The role of teacher support and in-class teaching practices on reading performance: Evidence from PISA 2018 outcomes for Türkiye

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Abstract: The study deals with the variation of Turkish students' reading comprehension performance according to *perceived teacher support* and *reading activities in the classroom.* This study, which is grounded on the data drawn from the PISA 2018 database, investigates the relationship between certain variables. In the analyses performed on the PISA IDE server, the PISA 2018 reading literacy general averages of Türkiye were associated with the identified variables, and the differences in the averages were examined. As a result, perceived teacher support, teacher's adaptation of the course, and stimulation of reading engagement have a positive relationship with reading comprehension; however, it was found out that the frequency of receiving feedback had a negative relationship with reading performance. In addition, the general reading average of the students who reported that they had not performed activities such as *summarizing, comparing the content of the text with their own experiences, comparing the text they have read with other texts written on similar topics,* and *writing about the text that has been read* was much higher than those who reported that they had performed these activities. These results have strengthened the conclusion that teachers give feedback to poor readers more frequently. On the other hand, it is possible that good readers may find the learning activities in the course inadequate. In summary, reading comprehension performance is positively or negatively affected by teacher support, adaptive instruction, feedback, and engagement in reading activities in the classroom.

1. INTRODUCTION

Reading comprehension is a skill that develops in the process, includes various stages, and deepens with different layers. The monitoring-based guidance of teachers makes this process effective and efficient. In addition to its cognitive multilayeredness, the reading process can reach an effective level with pre-reading, reading and post-reading activities inside and out-side the classroom. Kutlu *et al*. (2019) point out that reading comprehension is a multi-dimensional process that is affected by the characteristics of the individual, the text and the context. It also consists of many subcomponents and emphasizes that the ways to be followed for the evaluation

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of this skill should be versatile and comprehensive. An effective reading process should be built on a supportive classroom climate in which the teacher monitors the student and gives feedback, motivation, and encouragement.

An important dimension of the in-class studies is assessment activities aimed at monitoring the student's development, strengths, and weaknesses. It is known that the assessment affects the academic success of the student not only with its cognitive dimensions but also with its affective dimensions. Students' interactions with their teachers play an important role in their learning and attitude. As Federici and Skaalvik (2014) point out, students need to feel that their teachers care about them and their success in order to fully participate in learning activities and perform at their best. The work of Klem and Connell (2004) and Wang and Holcombe (2010) also show that teacher support is important for student engagement and that students' perceptions for the school environment affect their academic achievement directly or indirectly. Teachers support their students by encouraging, motivating, listening helping them, and providing them with the necessary resources of knowledge and materials.

Teacher support is conceptualized in the literature with various contents. Briefly, it is framed as 'information, instruments, feelings or evaluation support for the student. Malecki and Demaray (2003) explain that most of the classifications used can fit into the following common framework: informational support is to give suggestions in a specific area; instrumental support is to provide the necessary resources. While *emotional support* is to inspire confidence, interest or empathy, appraisal support is the giving evaluative feedback to each student. Providing feedback is an important part of teacher support (Sukhram & Monda-Amaya, 2017).

Teacher support can also be classified in two types as emotional support (empathy, sincerity, encouragement, interest, etc.) within the classroom and instrument support (for instance, teachers help students to solve a problem or accomplish a difficult task). Instrument support includes students' perceptions of resources and practical help. These may include teachers' questioning, clarification, correction, elaboration, and modelling behaviours that contribute to comprehension, problem solving, or skill development (Federici & Skaalvik, 2014).

Various studies reveal that emotional support from teachers is associated with students' positive emotions, attitudes, and behaviours such as class participation, effort, low anxiety levels, and high internal motivation (Federici & Skaalvik, 2014; Guess & McCane-Bowling, 2016; Lee, 2012; Ruzek *et al.,* 2016; Sakiz, Pape, & Hoy, 2012). Instrumental support is in the form of concrete and practical assistance that has a strong and direct relationship with students' low level of anxiety, effort, and internal motivation (Federici & Skaalvik, 2014). Supportive teacher-student relationships are significantly associated with student engagement (Lee, 2012). When teachers are more emotionally supportive, there is an increase in students' behavioural engagement and motivation (Ruzek *et al*., 2016). Sakiz, Pape and Hoy (2012) indicated that the emotional support that students perceive encourages academic self-efficacy and academic effort. Guess and McCane-Bowling (2016) argue that supportive teachers create students who are more satisfied with their lives. Lei, Cui, and Chiu (2018) who conducted a meta-analysis (effect size, 121) of 65 studies found that teacher support was significantly associated with students' academic emotions (emotional experiences such as fun, hopelessness, boredom, anxiety, and anger, which can affect learning outcomes). They also reported that these relationships could be treated as positive and negative connections.

