates to SES. It highlights potential SES-based disparities in support, offering insights for policies and practices aimed at reducing educational inequality.

2. Students' Attitudes Toward Homework

The study explores students' attitudes toward homework and how these relate to reading achievement and SES. This helps assess whether homework benefits are equitable and informs better homework practices to enhance student achievement and satisfaction.

3. Representative Sample and New Insights

Using a representative sample, the study provides generalizable findings and sheds light on understudied aspects of homework practices (in Slovenia), which can advance the academic discourse and fill gaps in the literature.

4. Implications for Homework Policy and Practice

The findings can guide educators (practitioners) and policymakers in designing more effective homework policies, such as providing guidance on how parents can support their children. By addressing SES disparities, the article has the potential to inform targeted interventions that support students and families from lower SES backgrounds, contributing to educational equity.

Overall, this article's significance lies in its ability to shed light on the nuanced relationship between homework, student attitudes, parental involvement, socioeconomic factors, and reading achievement.

1.2. Evidence from Other Studies on Homework—Including Students' and Parents' Attitudes

Literature reviews on homework reveal different dimensions and perceptions when thinking about homework. One level is looking from the national or school's point of view—is there a common homework policy at the national or school level or is homework

an individual tool of each teacher? Furthermore, we can look at homework from the teachers' perspective. Students' attitude to homework is another important level that is intricately connected to the fourth level—parents' perception.

1.2.1. Homework Policy

Schools deal with homework in different ways. Principals can lead the common school homework policy or introduce government policy if there is one prepared. However, such a strategic approach is rare since research shows that principals wish for the following:

- more education about the homework;
- having homework more often on the meeting agendas to talk about strategies;
- more cooperation between principals, so that cross-pollination of ideas may improve homework policies;
- that principals should emphasize and ensure that the role of teachers, parents, and learners promotes homework as an effective element in teaching and learning and that all stakeholders should play their part in making learners benefit from homework (Ndebele, 2018, p. 9).

Principals are expected to be not only managers but also pedagogical leaders or leaders for learning. Therefore, their perception of homework is important for their school. In fact, teachers also often report the lack of standardized practices for homework assignments across schools. They felt free to assign homework as they wished, without any formal guidelines or obligations from the school or the responsible ministry of education. This leads to inconsistencies in how homework is assigned and managed (Syla, 2023, p. 4).

If a common homework policy is one approach to homework, some may even try to defend the no-homework policy. The findings from a study by Pfeiffer (2018) suggest that the no-homework policy had a beneficial impact on students' emotional and academic experiences and family dynamics. However, the same study also identified several potential disadvantages (Pfeiffer, 2018), including concerns about academic rigor, parental dissatisfaction, the need for teacher adaptation, limited evidence of long-term benefits, and variability in student needs. If a school discards homework, it will not be using a powerful instructional tool (Marzano & Pickering, 2007).

To improve homework practices on the policy level, it is necessary to pay attention to the following:

- professional development for teachers on the design and implementation of effective homework assignments, as well as the importance of feedback and collaboration with parents;
- addressing classroom challenges, such as large class sizes and time constraints;
- the need for a common policy by policymakers, teachers, and parents that should guide homework, based on the data about the perception of students, teachers, and parents regarding homework;
- the need for established standards for homework, focusing on purpose, the time students should spend on it, the creation of assignments, and the provision of feedback;
- genuine cooperation with parents regarding homework (Ambrose & Shahid, 2023, p. 324; Syla, 2023, pp. 9–10).

Such steps toward a structured and supportive environment for homework can benefit students, teachers, and parents. Furthermore, this support can be offered by schools, with daily homework assistance being an extracurricular offer, which is even more effective if it addresses the specific needs of students in order to complement it and compensate for it (Lilla & Schüpbach, 2021).

1.2.2. Teachers' Perspective

Teacher perspectives on homework have been widely studied, revealing that teachers view homework as serving multiple purposes: reviewing and reinforcing material, fostering personal development and responsibility, supporting academic achievement, and promoting school–parent cooperation (Buyukalan & Altinay, 2018; Davidovitch & Yavich, 2017; Yıldız & Kılıç, 2020).

Fitzmaurice et al. (2020) identified that professional identity, expectations of others (parents, colleagues), school policy (institutional guidelines), and cultural values in the community and society influence teachers' homework practices.

Some teachers believe involving parents is important, but they also encounter instances of too much involvement from parents or undesired parental involvement (Buyukalan & Altinay, 2018; Davidovitch & Yavich, 2017). If parents are well informed about how they can help their children with homework, some problems may be avoided.

1.2.3. Parents'/Guardians' Perspective

Parents' perspective is closely connected to an attitude that their children have to do homework and vice versa, children's attitudes are closely connected to the attitude, help, and amount of time parents use to support them with homework. Some parents invest time and urge their children to prepare their homework (Davidovitch & Yavich, 2017). Studies show that if parents have high expectations for their children to do their homework, then the children will do their daily homework more willingly. Furthermore, if a parent's engagement in a child's education process increases, the student's success in their lessons increases (Deringöl, 2019; Goulet et al., 2023). However, it was noted that parents of elementary school students are more engaged in their children's education compared to parents of secondary school students. The decrease in higher grades could also be due to the increasing complexity of subjects (Deringöl, 2019).

According to Goulet et al. (2023), the home-based involvement can include four dimensions: parental expectations, parent–child communication, homework supervision, and school-based involvement. Studies show that parental involvement was positively associated with later student engagement, specifically parent–child communication and homework supervision. Additionally, students from higher SES families reported higher levels of school-based involvement from their parents (ibid.). Webb et al. (2022) emphasize that economic hardship is strongly associated with school engagement, showing that students from lower SES backgrounds are less likely to complete homework and often exhibit lower academic motivation. This observation is supported by Hartas (2011), who argues that parental involvement in education (among seven-year-old students in UK) is influenced by SES, with children from disadvantaged backgrounds frequently receiving limited academic support at home—negatively impacting their language, literacy, and social development. However, the same study from Hartas (2011) showed, for instance, that homework support and book reading did not have a significant association with children's language and literacy outcomes, even though a large proportion of parents regularly participated in home learning support (Hartas, 2011, 2012, 2014). While homework offers clear benefits for students within the educational system, research presents mixed evidence concerning its impact on academic achievement (Cheraghi & Rahimi, 2024). Also, parental involvement in homework is widely debated—some studies link it to improved achievement, while others suggest it may have little or even a negative impact (Hunnell-Leigh, 2017). Another meta-analysis shows that parental training improves homework completion, reduces problems, and may boost academic performance in elementary school students, while overall parental involvement correlates positively with achievement in elementary and high school, but negatively in middle school—especially benefiting verbal over math

outcomes, with rule-setting being the most effective strategy (Patall et al., 2008). Given these mixed findings, teachers should consider assigning homework that enables effective parental support (ibid.).

However, in today's multicultural and multinational world, schools face challenges such as language barriers that affect communication between teachers and students, among teachers themselves, and between teachers and parents. Studies show that migrant parents can have poor relations with the school due to their inability to speak the language of the country where they live. Furthermore, this affects parents' help with homework or engaging in school activities (Bolat, 2021). However, help is considered necessary because teachers alone cannot do everything, especially in the early years of the student's academic life. They need to provide indirect (creating a supportive home environment) and direct help to their children, although regarding direct help, parents need to be careful that it does not lead to excessive assistance that could undermine the child's independence in learning (Mahmoud, 2018).

