

Research Article

Analysis of Students' Reading Comprehension Ability Based on Reading Motivation, School Climate, Teacher-Student Interaction, and Parental Involvement

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Abstract.

Improving students' literacy ability is one of the targets of the Sustainable Development Goals (SDG), especially Goal Number 4 which pertains to Quality Education. The literacy problem with students' ability to understand the contents of what they are reading still needs to be improved. This study analyzes students' reading comprehension ability and the factors influencing it. Based on results of previous studies, the factors that are suspected of influencing reading comprehension ability are reading motivation, school climate, teacher-student interaction, and parental support. This study involved 288 high school students selected using simple random sampling techniques. Data were collected by filling out questionnaires and analyzed using descriptive statistics and logistic regression tests. The results show that reading motivation, school climate, teacher-student interaction, and parental involvement significantly affected students' reading comprehension ability. Students who are more motivated, in good school environments, have better interactions with teachers, and receive more support from their parents have better reading comprehension abilities. Therefore, to improve students' reading comprehension ability, it is essential to optimize the role of the school and family environments.

Keywords: reading comprehension, reading motivation, parental involvement, school climate, teacher-student interaction

1. Introduction

Literacy skills are essential skills for students to have as a provision in building knowledge and skills. The 2022 Indonesian Report Card data shows that the literacy skills of students in Indonesia are included in the moderate category, meaning that 40-70% of students achieve minimum literacy competencies [1]. Based on the level of education, the percentage of high school students with literacy competencies above the minimum is lower than elementary and junior high school levels.

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Published: 18 April 2025

Publishing services provided by
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Selection and Peer-review under the responsibility of the ICESRE Conference Committee.



Improving students' literacy skills is one of the targets of the Sustainable Development Goals (SDGs), especially Goal Number 4, namely Quality Education. Literacy is a critical component that determines the quality of education. Students with a higher reading literacy level tend to achieve better learning outcomes. Literacy in reading impacts students' ability to understand lesson material but can also increase students' enthusiasm for learning [2].

Reading comprehension ability is part of the literacy skills that students must possess at all levels of education, including high school. Previous research shows that reading comprehension ability is related to reading motivation. Reading comprehension ability has a unidirectional and positive relationship with reading motivation [3,4]. Other studies have also found that reading motivation influences reading comprehension activities significantly [5].

The ability to read comprehension is also inseparable from the role of the school environment, such as through school climate and teacher-student interaction. A conducive school climate creates a comfortable and safe learning atmosphere so students can focus and be motivated to learn. Teachers who can communicate well and provide constructive feedback can help students overcome difficulties in reading and understanding texts.

Parents also need to support students' reading comprehension abilities through parental involvement. Parents actively involved in their children's learning activities (such as guiding reading at home and supporting children) can increase their motivation and reading abilities [6]. Consistent parental support can help students develop good reading habits and improve their understanding of reading content.

Research on reading comprehension abilities has been carried out partially. This study attempts to elaborate on several factors that influence the reading comprehension abilities of high school students. This study aims to comprehensively analyze how reading motivation, school climate, teacher-student interaction, and parental involvement affect the reading comprehension abilities of high school students. The results of this study are expected to provide deeper insight into the factors (reading motivation, school climate, teacher-student interaction, parental involvement) that influence reading comprehension ability and provide recommendations for improving student literacy skills in high schools.

2. Method

Using cluster sampling procedures, 288 high school students from East Jakarta City, DKI Jakarta Province, Indonesia, served as the study's respondents. There were 141 female students and 147 male students among the responders. The average age of the respondents, who ranged in age from 16 to 18, was 17.

Reading motivation, school climate, student-teacher interaction, and family participation in reading comprehension were among the research data. Students filled out the research instrument individually as part of the self-report approach, which was used to collect research data in May and June of 2024. Descriptive analysis and logistic regression tests were used to assess the data after they were collected.

Reading motivation measures the drive from within to read to absorb the information needed, as seen from seven dimensions: curiosity, involvement, grades, competition, social recognition, emotional regulation, and relief from boredom [7]. The study's instrument comprised 34 items with strongly agree, agree, disagree, and strongly disagree as response possibilities. The Cronbach's alpha rating for the reading motivation tool is 0.924, indicating its validity and reliability.

School Climate measures students' perceptions of the school environment conditions seen from three dimensions: physical environment, teacher-student interactions, and peer relationships [8]. The study's instrument comprised 27 items with strongly agree, agree, disagree, and strongly disagree as response possibilities. The Cronbach's alpha rating for the school climate instrument is 0.907, indicating its validity and reliability.