Studies also highlight the link between teacher support and students' academic success. The supportive teacher-student relationship influences student achievement, both directly and indirectly, with a greater sense of commitment to school (Hughes *et al*., 2008; Klem & Connell, 2004; Lee, 2012; Reyes *et al.,* 2012; Wang & Holcombe, 2010). Malecki and Demaray (2003) found out that perceived emotional support from teachers was the important and only predictor of students' social skills and academic competence. In addition, Dolapçıoğlu (2019)

pointed out that students' relationship levels with their teachers were higher in the courses they were successful in.

When the subject is customized in the context of reading ability, the relationship of teacher support on reading performance stands out. It is important to note that the teacher-student relationship (Lee, 2012) and teacher support perceived by students (Ma, Luo, & Xiao, 2021; Ma, Xiao, & Hau, 2022), have an impact on reading skills.

The teacher's instructional activities in the classroom are another variable that has an impact on reading comprehension. These activities include encouraging students with questions, giving feedback, relating the text to the preliminary experiences, establishing in-text and out-of-text relationships, making intertextual comparisons, writing, and summarizing. These are effective in maintaining *engagement in reading*. The stimulation of reading engagement refers to supporting students' motivation and providing them with opportunities (Afflerbach & Harrison, 2017; Merga, 2020). Participation/dedication in reading is vital for reading performance (Lee *et al.,* 2021). Lei, Wen, Li, Kong, Chen, and Li (2019) concluded that teacher support through metacognitive strategies improved reading comprehension. Gambrell (1996) also emphasizes the critical role of the teacher in creating a classroom culture that encourages reading motivation.

In Türkiye, the interest shown in the role of the teacher in students' reading performance is little if any. However, the reasons why Turkish students' reading comprehension levels are far below expectations in international and national student monitoring programs should be investigated from various aspects. Approximately 67% of the 4th and 8th-grade students in the field of Turkish language in the ABIDE (Monitoring and Evaluation of Academic Skills) project (2018) were in the intermediate and below levels (Parlak, 2019; Yıldırım and Ozgurluk, 2019). A similar situation was observed in the central examinations carried out to be placed in secondary education schools. In 2022 and 2021, the average number of correct answers of students in the Turkish language test was 9 out of 20, and the number of correct answers for 63% of students was between 0 and 10. In 2020, there was an average of 7 correct answers in the Turkish language test (MEB, 2020; 2021; 2022). The PISA 2015 and 2018 results also showed that there were some fundamental problems in reading comprehension. The reading literacy average of 15-year-old Turkish students was below the OECD average, and more than half of the students were at the second level or below (OECD, 2016; 2019).

With the data of large-scale monitoring projects such as PISA, PIRLS, or ABIDE, significant inferences on the depths of the education system can be obtained. In studies carried out in Türkiye, reading comprehension achievement was widely examined in relation to the number of read books, the educational background of parents, and socio-economic level. Although the relationship between reading performance and the role of the teacher and in-class activities was clearly shown in the literature, this issue has not been sufficiently emphasized as a part of the classroom teaching and evaluation process.

Within the scope of PISA 2018, the classroom climate, the teacher's initiatives, behaviours, and the effect of classroom teaching practices on reading performance were discussed in detail in the language courses. The change in categories such as teacher enthusiasm, teacher support, and teacher behaviour from the point of view of the students was examined in general terms in terms of countries. In this study, *teacher support, teacher feedback, adaptive instruction, teacher stimulation of reading engagement,* and *in-class reading activities* were discussed in regard to Turkish students' reading performance in PISA 2018. In this respect, it is foreseen that significant inferences can be made for the development of reading in the Turkish education system from the results of the study.

2. METHOD

2.1. The Database and Sample

This study has a sectional design that examines the relationship between student reading achievement and certain variables in PISA 2018 dataset. The reading scale and student survey data of Türkiye sample were taken from PISA 2018 database (https://pisadataexplorer.oecd.or g/ide/idepisa/) by analyzing the relationship of the variables to be investigated.

Nomenclature of Territorial Units for Statistics (NUTS) was used to determine the Türkiye sample of the PISA 2018 project. Accordingly, 186 schools representing 12 regions and 6890 students participated in the study with stratified sampling. 44% of the 15-year-old students representing Türkiye are educated in Anatolian High Schools, 31% in Vocational and Technical Anatolian High Schools and 14% in Anatolian Imam-Hatip High Schools. 0.3% of the students are at the secondary school level. 49.6% of the sample of Türkiye is female and 50.4% is male.