1.2.4. Students' Perspective

Students around the world are assigned homework. In some countries, there is a strong culture of assigning homework; in others, they can even try or at least discuss the possibility of the no-homework policy as projects. For students, it is especially important that the homework is well prepared, interesting, and relevant to their learning (Rosário et al., 2018). To mitigate the feelings of boredom and enhance their engagement with the task, it is important for students to receive support from adults, have a feeling of control, receive appraisals, and that the tasks are not under- or over-challenging (Raccanello et al., 2022). For this to happen, in some studies, personalized homework based on students' performance showed a higher level of knowledge than those who received non-personalized assignments. In order for teachers to be able to give personalized homework, they must perform formative monitoring (Rodríguez-Martínez et al., 2023). Furthermore, studies show that time spent on homework is a strong predictor of high attainment in exams (Sammons et al., 2015). "Spending time on homework is likely to reflect both student motivation and engagement, school policies and the priority teachers attach to encouraging students to study at home (or provide opportunities after school), and parental attitudes and support" (Sammons et al., 2015, p. 22). Furthermore, students whose parents have a higher SES tend to spend more time doing homework (OECD, 2014).

It is important that children get feedback about the homework. However, the inclusion of homework can create disparities in grading outcomes, particularly for disadvantaged students from minority backgrounds or lower SES. Therefore, Griffin and Townsley (2022) suggest that excluding homework from final grades could lead to more equitable grading outcomes. Li et al. (2019) proposed a self-assessment-based homework model that encourages active student engagement, reflection on learning, and a deeper understanding of course material. With such an approach, a lack of engagement in homework correction can be avoided, as studies show that students do not reflect on their mistakes or take steps for improvement, as they overlook the comments provided by teachers (Ma & Wei, 2023).

To conclude, looking from the perspective of teachers, students, and parents, the findings show that the teachers' attitude is the most positive, followed by the student's attitude, and finally the parents' attitudes (Davidovitch & Yavich, 2017, p. 106). However, recognizing the influence of both teacher and parental expectations is essential in understanding how students develop their attitudes toward assigned homework. Simpson (2021) highlights that teachers' homework practices are shaped by their perceptions of parental aspirations, pointing to a triangular dynamic involving parental expectations, teacher practices, and student engagement.

2. Materials and Methods

The present study employs both quantitative and qualitative approaches. Details about the sample, the instruments and data used, and the data collection and preparation, as well as the analyses conducted, are described below. In addition to quantitative methods (which are representative of the target population in Slovenia, namely, grade 4 students), the study incorporates a qualitative component through the coding of open-ended questions (from the parents/guardians of the sampled students).

2.1. Sample and Data Collection

The PIRLS study uses a two-stage cluster sampling design: first, schools are sampled; then, whole intact classes (i.e., clusters) within those schools (grade 4) are selected, as the study emphasizes students' curricular and instructional experiences, which are typically structured at the classroom level (Almaskut et al., 2023a). The international target population coverage (grade 4) in Slovenia was 100%, and the overall rate of within-school student participation (weighted percentage) was 95% (Almaskut et al., 2023b). The overall exclusion rate (i.e., school, within-sample, and student exclusions) in Slovenia for PIRLS 2021 was 2.8% (Almaskut et al., 2023b; von Davier et al., 2023), which is within the limits set by the IEA, and the sample is representative of the target population (fourth-graders) in Slovenia (Klemencic Mirazchiyski & Mirazchiyski, 2023). The international student questionnaire was supplemented with national additions, a set of questions from the national perspective related to, among other things, homework. The data from these national additions used for the present study (for its qualitative approach) were collected in parallel with the main data collection, adding the national questions to the student questionnaire between 17th March and 23rd June 2021 (most schools participated during two weeks in April and May, while June was primarily reserved for repeat sessions). Overall, the study involved students (fourth-graders, averaging 10 years old), their teachers, principals, and parents. The collected data (for PIRLS Digital and Bridge) are as follows: 194 schools (332 classes), 163 principals, 6505 students (5096 PIRLS Digital, 1409 Bridge), 5974 parents (for each student, 1 parent or guardian, answering for both parents/guardians if the student has both parents), and 324 teachers (teaching the sampled fourth-grade classes) (Klemencic Mirazchiyski & Mirazchiyski, 2023). However, in our study, we used data for PIRLS Digital only, without the bridge module (and consequently the bridge sample), which were used to facilitate linking with countries that conducted PIRLS only on paper. Regarding the parents' attitudes in our qualitative study, these were the attitudes of the parents of the sampled students.

In all countries participating in PIRLS 2021, including Slovenia, the data were anonymized during the data collection by using unique numerical identification numbers instead of respondents' names, so the identity of any respondent (students, parents, school principals, and teachers) was unknown. As PIRLS 2021 was conducted electronically, all respondents received numerical IDs for login to the data collection platform. The match between the actual person and his/her ID was known only to the school. In addition, after the data were processed by the IEA, the school, class, and student unique identification numbers were scrambled to add an extra layer of identity protection. This study uses publicly available data which do not contain any stratification variables that can be used to identify respondents. For more details, see Fishbein et al. (2023) and Cockle (2023). Finally, PIRLS is an observational study and none of the participants was subjected to experimental work or clinical trials.

2.2. Data Preparation and (Quantitative and Qualitative) Analyses

In our analyses, we use data from two contextual questionnaires, namely, the student questionnaire and the home questionnaire (also called Early Learning Survey or Parent/Guardian questionnaire), in addition to a PIRLS assessment instrument (for reading achievement).

The reading achievement is represented by five separate score variables. The student test contains 363 items: no student can take all items, and no item can be taken by all the students, as the number of items is too high. Thus, the items are distributed across 18 assessment blocks. Each block contains a text passage and a set of test items related to it. A text passage and the items related to it appear only in one block, i.e., each block is unique. The blocks are distributed in 18 booklets, where each booklet contains two blocks. A block in one booklet also appears in the next booklet, so that all 18 booklets are connected through common blocks (Martin et al., 2019). Each student takes two blocks of items in a “booklet”; his or her responses for all other items are missing. The scaling methodology for this kind of multiple matrix design begins with the estimation of the item parameters, which are estimated through Item Response Theory (IRT). All the background variables from all the instruments are then used in Principal Component Analysis (PCA) to reduce their number by extracting the principal components that explain 90% of the variance in the background variables. The item parameters and the principal components are then used in latent regressions to obtain achievement scores. These are called “plausible values” (PVs), which are random draws from distributions for students with similar characteristics formed using the information from the background variables. As this methodology follows the multiple imputation methodologies, to capture the uncertainty of the scores, five instead of one achievement scores are drawn. The metric of the PVs was set to have an international center point of 500 and a standard deviation of 100 (Bezirhan et al., 2023; Yin et al., 2023). In any analysis involving PVs, computations must be carried out with each PV separately and then summarized. The standard errors of the estimates are computed by combining the imputation variance from the PVs and the sampling variance (Foy & Almaskut, 2023).

The SES measure we used in this study is the Home Socioeconomic Status (HSES) scale in the PIRLS 2021 database. It is produced using IRT from four source variables: (1) the number of books at home; (2) the number of children’s books at home; (3) the highest education level of either parent; and (4) the highest occupational level of either parent. All of these are categorical variables. The number of books at home has the following categories: (1) 0–10; (2) 11–25; (3) 26–100; (4) 101–200; and (5) more than 200. Similarly, the number of children’s books at home has the following categories: (1) 0–10; (2) 11–25; (3) 26–50; (4) 51–100; and (5) more than 100. The highest educational level of either parent has categories ranging from some primary education or did not go to school to finished university or higher. The highest occupational level of either parent ranges from never having worked to professional positions (Yin & Reynolds, 2023). The scale was composed using a partial credit IRT model that relates to the probability that a particular response to an item will be chosen given the location of the person on the latent construct. The item parameters were estimated on the international level and then used to estimate the score for each respondent on the latent construct. The raw scores were rescaled, so that on the international level the scale has a center point of 10 and a standard deviation of 2 score points (Yin & Reynolds, 2023).