Teacher-student interaction is a reciprocal interaction between teachers and students in learning activities seen from eight dimensions: leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, and strict. The study's instrument comprised 40 items with strongly agree, agree, disagree, and strongly disagree as response possibilities. The Cronbach's alpha rating for the teacher-students interaction instrument is 0.861, indicating its validity and reliability.

Parental involvement measures students' perceptions related to the form of parental involvement in supporting reading interests seen from two dimensions, namely parent-ing and learning at home [9]. There are 42 items in the test, and the possible answers are always, frequently, sometimes, and never. The parental involvement instrument is valid and reliable, with a Cronbach's alpha value of 0.962. Reading comprehension ability is the ability of students to understand the contents of reading as seen from

four dimensions: applied reading ability, interpretive ability, affective ability, and lexical ability [10]. The instrument consists of 18 items with response options consisting of all the time, almost all the time, rarely, and never. The Cronbach's alpha rating for the reading comprehension instrument is 0.915, indicating its validity and reliability.

3. Result and Discussion

The variables measured in this study consisted of reading motivation, school climate, teacher-student interaction, parental involvement, and students' reading comprehension skills. The results of the study are presented in Figure 1.

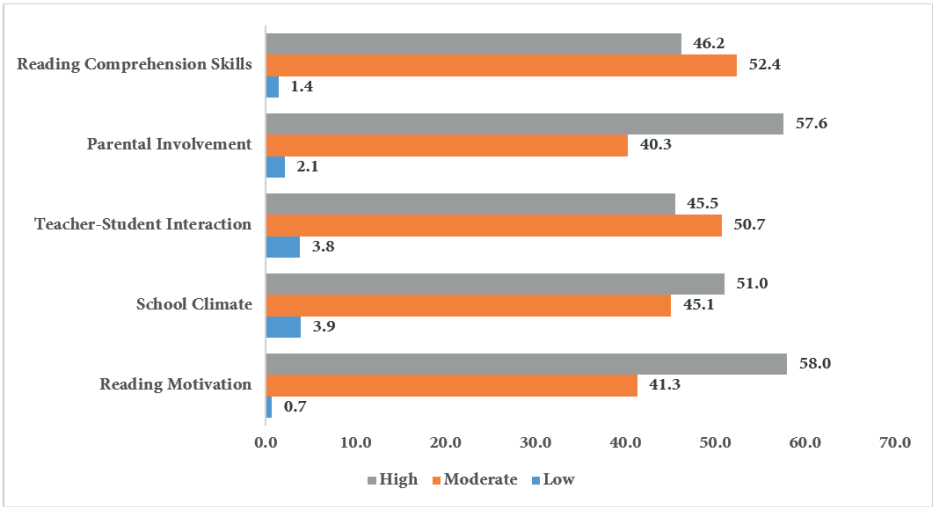


Figure 1: Distribution of respondents based on reading motivation, school climate, teacher students' interaction, parental involvement, and reading comprehension skills category.

3.1. Reading Motivation

Reading motivation is a drive from within and outside students to read and understand texts. The study results showed that more than half of the students had high reading motivation (58.0%). This result indicates that students have high motivation to read and understand texts. Reading motivation is very important for high school students. Reading motivation is closely related to fostering a positive attitude towards literacy [11]. In addition, reading motivation can also help students achieve academically [12].

3.2. School Climate

School climate is students' perceptions of the condition of the school environment. The study results showed that more than half of the students rated the school climate as high (51.0%). This result indicates that students rate the condition of their school environment as being in good condition. School climate is related to students' subjective well-being and will ultimately increase student involvement in school activities [13]. Students with good school climate assessments will also perform well academically [14]. School climate is also a determining factor for school outcomes. The better the school climate, the better the outcomes [15].

3.3. Teacher-Student Interaction

The interaction between teachers and students is a process of reciprocal communication that occurs between teachers and students, especially in learning activities. Student-teacher interaction is crucial for improving learning quality and student motivation. The study showed that students assessed teacher interaction as being in the moderate (50.7%) and high (45.5%) categories. These results indicate that teacher-student interaction is in a good category. Good interactions between teachers and students can improve students' perceptions of their well-being in class [16] and also can determine students' academic achievement in class [17].