2.2. Data Analysis

In the process, through the data analysis tool offered by OECD, our analyses that provided the basis of this research have been carried out, and reports were generated from PISA datasets. In the secondary analyses conducted on the server, Türkiye's PISA 2018 *reading ability scale*: *Overall Reading*, the following variables reported by the students were correlated: *Teacher support, emotional support, feedback, adaptive instruction, teacher stimulating of reading engagement,* and *in-class reading activities* in Turkish/Turkish Language and Literature course.

Adaptive instruction is inferred from students' responses to the question of ST212; teacher feedback was obtained using students' responses to ST104 that a trend question; teachers' stimulation of reading engagement was obtained based on a trend question (ST152) from PISA 2009; teacher support was inferred from students' responses to ST100; and teacher-directed instruction was gathered from ST102. The details of other variables can be seen in Table 1.

Table 1. *List of categories and items numbers.*

Categories of analysis		PISA ITEMS ID
Student-teacher relations (reported by students)	Teacher support	ST100
	Teacher feedback	ST104
Engagement in reading activities	Teacher-directed instruction	ST102
	Teaching practices in Turkish language course	ST153
Classroom instruction in reading-teacher strategies	Teachers' stimulation of reading engagement	ST152
Self-related cognition related to learning	Teacher emotional support	ST211
	Adaptive instruction	ST212

The screenshot of the system enabling secondary analysis at PISA 2018 database was presented in Figure 1. In the analysis, it was determined whether there was a significant difference between the variables in terms of average reading scores. The p values were presented in the tables.

Figure 1. *PISA IDE data analysis tool.*
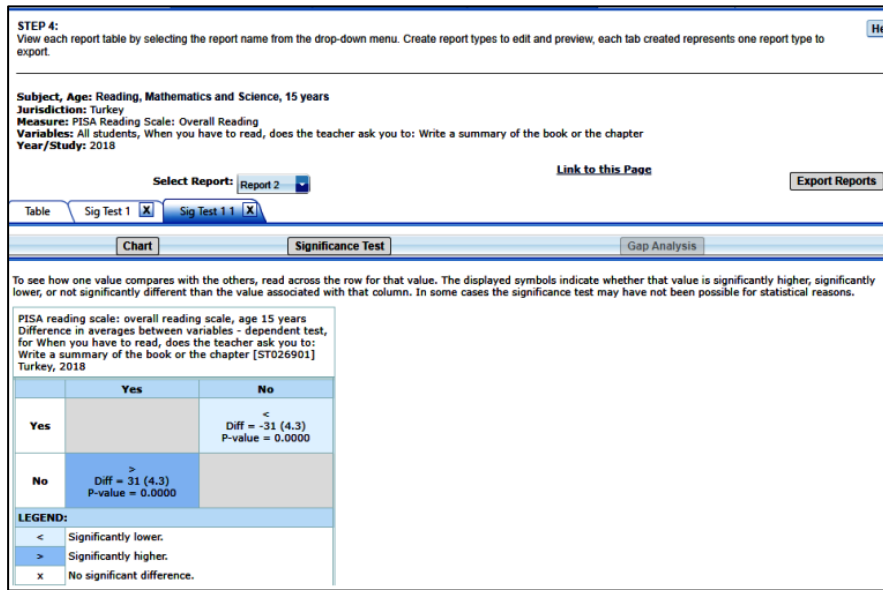
3. RESULTS

In addition to reading performance in PISA 2018, the results obtained from the data collected for the 'classroom climate perceived by the students' in Turkish/Turkish Language and Literature courses were discussed under the subheadings of *teacher support (help and emotional support), feedback, adaptive instruction, the stimulation of reading engagement, and in-class reading practices.*

3.1. Teacher Support, Feedback, Adaptive Instruction, and Reading Performance

According to the perception of receiving help as an indicator of teacher support, the average overall reading score of the Türkiye sample varies. In the Turkish/Turkish Language and Literature course, the average reading score of the students who stated, "Teacher helps students with their learning" and those who have a negative perception of help were different.

Table 2. *Help perception and reading performance.*

	Every lesson (468)	Most lessons (472)	Some lessons (452)
Most lessons (472)	Diff = 4 (3.0) *p*-value = 0.2072		
Some lessons (452)	**Diff = 16 (4.6)** ***p*-value = 0.0005**	**Diff = 20 (4.1)** ***p*-value = 0.0000**	
Never or hardly ever (452)	Diff = 15 (9.1) *p*-value = 0.0897	**Diff = 19 (8.2)** ***p*-value = 0.0190**	Diff = 1 (7.9) *p*-value = 0.9445

As can be seen in Table 2, the average reading score of students who reported that the teacher helped in "most lessons" was considerably higher than those who reported that the teacher "sometimes" helped or "never" helped.