The rest of the background variables used in the quantitative study are presented in Table 1. The variables on homework from the student questionnaire are categorical with the following categories: (1) “Agree a lot”; (2) “Agree a little”; (3) “Disagree a little”; and (4) “Disagree a lot”. The categories of these variables were reversed, so that the higher values show more agreement and vice versa. The variables from the home questionnaire

have the following categories: (1) “My child does not have homework”; (2) “Less than once a week”; (3) “Once to twice per week”; (4) “Three to four times per week”; and (5) “Every day”.

Table 1. Variables used from contextual questionnaires (quantitative approach).

Instrument	Variable Name	Variable Label	Question
ASGN	ASXR11A	READ\HOMEWORK\DO HOMEWORK AT HOME	I do my homework at home
ASGN	ASXR11C	READ\HOMEWORK\COPY HOMEWORK FROM SCHOOLMATE	I often copy my homework from a classmate
ASGN	ASXR11D	READ\HOMEWORK\PARENTS HELP ME WITH HOMEWORK	My parents often help me to do my homework
ASGN	ASXR11E	READ\HOMEWORK\ALWAYS FINISH MY HOMEWORK	I always come to school with finished homework
ASGN	ASXR11F	READ\HOMEWORK\HOMEWORK IS BORING	Homework is boring.
ASGN	ASXR11G	READ\HOMEWORK\HAPPY TO DO HOMEWORK	I do my homework with pleasure.
ASGN	ASXR11H	READ\HOMEWORK\HOMEWORK HELPS ME UNDERSTAND WHAT WE LEARNED IN SCHOOL	Homework helps me to better understand what we are doing in school.
ASGN	ASXR11I	READ\HOMEWORK\I TRY TO DO HOMEWORK CORRECTLY	I do my best to do my homework correctly.
ASGN	ASXR11J	READ\HOMEWORK\HOMEWORK SHOULD BE GRADED	Homework should be considered as a part of grade.
ASGN	ASXR11K	READ\HOMEWORK\TEACHER CHECKS HOMEWORK	The teacher always reviews homework.
ASGN	ASXR11L	READ\HOMEWORK\DO HOMEWORK NOT NECESSARY	Homework is not necessary.
ASGN	ASXR11M	READ\HOMEWORK\TO MUCH HOMEWORK	I have too much homework.
ASHN	ASXH23A	GEN\HOMEWORK\HOW OFTEN	Approximately, how often does your child do homework?
ASHN	ASXH23BA	GEN\HOMEWORK\ASK CHILD	Ask if your child has done his/her homework.
ASHN	ASXH23BB	GEN\HOMEWORK\ENCOURAGE CHILD	Encourage your child to do her/his homework.
ASHN	ASXH23BC	GEN\HOMEWORK\HELP CHILD	Help your child with homework.
ASHN	ASXH23BD	GEN\HOMEWORK\CHECK HOMEWORK	Review your child’s homework to make sure it is correct.

Note: ASGN = International student questionnaire with national additions; ASHN = International home questionnaire.

All of the analyses for the quantitative part were carried out using the R Analyzer for Large-Scale Assessments (RALSAs) package (Mirazchiyski, 2021).

The variable used for the qualitative approach (from the ASH questionnaire) was “Please write the reason or reasons why you help your child with his/her homework?” (for parents/guardians who answered that they are helping with homework) and was an open-ended question. Reflective thematic analysis, introduced by Braun and Clarke in 2006 (Byrne, 2022), was conducted. We followed their six-phase approach, which includes familiarization with the data; generating initial codes (using a mixed approach—both deductive or theory-driven, and inductive or data-driven); generating and reviewing themes (or categories in our case); defining and naming the categories/themes (where we adopted a non-linear approach, revisiting and adjusting previously defined codes and

renaming (in a meaning of shortening) some themes/categories); and finally, producing the report. The process is described in more detail below.

The results were coded manually (with no specific software) but based on mainly pre-established codes and categories (theory-driven approach) at the initial phase. We assigned a broader code to the responses and then grouped them into categories/themes (which were developed based on a review of the literature—see introduction section for details). It needs to be noted that some parents'/guardians' responses included more than one code and category. The following 12 categories were established: we do not help; consolidation; work habits; (mis)understanding; encouragement; request/needs help; monitoring of schoolwork; supervision; explanation; confirmation of correctness; socializing; occasionally helping. The cases where the parents did not provide answers were coded as missing. A total of 3311 parents/guardians responded to our question. As parents usually provided more than one reason for helping their child, this resulted in 7697 answers that were attributed to the 12 categories/themes.

Although in the introduction of this paper, we established four main categories related to homework (for both the qualitative and quantitative part of our study; however, more categories are actually mapped in our qualitative approach), these are further divided into the following subcategories (not all were covered in the parents'/guardians' responses):

- purpose: sharing knowledge (repeating the learning units, knowledge development or expansion, systematization, transfer, application in new situations), to prepare for new learning units, and student-led learning;
- effect: achievement, independence/responsibility, participation in the learning process, personal development, and connection between the school and family;
- characteristics/design of homework: time, frequency, needing help, learning aid, type of task;
- evaluation: feedback, monitoring, and assessment.

It is not surprising that not all of those subcategories were covered in the parents'/guardians' answers, as when reading and systemizing the functions of homework we were not limited to the potential responses of parents alone, but instead systematically organized the dimensions of homework according to four stakeholder perspectives: national/school policies, teachers, pupils, and parents. Nevertheless, our initial attempt at categorization was based on these perspectives. Still, some of the subcategories from the theoretical framework also included specific responses from parents, but due to a better understanding, some categories had to be renamed. For example, from the previously established category characteristics/design of the homework (which included a subcategory "needing help"), we kept the category needed help (requested help, needs). From the purpose category, we changed the name of the subcategory from "repeating the learning units" to "consolidation" as it better fits the specific answers. On the contrary, the "connection between school and family", as one of the homework effects from the literature, was not used in the actual parents' responses, but it was rather used as an example of "cooperation between parents and their child", and therefore a new subcategory was established named "socializing". Based on these, 12 new categories were established, some of them covering categories from the literature review, some of which were renamed as they fitted better into another category. However, two categories did not actually explain why parents helped children with the homework, namely, "we do not help" which was not meant to be answered in an open-ended question (as this was a filter question with the same label) and "occasionally helping", as it did not provide an answer to the question. In the last stage, we carried out further categorization of the subcategories into two main categories—functions of why parents help their students with homework, namely, educational function (consolidation, (mis)understanding, requested help/help needed, monitoring of school

work, explanation, confirmation of correctness) and the developmental/socializing (or upbringing) category, where answers from several categories fitted (namely, developing of working habits, encouragement, supervision, socializing).

3. Results

This section is divided into two parts. First, we use a quantitative approach, followed by a qualitative approach (Section 3.1) focused on the parents'/guardians' involvement in homework-related tasks (and if this correlates with SES or students' reading literacy) and then showing the results from our qualitative analyses of why parents actually help with homework. In Section 3.2, we are interested in the results on students' attitudes towards the homework and if those attitudes are related to their SES or reading achievements.