3.4. Parental Involvement

Parents have an important role in children's education. Children spend more time with their family than they do in school. Parents are expected to help improve their children's academic performance [18]. The study showed that parental involvement was in the moderate (40.3%) and high (57.6%) categories. These results indicate that students receive support from their parents in the good category. One strategy for improving children's academic achievement is for parents to become more involved in their education [19]. Compared to children who do not receive parental help, children who receive parental support achieve higher academic grades [20].

3.5. Reading Comprehension Ability

Reading comprehension is a person’s ability to understand, interpret, and analyze the contents of a reading. This ability is important for students to have. Reading comprehension ability plays a vital role in achieving students’ academic success. This ability is also needed in the world of work. More than half of students have reading comprehension abilities that are in the moderate category (52.4%). These results indicate that students’ reading comprehension abilities are reasonably good. Reading comprehension abilities affect students’ academic achievement. Students with poor reading comprehension abilities will have difficulty understanding instructions, decreasing academic achievement [21].

3.6. The Influence of Reading Motivation, School Climate, Teacher-Student Interaction, and Parental Involvement on Students' Reading Comprehension Ability

This study analyzes the influence of reading motivation, school climate, teacher-student interaction, and parental involvement on students’ reading comprehension abilities. The data analysis used was a logistic regression test. The results showed that reading motivation, school climate, teacher-student interaction, and parental support significantly affected students’ reading comprehension ability. The influence given was positive. Table 1 displays the outcomes of the logistic regression test. The independent variable has a very excellent ability to explain the dependent variable, as indicated by the Nagelkerke R² value of 0.833.

TABLE 1: The results of the logistic regression test.

Model	Beta	Sig.
Constant	-53.311	0.000
Reading Motivation	0.218	0.002
School Climate	0.239	0.000
Teacher-Student Interaction	0.109	0.040
Parental Involvement	0.086	0.030
Chi-square	280.199	
Df	4	
Sig	0.000	
Nagelkerke R ²	0.833	

Reading motivation is the first factor that influences reading comprehension ability ($\beta=0.218$, $p<0.01$). Reading motivation has a significant effect on students' reading comprehension ability. Students' reading comprehension skills increase with their level of reading motivation. The study's findings are consistent with earlier research showing that reading motivation affects reading comprehension skills. Previous studies have demonstrated a strong correlation between pupils' reading comprehension skills and their motivation to read [22]. Reading motivation increases students' success in understanding texts [23]. The better the students' motivation, the better their ability to understand the text [24].

The second factor influencing reading comprehension is school climate ($\beta=0.239$, $p<0.01$). Students' reading comprehension skills are greatly enhanced by the school climate. The study's findings corroborate earlier studies showing that school atmosphere affects reading proficiency [25]. A better school climate can improve students' reading comprehension ability.

The third factor that influences reading comprehension ability is teacher-student interaction ($\beta=0.109$, $p<0.05$). Students' reading comprehension skills are significantly impacted by interactions between teachers and students. Students' reading comprehension skills improve with improved teacher-student interactions. Effective teacher-student interaction improves students' reading comprehension skills [26]. The more frequent teacher-student interactions in the classroom positively correlate with the increase in students' reading comprehension skills [27].

The fourth factor that influences reading comprehension ability is parent involvement is a factor influencing reading comprehension skills ($\beta=0.086$, $p<0.05$). Families, especially parents, have an essential role in children's education, encouraging children's interest in reading. Parental involvement has a significant effect on students' reading comprehension skills. The higher the parental involvement, the better the student's ability to understand the reading contents. Children's motivation and reading abilities can be improved by parents who actively participate in their education (e.g., by supporting and leading reading at home) [6].

4. Conclusion

The results showed that reading motivation, school climate, teacher-student interaction, and parental involvement significantly affected students' reading comprehension ability.

The higher a student's reading motivation, the better the student's ability to understand the contents of the reading. School climate also determines students' reading comprehension ability. The better the quality of the school environment, the better the student's ability to read comprehension. Reading comprehension ability is also influenced by teacher-student interaction. The better the interaction between teachers and students, the better the students' reading comprehension ability. In addition, reading comprehension ability also increase with the higher support students receive from their parents. Thus, maximising the impact of the home and school contexts is crucial to raising students' reading comprehension skills..

Acknowledgements

The researcher would like to express gratitude to the Universitas Negeri Jakarta Faculty of Engineering for providing financing for this study in accordance with the assignment agreement letter number T/034/5.FT/Kontrak-Penelitian /PT.01.03/III/2024 and the Rec-tor's Decree Number 325/UN39/HK.02/2024.

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