A similar situation was with regard to additional assistance. According to the answers given to the question "The teacher gives extra help when students need it", Türkiye's general reading scale average scores varied.

Table 3. *Perception of extra help and reading performance.*

	Every lesson (466)	Most lessons (475)	Some lessons (459)
Most lessons (475)	**Diff = 9 (2.8)** **_p_-value = 0.0017**		
Some lessons (459)	**Diff = 7 (3.3)** **_p_-value = 0.0244**	**Diff = 16 (3.7)** **_p_-value = 0.0000**	
Never or hardly ever (451)	**Diff = 15 (6.3)** **_p_-value = 0.0178**	**Diff = 24 (6.6)** **_p_-value = 0.0003**	Diff = 7 (5.5) _p_-value = 0.1785

As can be seen in Table 3, there is a significant difference between the reading comprehension performance of the students who reported that the teacher gives extra help in every or most lessons and the students who stated that they hardly helped. The average reading score of students who report that the teacher helped in "most lessons" is considerably higher than students who reported that the teacher "sometimes" helped or "never" helped. In other words, when the perception of receiving help is positive, reading performance is also high.

When we look at the relationship the students establish with the teacher, which is *the emotional support*, it is seen that there is a difference in reading performance. The resulting difference points to a complex situation (see Table 4).

Table 4. *Teacher listening to and paying attention to students' views.*

	Strongly disagree (448)	Disagree (472)	Agree (468)
Disagree (472)	**Diff = 24 (4.8)** **_p_-value = 0.0000**		
Agree (468)	**Diff = 20 (4.7)** **_p_-value = 0.0000**	Diff = -3 (3.5) _p_-value = 0.3225	
Strongly agree (470)	**Diff = 23 (5.2)** **_p_-value = 0.0000**	Diff = 1 (4.6) _p_-value = 0.8169	Diff = 2 (3.5) _p_-value = 0.4945

There is a significant difference between the reading success of the students who stated that, "I strongly disagree" with the statement "The teacher listened to and paid attention to my views on how to do things" and those who stated, "I do not agree", "I agree" and "I totally agree", and this difference is statistically significant.

A similar situation is seen with students who reported that, "The teacher made me feel confident in my ability to do well in the course".

Table 5. *Ensuring that the teacher has confidence in the students' abilities.*

	Strongly disagree (446)	Disagree (481)	Agree (469)
Disagree (481)	**Diff = 35 (4.2)** **_p_-value = 0.0000**		
Agree (469)	**Diff = 23 (4.3)** **_p_-value = 0.0000**	**Diff = 12 (2.8)** **_p_-value = 0.0000**	
Strongly agree (458)	**Diff = 13 (5.4)** **_p_-value = 0.0193**	**Diff = 22 (4.8)** **_p_-value = 0.0000**	**Diff = 10 (4.4)** **_p_-value = 0.0190**

As can be understood from Table 5, the big difference, here, is poor reading performance, especially among students who firmly stated that "the teacher does not listen to their views' and

"the teacher doesn't enable them to feel confident" in class. However, student responses do not indicate a linear development.

The feedback perception of the students in the Turkish/Turkish Language and Literature course is also seen to be related to the average scores of the general reading scale (see Table 6).

Table 6. *Feedback: Powerful aspects.*

	Never or almost never (468)	Some lessons (459)	Many lessons (474)
Some lessons (459)	**Diff = 9 (2.9)** **p-value = 0.0016**		
Many lessons (474)	Diff = 6 (4.5) p-value = 0.1959	**Diff = 15 (3.5)** **p-value = 0.0000**	
(Almost) every lesson (468)	Diff = 0 (5.4) p-value = 0.9671	Diff = 9 (4.6) p-value = 0.0575	Diff = 6 (3.8) p-value = 0.1146

The reading score of the students who thought that they receive feedback on their good aspects in "most courses" is significantly higher than the those who thought that they receive feedback on their good aspects in "some courses". The scores of the students who thought that they had never received any feedback have not changed compared to those who thought that they had received some feedback in each lesson.

An inverse relationship emerged between students who reported *receiving feedback from the teacher on how to improve themselves* and students who reported that they did not.