3.1. Parents' Involvement in Homework-Related Tasks

The results from parental responses on the homework items are presented in Table 2. We were interested here in how often parents/guardians are involved in their child's homework, such as asking if their child has done their homework, encouraging them to do their homework, helping with homework, or even reviewing their child's homework to make sure it is correct. As can be seen from the results in Table 2, all of these items are on parental control over their child's homework, encouragement, and the help parents give for homework assignments.

Table 2. Parents'/guardians' involvement in homework.

Items	Categories	Percentages	(SE)	Average SES	(SE)	Average Achievement	(SE)
Ask if your child has done their homework	Less than once a week	2.71	(0.32)	11.08	(0.16)	547.34	(7.91)
	Once to twice a week	6.35	(0.54)	11.10	(0.11)	545.37	(5.52)
	Three to four times a week	10.76	(0.59)	11.05	(0.08)	543.27	(4.14)
	Every day	80.19	(0.84)	10.65	(0.04)	518.06	(1.92)
Encourage your child to do their homework	Less than once a week	13.93	(0.68)	11.16	(0.09)	551.91	(3.81)
	Once to twice a week	11.13	(0.63)	11.02	(0.08)	537.12	(4.09)
	Three to four times a week	10.26	(0.70)	11.02	(0.07)	533.54	(3.23)
	Every day	64.68	(1.15)	10.56	(0.04)	513.42	(2.07)
Help your child with their homework	Less than once a week	37.30	(1.14)	11.17	(0.05)	551.44	(2.64)
	Once to twice a week	29.35	(0.87)	10.76	(0.05)	526.39	(2.29)
	Three to four times a week	12.07	(0.56)	10.44	(0.06)	497.74	(3.62)
	Every day	21.28	(0.80)	10.16	(0.05)	484.75	(2.76)
Review your child's homework to make sure it is correct	Less than once a week	25.57	(0.87)	11.12	(0.06)	550.94	(2.45)
	Once to twice a week	27.04	(0.87)	10.98	(0.06)	534.34	(2.90)
	Three to four times a week	16.92	(0.81)	10.67	(0.07)	512.78	(3.38)
	Every day	30.46	(0.95)	10.27	(0.04)	496.95	(2.31)

The averages for family SES and student achievement per category in each variable were computed (see Table 2). In general, parents tend to ask if their child has done their homework, encourage them to do their homework, and review their homework with high frequency—most of the parents do this every day (80%, 65%, and 30%, respectively). Helping students with their homework shows the opposite pattern. The majority of parents (37%) respond that they do this less than once a week. None of these activities is related to the SES, as the average family SES is about the same across all the categories of all the questions. This, however, is different for the average student's achievement in

reading. Students whose parents carry out any of these activities more often have lower achievement and vice versa. For example, students who receive help from their parents for their homework every day have 67 fewer score points than students who receive help from their parents less than once a week. This is true for all the other statements. While counterintuitive, this finding has a logical explanation—students who have lower academic outcomes tend to receive more help with and attention to homework from their parents.

When presenting the results from the angle of parents on how often they are helping with homework, it is relevant to see their responses to the question of why they are helping with their child's homework (for those parents who answered that they are helping with homework).

From the 12 categories established based on the responses (Table 3), 4.9% of the parents (377 responses) are in the category “we do not help” and an additional 12.8% (986 responses) are in the category “occasionally helping”, from a total of 7697 responses. These two categories do not fit into the question of why parents/guardians are helping students with their homework. From the remaining 10 categories, the majority of the responses fall into the category “(mis)understanding”—35.3% of the parents (1697 responses), e.g., when he/she “does not understand something”. This category actually goes well together with the category “explanation” (with 15.2% or 724 responses), e.g., “needs explanation”. There were also a lot of parents (27.4% or 1301 responses) in the category “requested help/needs” with answers such as “He asks for help with tasks that he doesn't know how to solve”. In total, 4755 responses fall into the so-called educational function of homework, where responses were also categorized as “consolidation” (reinforcement) of what has been learned, “monitoring of schoolwork”, and “confirmation of correctness”. All of these categories fall into the broader function of homework which is the educational function of the homework. However, many of the parents'/guardians' responses are still not attributed to this function. Therefore we categorized them as a developmental/socialization (or upbringing) function of the homework, with several categories, such as “work habits” (parents saying that they are helping their child with homework “to establish routine”, “to develop learning habits”, etc.); “encouragement”, with responses such as “to be confident”, “to see that problems are solvable”, etc.; supervision (e.g., “need supervision”, “to keep me up with school work”, etc.); and “socializing”, with responses such as “he feels better if I sit next to him while his is doing homework”, “sometimes he needs cooperation”, and “conversation, so we spend more time together.” While seeing responses divided into two categories only, namely, educational function and developmental/socialization/upbringing function of homework, it is evident from the results that the majority of parents/guardians' responses on the question of why they help with homework belongs to the educational function of homework.

3.2. Students' Attitudes Towards Homework and Association with Their SES and Reading Achievement

The results on student attitudes towards homework, along with their reading achievements and related to students' reading achievements, are presented in Table 4, followed by the results for students' attitudes associated with their SES status.

Table 3. Categorization and results of open-ended questions on why parents are helping with child's homework.

Categories	We Do Not Help	Consolidation	Work Habits	(Mis)understanding	Encouragement	Requested Help/Needs	Monitoring of Schoolwork	Supervision	Explanation	Confirmation of Correctness	Socializing	Occasionally Helping	SUM
No. of answers	377 (4.9%)	307 (4.0%)	426 (5.5%)	1679 (21.8%)	386 (5.0%)	1301 (16.9%)	339 (4.4%)	594 (7.7%)	724 (9.4%)	405 (5.3%)	173 (2.2%)	986 (12.8%)	7697 (100.0%)
Further categorization—2 functions:													
Educational		307 (6.5%)		1679 (35.3%)		1301 (27.4%)	339 (7.1%)		724 (15.2%)	405 (8.5%)			4755 (100.0%)
Developmental/socialization/upbringing			426 (27.0%)		386 (24.4%)			594 (37.6%)			173 (11.0%)		1579 (100.0%)

Table 4. Students' attitudes toward homework and their associations with average reading achievements.

Items	I Do Not Agree at All or I Do Not Agree (%)	(SE)	Average Reading Achievement	(SE)	I Agree or I Completely Agree (%)	(SE)	Average Reading Achievement	(SE)	Difference in Average Reading Achievement	<i>p</i>
I do my homework at home	15.67	(1.08)	526.63	(3.28)	84.33	(1.08)	520.26	(1.93)	−6.37	0.057
I often copy my homework from a classmate	87.53	(0.69)	530.6	(1.77)	12.47	(0.69)	459.41	(3.40)	−71.19	<0.001
My parents often help me to do my homework	62.06	(0.96)	539.93	(1.73)	37.94	(0.96)	491.47	(2.69)	−48.46	<0.001
I always come to school with finished homework	18.44	(0.88)	512.69	(3.02)	81.56	(0.88)	524.06	(1.89)	11.37	<0.001
Homework is boring	59.87	(0.97)	529.76	(1.79)	40.13	(0.97)	510.13	(2.77)	−19.63	<0.001
I do my homework with pleasure	33.70	(1.02)	525.25	(2.91)	66.30	(1.02)	520.48	(1.80)	−4.77	0.073
Homework helps me to better understand what we are doing in school	10.06	(0.60)	525.80	(4.12)	89.94	(0.60)	520.25	(1.86)	−5.55	0.163
I do my best to do homework correctly	2.80	(0.31)	481.41	(6.67)	97.20	(0.31)	522.79	(1.88)	41.38	<0.001
Homework should be considered as a part of grade	62.54	(0.92)	530.53	(1.87)	37.46	(0.92)	506.96	(2.57)	−23.57	<0.001
The teacher always reviews homework	15.15	(1.04)	520.08	(3.05)	84.85	(1.04)	521.93	(2.03)	1.85	0.573
Homework is not necessary	82.17	(0.64)	529.76	(1.85)	17.83	(0.64)	485.12	(3.45)	−44.64	<0.001
I have too much homework	68.10	(0.91)	533.39	(1.71)	31.90	(0.91)	497.88	(2.94)	−35.51	<0.001