Table 7. *Feedback: Aspects that could be improved.*

	Never or almost never (473)	Some lessons (467)	Many lessons (466)
Some lessons (467)	**Diff = 6 (3.1)** **p-value = 0.0458**		
Many lessons (466)	Diff = 8 (4.9) p-value = 0.1218	Diff = 1 (3.4) p-value = 0.7072	
(Almost) every lesson (459)	**Diff = 14 (4.7)** **p-value = 0.0033**	**Diff = 8 (3.6)** **p-value = 0.0366**	Diff = 6 (3.8) p-value = 0.0953

As can be seen in Table 7, students with a negative perception of feedback on the aspects that could be improved have a higher average reading score than students with positive feedback. It should be noted that as the perception regarding the rate of reporting feedback decreases, so does the reading performance score. The same situation was also revealed in the perception of feedback about which areas students can still improve themselves (see Table 8).

Table 8. *Feedback: Areas for improvement.*

	Never or almost never (482)	Some lessons (462)	Many lessons (461)
Some lessons (462)	**Diff = 19 (3.0)** **p-value = 0.0000**		
Many lessons (461)	**Diff = 21 (4.9)** **p-value = 0.0000**	Diff = 1 (3.6) p-value = 0.6986	
(Almost) every lesson (459)	**Diff = 22 (4.6)** **p-value = 0.0000**	Diff = 3 (3.7) p-value = 0.3849	Diff = 2 (3.9) p-value = 0.6368

It is understood that students' reading performance varies according to the perception of positive or negative feedback. As reading performance improves, the frequency of receiving feedback

decreases. This suggests that feedback expectations of students who are successful in reading are also high. On the other hand, there is a high probability that teachers give feedback to poor readers more frequently.

Reading comprehension performance shows a linear relationship with *the teacher's adaptation of the instruction* according to the level and needs.

Table 9. *The teachers' adaptation of the instruction to the needs and level of the class.*

	Never or almost never (442)	Some lessons (452)	Many lessons (475)
Some lessons (452)	Diff = 9 (5.4) *p*-value = 0.0836		
Many lessons (475)	**Diff = 33 (5.2)** ***p*-value = 0.0000**	**Diff = 24 (2.8)** ***p*-value = 0.0000**	
(Almost) every lesson (483)	**Diff = 41 (6.5)** ***p*-value = 0.0000**	**Diff = 31 (4.1)** ***p*-value = 0.0000**	**Diff = 8 (3.0)** ***p*-value = 0.0094**

As can be seen in Table 9, the average reading score of students who stated that "almost every lesson" was organized according to the level and need of the class was much higher than the students who thought that the lesson was "almost never" adapted to the class, and the difference was significant.

From the students' point of view, individual assistance to students who had difficulties in the course made a significant difference in reading scores. The reading performance of the students who reported that they were helped when they had difficulty in "almost every lesson" was higher than the others. In terms of performance level, there were students reporting that they were "almost never" helped or "sometimes" helped when they had difficulties. This can be seen from Table 10.

Table 10. *Helping the student who is struggling individually.*

	Never or almost never (461)	Some lessons (461)	Many lessons (469)
Some lessons (461)	Diff = 1 (4.2) *p*-value = 0.8608		
Many lessons (469)	Diff = 9 (5.1) *p*-value = 0.0957	**Diff = 8 (3.4)** ***p*-value = 0.0230**	
(Almost) every lesson (474)	**Diff = 13 (4.9)** ***p*-value = 0.0064**	**Diff = 13 (3.4)** ***p*-value = 0.0003**	Diff = 5 (3.5) *p*-value = 0.1746

3.1. Teachers' Stimulation of Reading Engagement, Classroom Reading Practices and Reading Performance

Teachers' stimulation of reading engagement is significant in reading performance. The average reading score seems linear, as the teacher stimulates the student to explain his or her views on the text read in the lesson. The difference that arises in this regard is also very remarkable.

Table 11. *Stimulate: Express opinion.*

	Never or hardly ever (442)	Some lessons (451)	Most lessons (480)
Some lessons (451)	**Diff = 9 (4.7)** ***p*-value = 0.0464**		
Most lessons (480)	**Diff = 38 (5.5)** ***p*-value = 0.0000**	**Diff = 28 (3.4)** ***p*-value = 0.0000**	
All lessons (483)	**Diff = 41 (5.6)** ***p*-value = 0.0000**	**Diff = 32 (3.6)** ***p*-value = 0.0000**	Diff = 3 (3.6) *p*-value = 0.3745

As can be seen in Table 11, students who reported that they were not encouraged to express their own opinions have a significantly lower reading average. Students who stated that they were encouraged to express their views on "every course or most courses" had higher reading performance.

Stimulating students *to associate the read text with their own experiences* also affects their reading comprehension performance (see Table 12).

Table 12. *Stimulate: Relate to lives.*

	Never or hardly ever (465)	Some lessons (461)	Most lessons (471)
Some lessons (461)	Diff = 4 (3.2) *p*-value = 0.2478		
Most lessons (471)	Diff = 6 (3.6) *p*-value = 0.0843	**Diff = 10 (3.1)** ***p*-value = 0.0014**	
All lessons (474)	**Diff = 9 (4.7)** ***p*-value = 0.0476**	**Diff = 13 (3.7)** ***p*-value = 0.0006**	Diff = 3 (4.0) *p*-value = 0.4556

Motivating the participation in the course with questions also increases the level of reading comprehension (see Table 13).

Table 13. *Strategies: Motivating questions.*

	Never or hardly ever (464)	Some lessons (462)	Most lessons (469)
Some lessons (462)	Diff = -1 (4.8) *p*-value = 0.7609		
Most lessons (469)	Diff = 5 (5.1) *p*-value = 0.3037	**Diff = 7 (2.9)** ***p*-value = 0.0191**	
All lessons (470)	Diff = 7 (5.8) *p*-value = 0.2453	**Diff = 8 (3.7)** ***p*-value = 0.0256**	Diff = 1 (3.1) *p*-value = 0.6379

In the Turkish/Turkish Language and Literature course, as the frequency of motivating the student's participation in the course with questions increases, the level of reading comprehension also increases. There is a significant difference between the general reading scores of the students who stated that they were motivated by questions in "some courses" and those who stated that they were motivated in "all courses."

The reading average scores of Turkish students participating in PISA 2018 differ according to how the teacher evaluates their in-class practices in reading activities. There is a big difference between the reading scale scores of the students who stated, "the teacher makes a short summary of the previous lesson at the beginning of the lesson" and the students who had negative opinions on this subject, and this difference indicates an inverse relationship (see Table 14).

Table 14. *Teacher giving a summary of the previous lesson at the beginning of the lesson.*

	Every lesson (449)	Most lessons (467)	Some lessons (476)
Most lessons (467)	**Diff = 18 (3.2)** ***p*-value = 0.0000**		
Some lessons (476)	**Diff = 28 (3.3)** ***p*-value = 0.0000**	**Diff = 9 (2.6)** ***p*-value = 0.0003**	
Never or hardly ever (492)	**Diff = 43 (6.9)** ***p*-value = 0.0000**	**Diff = 25 (5.7)** ***p*-value = 0.0000**	**Diff = 16 (5.9)** ***p*-value = 0.0082**

There is a 43-point difference between the students who reported that the teacher "every lesson" made a short summary of the previous lesson at the beginning of the Turkish/Turkish Language lesson and the students who reported that this practice was never made. What is remarkable is that the reading performance score increases as the frequency of teacher reports concerning the summary of the lesson decreases. This may indicate that the expectations of students with high reading performance have not been met. From another point of view, the positive perceptions of students with poor reading performance suggest that their awareness of classroom activities is poor.

Positive and negative responses to *activities related to reading a book or a chapter* result in different appearances in reading performance.

The average reading score of the students who reported that the *summary* of the book or book chapter read in the course was written is lower than the students who reported that the summary activity was not done. This difference is high and significant. This can be seen in Table 15.

Table 15. *Summarizing.*

	No (489)
Yes (458)	**Diff = 31 (4.3)** ***p*-value = 0.0000**

As with the summarization activity, *small group discussion* also indicates an inverse relationship. In the Türkiye sample, the average reading score of the students who reported that small group discussions were held with students reading the same book was lower than the students who reported that they did not, and this difference was significantly higher (see in Table 16).

Table 16. *Small group discussion with students reading the same text.*

	No (476)
Yes (455)	**Diff = 22 (2.8)** ***p*-value = 0.0000**

The same situation is seen in *the activity of comparing the content of the text read with their own experiences*. The reading score of students who reported that this activity was not done was significantly higher than the students who stated that it was done (see in Table 17).

Table 17. *Comparing the content of the text with their own experiences.*

	No (482)
Yes (453)	**Diff = 29 (2.9)** ***p*-value = 0.0000**

In addition, the reading performance of the students who reported that *the text read in the courses was compared with other texts written on similar topics* is lower and statistically significant This can be seen in Table 18.

Table 18. *Comparison with other texts on similar topics.*

	No (481)
Yes (455)	**Diff = 26 (2.6)** ***p*-value = 0.0000**

The average reading score of students who gave a positive opinion about *the writing that was done on the text that was read* was considerably lower than that of students who gave a negative opinion, and this difference is significant. the values can be seen in Table 19.