As seen from the results presented in Table 4, most (84.3%) of the students agree or completely agree that they do their homework at home. However, almost 16% of the fourth-grade students in Slovenia disagree or completely disagree with this statement and the percentage is not low. Students who disagree with the statement that they do their homework at school have more than a six percent lower achievement, although the difference is not statistically significant. Less than 13% of the students agree or completely agree they copy their homework from a classmate. This can imply that copying homework might be a symptom of broader issues—such as lack of understanding, low engagement, or poor study habits. Therefore, linked this with are the purposes and effects of homework. These students have a 71 score points lower achievement than those who disagree or completely disagree (87.5%). The difference is large, almost three-quarters of the achievement scores' standard deviation, and is statistically significant. A rather sizeable proportion of Slovenian students (38%) state that their parents often help them with homework. These students have a significantly lower achievement of 48.5 score points, which is almost half a standard deviation of the achievement scale. A lot of students (18%) disagree or strongly disagree they always come to school with finished homework. They have 11 score points of lower achievement compared to those who agree or strongly agree, and although the difference is not that big, it is statistically significant. However, it is notable that 60% of students are of the opinion that homework is not boring. They also have an almost 20 score points higher achievement than those who find homework boring and the difference is significant. It is about the opposite when it comes to how pleasurable homework is as an activity. Almost 34% disagree or strongly disagree they do their homework with pleasure. They also have a slightly higher achievement than those who agree or strongly agree they do homework with pleasure, but the difference is small (less than five score points) and statistically insignificant. Ninety percent of the students agree or strongly agree that homework helps them better understand what they are doing at school but have a less than six score points lower achievement than those who disagree. The difference is, however, insignificant. That is, for this and the previous statement, the results are within the margin of error and there are no differences between the groups of students. Less than 3% of students disagree with the statement that they do their best in preparing their homework and their achievement is significantly lower by 41 points than of those who agree or strongly agree. More than 62% of the students disagree or strongly disagree that homework should be considered as part of the grades they receive. These students have a more than 23 score points higher achievement than those who do agree or strongly agree and the difference is significant. Most of the students (85%) responded that their teachers always review the homework. However, their achievement is about the same as that of those who answer negatively with no significant differences. Eighty-two percent of the students disagree or strongly disagree that homework is unnecessary. Their achievement is close to half a standard deviation (45 score points) higher than those who agree or strongly agree, and this difference is statistically significant. One of the most important questions in this study is whether the students are overwhelmed by the volume of homework they receive. Sixty-eight percent of Slovenian students disagree or strongly disagree they receive too much homework. Their achievement is also significantly higher compared to those who agree or strongly agree with the statement by more than 35 score points.

The relationship between the above statements and student SES was also assessed and the results are presented in Table 5.

Table 5. Students' attitudes towards homework and their associations with students' SES.

Item	Correlation	<i>p</i>
I do my homework at home	−0.01	0.590
I often copy my homework from a classmate	−0.13	<0.001
My parents often help me to do my homework	−0.16	<0.001
I always come to school with finished homework	0.04	0.086
Homework is boring	0.00	0.922
I do my homework with pleasure	−0.09	<0.001
Homework helps me to better understand what we are doing in school	−0.07	<0.001
I do my best to do homework correctly	0.03	0.072
Homework should be considered as a part of grade	−0.07	<0.001
Teacher always reviews homework	−0.07	<0.001
Homework is not necessary	−0.06	<0.001
I have too much homework	−0.06	0.001

Doing homework at home, the opinion that homework is boring, coming to school with finished homework, and making the best effort to do the homework correctly are unrelated to the student's SES, as the Spearman correlation coefficients are close to zero, and are even zero for homework being boring, and are insignificant (Table 5).

For the rest of the variables (Table 5) the correlation coefficients are statistically significant (i.e., their relationship with the family SES is systematic). The coefficients are negative because the categories of the variables on student homework range from "Strongly disagree" to "Strongly agree" and higher values of the SES variable show higher family SES. That is to say, the negative sign of the correlations shows that those who disagree more tend to have a higher family SES. The strongest association with SES is for the help students receive from their parents to do the homework ($r = -0.16$), followed by the statement on copying homework from classmates ($r = -0.13$). The more strongly the students disagree with these statements, the higher is their SES. The correlations of SES with doing homework with pleasure, the utility of homework to better understand the work done at school, considering homework as part of the grades, the teacher always reviewing homework, homework being unnecessary, and having too much work are all below 0.10 (as an absolute value), although significant. That is, although the students who disagree more tend to have a higher SES, the associations are weak.

4. Discussion

Our analysis revealed that the majority of parents/guardians actively assist their grade 4 children in Slovenia with homework, with 80% asking about homework daily, 65% encouraging their children to do homework, and 30% reviewing completed assignments to make sure it is correct. However, frequent parental assistance correlates with lower reading achievements among students. This finding can be interpreted from different perspectives, such as that over-involvement in homework by parents/guardians might undermine a child's autonomy and, consequently, their academic performance or that over-involvement for low achievers is more needed as they would need more help from parents. Normally in the literature, we would find results suggesting that parental involvement significantly enhances students' behavioral, cognitive, and affective engagement, leading to better school achievement and adjustment through improved effort, self-regulation, and a greater interest in school (Goulet et al., 2023). Some studies showed the opposite, such as Bacskai et al. (2024). Excessive parental involvement in homework negatively impacts student achievement, as it often signals a lack of autonomy or academic difficulties, increases pressure, and undermines motivation, while positive outcomes are linked to autonomy-supportive, emotionally responsive, and non-controlling assistance (ibid.). The

same authors also show that the positive impact of parental involvement on student achievement is not universal, as certain forms may have less favorable effects (*ibid.*). Our results are in line with those of some other studies, for example, [Hampden-Thompson et al. \(2013\)](#), which was based on a study in 21 countries from the Programme for International Student Assessment (PISA) data and found out that more frequent parental help with homework is significantly linked to lower student reading literacy, suggesting it may reflect parental monitoring in response to academic struggles rather than support itself improving performance, although those students were age 15 (i.e., in upper secondary schools). It is also important how parents are involved in homework. The results of a meta-study performed by [Castro et al. \(2015\)](#) indicate that parental models most strongly associated with high achievement emphasize general oversight of children's learning, particularly when parents hold high academic expectations, maintain regular communication about school, and support the development of reading habits. Targeted interventions for this aspect could be that schools should provide parents with structured guidance on how to support their children effectively. Research by [Mahmoud \(2018\)](#) supports the idea that parents should create a supportive environment rather than excessively intervene in the learning process. From the policy development angle, our recommendation suggests that educational policies could include workshops for parents that focus on the importance of fostering independence while offering appropriate support.

In our study, the parental/guardian responses regarding why they assist with homework emphasize two primary functions: educational (e.g., consolidation of knowledge, monitoring schoolwork) and developmental (e.g., building work habits, providing encouragement). This division aligns with the [Cooper \(2001\)](#) definition, which identified four instructional purposes of homework—practice, preparation, extension, and integration—and five non-instructional purposes, including parent–child communication, fulfilling directives, punishment, and community relations ([Rosário et al., 2019](#)). However, our study's results show the dominance of educational functions in responses, which is also expected regarding the concept that homework can be viewed as an extension of schoolwork, especially when having in mind the main purposes of the homework. The main purposes of the homework are as follows: strengthening knowledge (repeating the learning unit, deepening the knowledge, expanding knowledge, knowledge systematization, knowledge transfer, applying it in new situations), preparation for a new learning unit, and students working by themselves (meaning without a teacher or official instruction) on part of a unit or learning new units ([Žakelj & Ivanuš-Grmek, 2010](#); [Vatterott, 2018](#); [Griffin & Townsley, 2022](#)). When thinking about possible implications, we need to have in mind both the so-called holistic homework design, but also parent–teacher collaboration. Homework therefore should be designed to strike a balance between reinforcing academic content (instructional purposes) and promoting developmental skills (non-instructional purposes). This approach echoes recommendations by [Rodríguez-Martínez et al. \(2023\)](#), who found that personalized and formative homework improves engagement and learning outcomes. However, it is important that schools communicate the broader goals of homework to parents, emphasizing its dual role in academic and personal development (which is important, especially at the preliminary stages of learning).

Studies show that teachers' views on parental involvement are limited and indirect ([Goulet et al., 2023](#)) and parents report higher involvement than students perceive ([Thomas et al., 2020](#)). This means that it is essential to consider students' perceptions in order to have a clearer understanding about the issues and challenges with homework.

The majority of students in our study expressed positive attitudes toward homework, with 90% agreeing that it helps them understand what they are doing in school (related to instruction that falls into our category regarding the educational function of homework),

and 85% reporting that teachers always review their homework. It needs to be noted, however, that while most of the students are of the opinion that homework helps them with their academic performance (see above), nearly 40% of the students found homework boring, and 32% felt they received too much of it, which negatively correlated with academic performance (reading literacy to be precise). These findings align with earlier studies, such as those by [Raccanello et al. \(2022\)](#), which show that boredom and disengagement are significant barriers to effective homework completion. This would require that the amount and type of homework need to be more balanced. But these aspects (such as boredom related to homework) can also affect not only the educational but also the developmental function of homework, therefore affecting not only learning achievements but also other outcomes. A quantitative study conducted by [Holland et al. \(2021\)](#) in grades 3–6 shows that homework has a modest impact on children’s well-being, affecting areas such as sleep, emotional health, and parent–child relationships. There are several important implications that can be drawn from this. These include focusing on homework quality over quantity—teachers, when assigning homework, should prioritize meaningful, engaging assignments over high volumes of work. Studies by [Huang \(2022\)](#) and [Rosário et al. \(2018\)](#) suggest that well-designed tasks that are relevant to students’ lives foster greater engagement and learning. Regular teacher feedback on homework is essential to maintain student motivation and enhance the educational value of assignments. Research by [Ma and Wei \(2023\)](#) highlights that feedback not only supports learning but also encourages self-reflection and improvement.

As one of our research questions is targeted towards the relationship between attitudes towards homework and the family SES, this study identified a weak but systematic correlation between SES and certain aspects of homework, such as parental help and student attitudes. Students from higher SES families were less likely to receive frequent parental help or copy homework and reported slightly more positive attitudes towards its necessity and benefits. This can be explained with the generally higher reading achievement of higher SES students. Perhaps they are also more disciplined and motivated to achieve, but also to do their homework. These are, however, questions that go beyond the scope of this study and are of interest for future studies. The above findings are consistent with studies such as those by the [OECD \(2014\)](#), which found that students from higher SES families generally display greater independence and engagement in homework. At least two implications emerge when considering homework in relation to SES: the potential to reduce educational inequalities and the need to differentiate homework based on students’ needs. The latter means that homework should account for SES-related disparities, ensuring that assignments are equitable and manageable for all students. As [McCrary Calarco \(2020\)](#) pointed out, despite criticizing privileged “helicopter” parents, teachers may still feel pressured to grant them and their children special allowances—particularly around homework—revealing how institutional dynamics sustain inequality and emphasizing the need for policies that limit the influence of privilege in education. The study conducted by [Holte \(2016\)](#) finds that homework may undermine key aspects of childhood—such as relationships, diversity, curiosity, optimism, and equity—highlighting the need for teachers to reconsider homework practices in primary schools. It is crucial to take proactive steps to prevent the reproduction of social inequality, given its far-reaching consequences (*ibid*), and homework can play an important role in this. Also, a longitudinal ethnographic study by [McCrary Calarco et al. \(2022\)](#) of elementary and middle school math classrooms shows that, although teachers are aware of structural inequalities, they do not consistently interpret homework through that lens. These, in turn, can legitimize homework practices that perpetuate inequalities—such as assigning tasks beyond students’ independent capabilities and using homework to reward or penalize them (*ibid.*). And this once again underscores

the need to differentiate homework based on students' individual needs, while also taking their backgrounds into account, as these are often key to the learning opportunities students have outside of school. As [Posey-Maddox and Haley-Lock \(2016\)](#) entitled their article, "One Size Does Not Fit All". This qualitative study explored how parents and educators at a low-income school understand parental engagement and how work, school, and family dynamics shape their practices. Interviews revealed that mothers use varied strategies to balance responsibilities and involvement, often misaligned with school expectations. The study underscores the need for engagement opportunities that reflect families' unique contexts and strengths (*ibid.*), which differ not only between SES categories, but also within SES categories.

5. Conclusions, Limitations, and Future Research

The interplay between the home learning environment, socioeconomic factors, and children's educational outcomes reveals a complex picture of the persistent achievement gap, despite broader social changes—particularly the rise in parental involvement in children's learning ([Hartas, 2012](#)).

The study revealed that further research on the topic is needed. Homework remains a vital yet complex element of education in Slovenia. Its effectiveness should hinge on the quality of assignments, the balance between academic and developmental objectives, and collaboration among children and their parents/guardians. This study underscores the need for nuanced and evidence-based homework practices that cater to diverse student needs (considering the SES backgrounds of students), promoting both academic success and personal growth. However, as noted by [Marzano and Pickering \(2007\)](#), the effectiveness of homework depends on its design, purpose, and feedback mechanisms. So, also all these mechanisms need to be considered, which are complex and interrelated.

This study does not come without limitations as all the measures used in the analyses are self-reported and are not actually observed. And the qualitative part of our study also does not allow generalization.

Future research could include in-depth interviews with students, parents, and teachers to provide richer insights into their experiences with homework. Investigating how attitudes and practices around homework evolve over time could reveal its long-term impacts on student achievement and well-being. Comparing Slovenia's findings with other educational contexts could highlight cultural and systemic influences on homework effectiveness.

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Data Availability Statement: The international database is available from the IEA's Data Repository (<https://www.iea.nl/data-tools/repository/pirls>, accessed on 1 February 2025). The national additions' data is available from the Educational Research Institute's website (<https://www.pei.si/raziskovalna-dejavnost/mednarodne-raziskave/pirls/pirls-2021/>, accessed on 1 February 2025).