Table 19. *Writing a text related to the text being read.*

	No (476)
Yes (458)	**Diff = 19 (2.9)** ***p*-value = 0.0000**

As can be seen, the average overall reading score of the students who reported that the *activities of summarizing the text, comparing their own experiences with the content of the text, comparing the text with other texts on similar topics,* and *writing* were not done are much higher than those students who reported that these activities were done. This may be due to the fact that good readers find the teacher's activities inadequate in the lesson, or it may be due to the poor readers' inability to correctly define the activities in the classroom.

4. DISCUSSION

Based on the PISA 2018 data, this study focuses on the role of teacher support, feedback and teaching practices in Turkish/Turkish Language and Literature courses on reading comprehension performance in the Türkiye sample. According to the findings obtained from PISA 2018, there is a significant difference between the average reading score of students whose *perception of the help from the teacher* is positive and those who are negative in the Turkish/Turkish Language and Literature course. The average reading score of students whose perception of receiving help from the teacher is positive is considerably higher than the others. Accordingly, when the perception of help from the teacher is positive, reading performance is also high. Karip (2020) also evaluated the findings in Türkiye in general and found out that students' reading performance scores increased as the teacher support increased. Across OECD, students who reported receiving more teacher support scored lower in reading. For example, participants in schools where teachers often show interest in each student's learning scored an average of 479, while students in schools where teachers report little interest in each student's learning scored an average of 491 (OECD, 2019).

When the relationship that the students establish with the teacher is examined, namely *the emotional support*, it is seen that there is a significant difference in reading performance. There is a remarkable difference between the students who stated ($\bar{x}$ =448) that the teacher "absolutely did not listen" to the students' opinions about how to do something and the reading performance of the other students. The same is true for the students who "strongly disagree" that their teacher builds a sense of confidence that they can succeed. The big difference, here, stands out as poor reading performance, especially for students who firmly state that the teacher does not listen to their opinions and "don't make them feel confident" in class. However, student responses do not indicate a linear development. Karip (2020), in his study, reported that while 64% of students in Türkiye stated that their teacher created a sense of confidence in them that they could succeed; 62% of students thought that the teacher listened to their own views on how to do something. These findings show that the emotional support provided by teachers according to students' statements in Türkiye remains at a lower level than the OECD average. Meşe-Soytürk (2020) investigated teacher support including emotional support and found out that the highest impact on the reading skills of 15-year-old students studying in Türkiye was positively related to the classroom discipline, family support, reading competence perceptions, feeling of a sense of belonging to the school, respectively, and negatively related to teacher support. Karaman (2022) examined the relationship between teacher behavior and reading performance

in PISA 2018 and found that the students who felt supported by their teachers showed higher performance in reading literacy.

The feedback perception of the students in the Turkish/Turkish Language and Literature course was also seen to be related to the average scores of the general reading scale. Students who think they have received feedback on their good attributes in "most subjects" have a reading score significantly higher than those who think they have received feedback on their good attributes in "some lessons". There is a negative relationship between students who reported that they received feedback from the teacher on how to improve themselves and those who reported that they did not. Students with a negative perception of feedback for the purpose of improvement had higher average reading scores than students with positive feedback. The same situation arose in the perception of feedback given so that students could improve themselves. As reading performance increased, the frequency of those stating that he or she received feedback decreased. This suggests that students who were successful in reading also have high feedback expectations. It is also possible that teachers give more frequent feedback to poor readers. Karaman (2022) stated that the teacher feedback was negatively associated with reading performance. Safari (2020) found that teachers in countries above the OECD average often provide feedback and better reading materials to their students than teachers in countries below the average. This result also explains the negative relationship seen in Türkiye. Göçer and Şentürk (2019) pointed out that Turkish teachers used descriptive, process-based, and written feedback less than giving evaluative and verbal feedback for the whole class, and that Turkish language teachers had consensus on the importance of giving feedback in the text processing operation, and they had problems with when, how and which type of feedback could be given to which skill area. Karip (2020) stated that approximately one-fifth of students in Türkiye could not receive feedback from their teachers about their strengths, and how they could improve their performance and weaknesses which they could improve themselves. When the PISA 2018 results are evaluated in terms of the participating countries in general, it is seen that only from 10% to 15% of the students received feedback. In OECD economics specifically, less than 10% of students reported receiving feedback on their strengths "every or almost every lesson", and more importantly, many students reported that they received feedback "never or almost never" (OECD, 2019).