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References

- Almaskut, A., LaRoche, S., & Foy, P. (2023a). Chapter 3: Sample design in PIRLS 2021. In M. von Davier, I. V. S. Mullis, B. Fishbein, & P. Foy (Eds.), *Methods and procedures: PIRLS 2021 technical report*. Boston College, TIMSS & PIRLS International Study Center. Available online: <https://pirls2021.org/methods/chapter-3> (accessed on 1 February 2025).
- Almaskut, A., LaRoche, S., & Foy, P. (2023b). Chapter 8: Sample implementation in PIRLS 2021. In M. von Davier, I. V. S. Mullis, B. Fishbein, & P. Foy (Eds.), *Methods and procedures: PIRLS 2021 technical report*. Boston College, TIMSS & PIRLS International Study Center. Available online: <https://pirls2021.org/methods/chapter-8> (accessed on 1 February 2025).
- Ambrose, D., & Shahid, A. (2023). Teachers' perception of homework effectiveness in primary grades. *Journal of Education and Educational Development*, 10(2), 308–328. [\[CrossRef\]](#)
- Bacskaï, K., Alter, E., Dan, B. A., Vályogós, K., & Pusztai, G. (2024). Positive or negative and general or differentiated effect? Correlation between parental involvement and student achievement. *Education Sciences*, 14, 941. [\[CrossRef\]](#)
- Bezirhan, U., Foy, P., & Von Davier, M. (2023). *PIRLS 2021 achievement scaling methodology: Item response theory, population models, and linking across modes*. TIMSS & PIRLS International Study Center. [\[CrossRef\]](#)
- Bolat, Y. (2021). Primary school teachers' views on Syrian Students' Turkish and math skills and the confronted challenges. *International Journal of Modern Education Studies*, 5(1), 92–117. [\[CrossRef\]](#)
- Buyukalan, S. F., & Altınay, Y. B. (2018). Views of primary teachers about homework (A qualitative analysis). *Journal of Education and Training Studies*, 6(9), 152–162. [\[CrossRef\]](#)
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, 56, 1391–1412. [\[CrossRef\]](#)
- Castro, M., Expósito-Casas, E., López-Martín, E., Lizasoain, L., Navarro-Asencio, E., & Gaviria, J. L. (2015). Parental involvement on student academic achievement: A meta-analysis. *Educational Research Review*, 14, 33–46. [\[CrossRef\]](#)
- Cheraghi, F., & Rahimi, M. (2024). Effects of homework policy on EFL literacy development in emergency remote learning: A focus on academic self-regulation. *SAGE Open*, 14(1), 21582440241227006. [\[CrossRef\]](#)
- Cockle, M. (2023). *Creating the PIRLS 2021 international database*. TIMSS & PIRLS International Study Center. [\[CrossRef\]](#)
- Cooper, H. (2001). *The battle over homework: Common ground for administrators, teachers, and parents* (2nd ed.). Sage Publications.
- Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987–2003. *Review of Educational Research*, 76(1), 1–62. [\[CrossRef\]](#)
- Davidovitch, N., & Yavich, R. (2017). Views of students, parents, and teachers on homework in elementary school. *International Education Studies*, 10(10), 90–108. [\[CrossRef\]](#)
- Deringöl, Y. (2019). Parents' Expectation of mathematics education and their engagement in education and homework habits of children. *Acta Educationis Generalis*, 9(3), 16–40. [\[CrossRef\]](#)
- Fishbein, B., Yin, L., & Foy, P. (2023). *PIRLS 2021 user guide for the international database*. Boston College.
- Fitzmaurice, H., Flynn, M., & Hanafin, J. (2020). Primary teachers' homework practices: Identity, expectations, policies and cultural values. *Issues in Educational Research*, 30(3), 897–919. Available online: <http://www.iier.org.au/iier30/fitzmaurice.pdf> (accessed on 13 December 2024).
- Foy, P., & Almaskut, A. (2023). *Estimating standard errors in the PIRLS 2021 results*. TIMSS & PIRLS International Study Center. [\[CrossRef\]](#)
- Goulet, J., Archambault, I., Morizot, J., Olivier, E., & Tardif-Grenier, K. (2023). Validation of the student-rated parental school involvement questionnaire: Factorial validity and invariance across time and sociodemographic characteristics. *Journal of Psychoeducational Assessment*, 4(4), 416–433. [\[CrossRef\]](#)
- Griffin, R., & Townsley, M. (2022). Including homework and employability skills in class grades: An investigation of equitable grading outcomes in an urban high school. *Practical Assessment, Research, and Evaluation*, 27, 27. Available online: <https://scholarworks.umass.edu/pare/vol27/iss1/27> (accessed on 4 June 2025).
- Hampden-Thompson, G., Guzman, L., & Lippman, L. (2013). A cross-national analysis of parental involvement and student literacy. *International Journal of Comparative Sociology*, 54(3), 246–266. [\[CrossRef\]](#)
- Hartas, D. (2011). Families' social backgrounds matter: Socio-economic factors, home learning and young children's language, literacy and social outcomes. *British Educational Research Journal*, 37(6), 893–914. [\[CrossRef\]](#)
- Hartas, D. (2012). Inequality and the home learning environment: Predictions about seven-year-olds' language and literacy. *British Educational Research Journal*, 38(5), 859–879. [\[CrossRef\]](#)

- Hartas, D. (2014). Parenting for social mobility? Home learning, parental warmth, class and educational outcomes. *Journal of Education Policy*, 30, 21–38. [CrossRef]
- Holland, M., Courtney, M., Vergara, J., McIntyre, D., Nix, S., Marion, A., & Shergill, G. (2021). Homework and children in grades 3–6: Purpose, policy and non-academic impact. *Child Youth Care Forum*, 50, 631–651. [CrossRef]
- Holte, K. L. (2016). Homework in primary school: Could it be made more child-friendly? *Studia Paedagogica*, 21(4), 13–33. [CrossRef]
- Huang, X. (2022). Optimizing assignment design for primary and secondary school students. *Science Insights Education Frontiers*, 11(1), 1509–1516. [CrossRef]
- Hunnell-Leigh, A. (2017). *Impact of interactive homework on reading achievement* [Doctoral dissertation, Walden University].
- Khonamri, F., & Pavlikova, M. (2020). Exploring teachers' and learners' attitude towards homework: The case of English versus Non-English-Major teachers' homework practices. *Education and Self Development*, 15(4), 32–49. [CrossRef]
- Klemencic Mirazchiyski, E. (2023). *So domače naloge res tako problematične? Četrtošolci o domačih nalogah razmišljajo kar pozitivno, a ne pri vseh vidikih!* [Are homework assignments really that problematic? Fourth graders think quite positively about homework, but not in every aspect!]. PIRLS. Available online: <https://pirls.splet.arnes.si/2023/08/18/so-domace-naloge-res-tako-problematicne-cetrtošolci-o-domacih-nalogah-razmisľajo-kar-pozitivno-a-ne-pri-vseh-vidikih> (accessed on 25 November 2024).
- Klemencic Mirazchiyski, E., & Mirazchiyski, P. (2023). *Mednarodna raziskava bralne pismenosti (IEA PIRLS 2021): Nacionalno poročilo—Provi rezultati* [Progress in International Reading Literacy Study (IEA PIRLS 2021): National Report—Initial Results]. Pedagoški Inštitut. Available online: https://www.pei.si/wp-content/uploads/2023/05/Nacionalno_porocilo_PIRLS_2021.pdf (accessed on 25 November 2024).
- Li, N., Warter-Perez, N., & Shen, H. (2019). *A self-assessment based homework model* (Paper ID #27840). American Society for Engineering Education. Available online: <https://files.eric.ed.gov/fulltext/ED610619.pdf> (accessed on 19 January 2025).
- Lilla, N., & Schüpbach, M. (2021). Extended education in Germany between complementation and compensation: An analysis of extracurricular primary school offerings with regard to content, frequency, and range, in connection with the composition of the student body. *International Journal for Research on Extended Education*, 9(1), 22–44. [CrossRef]
- Magalhães, P., Ferreira, D., Cunha, J., & Rosário, P. (2020). Online vs traditional homework: A systematic review on the benefits to students' performance. *Computers & Education*, 152, 103869. [CrossRef]
- Mahmoud, S. S. (2018). Saudi parents' perceptions of the kind of help they offer to their primary school kids. *English Language Teaching*, 11(3), 102–112. [CrossRef]
- Martin, M. O., von Davier, M., Foy, P., & Mullis, I. V. S. (2019). PIRLS 2021 assessment design. In M. O. Martin, & I. V. S. Mullis (Eds.), *PIRLS 2021 assessment frameworks* (pp. 57–67). TIMSS & PIRLS International Study Center.
- Marzano, R. J., & Pickering, D. J. (2007). Special topic/the case for and against homework. *Responding to Changing Demographics*, 64(6), 74–79.
- Ma, Y., & Wei, C. (2023). Homework correction burden and strategies for junior high school English teachers: An interview study. *World Journal of Education*, 13(5), 2–8. [CrossRef]
- McCrory Calarco, J. (2020). Avoiding us versus them: How schools' dependence on privileged “Helicopter” parents influences enforcement of rules. *American Sociological Review*, 85(2), 223–246. [CrossRef]
- McCrory Calarco, J., Horn, I. S., & Chen, G. A. (2022). “You need to be more responsible”: The myth of meritocracy and teachers' accounts of homework inequalities. *Educational Researcher*, 51(8), 515–523. [CrossRef]
- Minotti, J. L. (2005). Effects of learning-style-based homework prescriptions on the achievement and attitudes of middle school students. *NASSP Bulletin*, 89(642), 67–89. [CrossRef]
- Mirazchiyski, P. V. (2021). RALSA: The R analyzer for large-scale assessments. *Large-Scale Assessments in Education*, 9, 21. [CrossRef]
- Mullis, V. S. I., Martin, O. M., & Liu, J. (2019). PIRLS 2021 context questionnaire framework. In I. V. S. Mullis, & M. O. Martin (Eds.), *PIRLS 2021: Assessment frameworks* (pp. 27–56). TIMSS & PIRLS Lynch School of Education International Study Center. Available online: https://pirls2021.org/wp-content/uploads/sites/2/2019/04/P21_Frameworks.pdf (accessed on 18 December 2024).
- Ndebele, M. (2018). Homework in the foundation phase: Perceptions of principals of eight public primary schools in Johannesburg. *South African Journal of Education*, 38(2), 1461. [CrossRef]
- OECD. (2014, December). *Does homework perpetuate inequities in education? PISA in Focus 46*. Available online: https://www.oecd.org/content/dam/oecd/en/publications/reports/2014/12/does-homework-perpetuate-inequities-in-education_g17a258a/5jxrhqhtx2xt-en.pdf (accessed on 1 February 2025).
- Patall, E. A., Cooper, H., & Robinson, J. C. (2008). Parent involvement in homework: A research synthesis. *Review of Educational Research*, 78(4), 1039–1101. [CrossRef]
- Pfeiffer, V. (2018). Homework policy review: A case study of a public school in the Western Cape Province. *South African Journal of Education*, 38(1), 1462. [CrossRef]
- Posey-Maddox, L., & Haley-Lock, A. (2016). One size does not fit all: Understanding parent engagement in the contexts of work, family, and public schooling. *Urban Education*, 55(5), 671–698. [CrossRef]

- Raccanello, D., Florit, E., Brondino, M., Roda, A., & Mason, L. (2022). Control and value appraisals and online multiple-text comprehension in primary school: The mediating role of boredom and the moderating role of word-reading fluency. *British Journal of Educational Psychology*, 92, 258–279. [CrossRef] [PubMed]
- Rodríguez-Martínez, J. A., González-Calero, J. A., Olmo-Munoz, J., Arnau, D., & Tirado-Olivares, S. (2023). Building personalised homework from learning analytics based formative assessment: Effect on fifth-grade students' understanding of fractions. *British Journal of Educational Technology*, 54(1), 76–97. [CrossRef]
- Rosário, P., Cunha, J., Nunes, T., Nunes, A. R., Moreira, T., & Núñez, J. C. (2019). "Homework should be... but we do not live in an ideal world": Mathematics teachers' perspectives on quality homework and on homework assigned in elementary and middle schools. *Frontiers in Psychology*, 10, 224. [CrossRef]
- Rosário, P., Núñez, J. C., Vallejo, G., Nunes, T., Cunha, J., Fuentes, S., & Valle, A. (2018). Homework purposes, homework behaviours, and academic achievement. Examining the mediating role of students' perceived homework quality. *Contemporary Educational Psychology*, 53, 168–180. [CrossRef]
- Sammons, P., Toth, K., & Sylva, K. (2015). *Subject to background: What promotes better achievement for bright but disadvantaged students?* University of Oxford; Sutton Trust.
- Simpson, A. (2021). Exploring teachers' perspectives on primary school homework. *Fields: Journal of Huddersfield Student Research*, 7(1), 806. [CrossRef]
- Syla, L. B. (2023). Perspectives of primary teachers, students, and parents on homework. *Education Research International*, 2023, 7669108. [CrossRef]
- Thomas, V., Muls, J., De Backer, F., & Lombaerts, K. (2020). Middle school student and parent perceptions of parental involvement: Unravelling the associations with school achievement and wellbeing. *Educational Studies*, 46(4), 404–421. [CrossRef]
- Trautwein, U., Ludtke, O., Schnyder, I., & Niggli, A. (2006). Predicting homework effort: Support for a domain-specific, multilevel homework model. *Journal of Educational Psychology*, 98, 438–456. [CrossRef]
- Valle, A., Regueiro, B., Núñez, J. C., Rodríguez, S., Piñeiro, I., & Rosário, P. (2016). Academic goals, student homework engagement, and academic achievement in elementary school. *Frontiers in Psychology*, 7, 463. [CrossRef] [PubMed]
- Vatterott, C. (2018). *Rethinking homework: Best practices that support diverse needs* (2nd ed.). ASCD.
- von Davier, M., Mullis, V. S. I., Fishbein, B., & Foy, P. (Eds.). (2023). *Methods and procedures: PIRLS 2021 technical report*. Boston College, TIMSS & PIRLS International Study Center. Available online: <https://pirls2021.org/methods> (accessed on 13 January 2025).
- Webb, N. J., Miller, T. L., & Stockbridge, E. L. (2022). Potential effects of adverse childhood experiences on school engagement in youth: A dominance analysis. *BMC Public Health*, 22(1), 2096. [CrossRef] [PubMed]
- Yin, L., Bezirhan, U., Fishbein, B., & Foy, P. (2023). *Implementing the PIRLS 2021 achievement scaling methodology*. TIMSS & PIRLS International Study Center. [CrossRef]
- Yin, L., & Reynolds, K. (2023). *Creating and interpreting the PIRLS 2021 context questionnaire scales*. TIMSS & PIRLS International Study Center. [CrossRef]
- Yıldız, V. A., & Kılıç, D. (2020). An investigation on the viewpoints of students, teachers, and parents about homework in primary schools. *International Online Journal of Education and Teaching*, 7(4), 1572–1583.
- Žakelj, A., & Ivanuš-Grmek, M. (2010). *Povezanost rezultatov pri nacionalnem preverjanju znanja s socialno-kulturnim okoljem učencev, poukom in domačimi nalogami* [The correlation of national assessment results with students' socio-cultural background, classroom instruction, and homework]. Zavod Republike Slovenije za šolstvo.

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