Adaptive instruction is another variable associated with reading comprehension. Reading comprehension performance shows a linear development as *the teacher adapts the lesson according to the level and needs*. The average reading score of the students who stated that "almost every lesson ($\bar{x}$=483)" is organized according to the level and needs of the class is much higher than the students who think that the lesson is "almost never ($\bar{x}$=442)" adapted to students, and the difference is significant. From the students' point of view, individual assistance to the students who had difficulties in the lesson also made a significant difference in the reading scores. Students who report to have been helped when they had difficulty in "almost every lesson" have higher reading performance than others. In terms of performance level, students who report to have been "almost never" helped or "sometimes" helped when they have difficulties are at the bottom. Karaman (2022) found out that the adaptation of instruction showed a positively significant relationship with reading literacy in Türkiye. Adapting the course requires expert knowledge. Vaughn (2019) found that teachers who made adaptation to the specific needs of their students could change their teaching according to the individual situation and the students they worked with. Houtveen *et al.* (1999) found that adapting the instruction during the initial reading process provided more successful reading results. Qian and Lau (2022) also found out that adaptive instruction was associated with reading performance.

Teachers' stimulation of reading engagement has been monitored since PISA 2009. According to the findings, the encouragement of teacher to express opinions and associating the content

with their schemata in classroom reading practices and motivating student participation with questions are important parameters in reading performance. For example, the average reading score develops linearly when the teacher encourages the student to express his or her views on the text they have read in the lesson. The average reading score of the students who stated that they were not encouraged to express their opinions was significantly lower. Encouraging students to relate the text they have read to their own lives also affects reading comprehension performance. In addition, as the frequency of motivating the student's participation in the lesson with questions increases in the Turkish / Turkish Language and Literature course, the level of reading comprehension also increases. Based on the PISA 2018 findings, Qian and Lau (2022) showed that teacher encouragement was positively related to reading performance at both student and school levels. Guthrie *et al.* (2006) identified that stimulating tasks in reading increased interest, internal motivation, and reading comprehension. Studies show that teachers have a critical role in promoting motivation to read intrinsically (e.g., De Naeghel *et al.*, 2014; Gambrell, 1996; Guthrie, McRae, & Klauda, 2007). Verdegaal (2021) suggests that the decline in the Netherlands' PISA reading performance is related to reading motivation. Finally, there is a 43-point difference between the students who reported that they "never or almost never" wrote a short summary of the previous lesson at the beginning of the lesson and those who reported that this practice was done "every lesson." As the frequency of the teacher's reporting of summarizing the lesson decreased, the reading performance score increased.

The average reading score of students who reported that there were no *summarizing the text, comparing their own experiences with the content of the text, comparing the text with other texts on similar topics, and writing activities related the text* was much higher than the students who reported that these activities were carried out. The average score of the students who pointed out that they summarized the text they read in the course (72%) was 458, while the average score of those who reported that they did not summarize the text (27%) was 489. There is a 22-point difference between the average of students who reported that small group discussions "was done" (45%) and students who reported that, "it was not done" (53%), and the difference is significant. There was also a 29-point difference in the statements for comparing the text to their own experience (yes= 52%, no=46). Intertext comparison (yes= 53%, no=45) and text-related writing (yes= 49%, no=49) show a 26-point difference in favor of those who reported negatively. It can be thought that the expectations of the good readers may not be met by the teacher, and that the awareness of the poor readers about the classroom activities is weak. From another point of view, the quality of in-class reading activities can be discussed. In the literature, the opinion that summarizing, criticizing, and evaluating the text affects reading performance is dominant. Kutlu *et al.* (2011) pointed out that the probability of predicting whether the reading comprehension was successful or not was influenced by the variable that the teacher had them write a summary about the texts they read. Dilidüzgün (2013) identified that the frequency of teachers' summary studies was limited to the summary studies in the book (97%). In addition, 31% of the teachers argued that the ability to summarize was not taught, and 47% argued that it was partially taught. Erdağı-Toksun (2017) pointed out that 4 out of 15 teachers had their students write a summary during reading-comprehension activities. In the project conducted by Kutlu et al. (2019), there was an increase in teachers' initiatives and behaviors such as giving feedback to students about reading comprehension, encouraging for discussion, encouraging them to express their opinions, making them associate it with their own experiences, writing something about what they read and summarizing what they read.

The present study has identified that teacher-related variables play crucial roles in students' reading achievement. Reading comprehension performance is positively or negatively associated with teacher support, teacher's adaptive instruction, teacher feedback, engagement in reading activities and in-class teaching practices. In order to increase reading performance, it can be recommended to focus on the teacher's behavior in the classroom.

4.1. Limitations

The study does not include a comparison with the data of the countries in Türkiye's economic bracket; it has limitations in terms of not addressing the differences that may occur in terms of gender, school type, reading habits and socio-economic variables.

Declaration of Conflicting Interests and Ethics

The authors declare no conflict of interest. This research study complies with research publishing ethics. The scientific and legal responsibility for manuscripts published in IJATE belongs to the author.

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