

Character moderation readiness: analysis of elementary school students' viewing readiness

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Abstract

The purpose of this study is to examine how elementary school students' viewing comprehension abilities relate to learning readiness and character moderation before instruction is implemented. Viewing comprehension is an emerging language skill that is essential for meeting the challenges of the 21st century and the demands of digital media development. This research employed a quantitative approach with a descriptive-correlational design and multiple linear regression analysis. The sample consisted of 76 teachers and 76 fifth-grade students from eight elementary schools in Sleman Regency, Yogyakarta. The instruments used included a learning readiness questionnaire, a character moderation questionnaire, and a viewing comprehension test based on minimum competency assessment items. The analysis revealed that neither learning readiness nor character moderation significantly influenced students' viewing comprehension skills, indicated by an R^2 value of 0.006 and a significance level of $p > 0.05$. These findings suggest that the contribution of both variables is very low. However, this does not necessarily imply the complete absence of a relationship between these variables. The small contribution of learning readiness and character moderation suggests that other internal and external factors should be explored further.

Keywords: Learning readiness; student character; viewing skills; elementary school

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INTRODUCTION

Viewing skills are essential for students to comprehend and construct meaning from what they read, hear, and observe (Huri et al., 2025). These skills are especially crucial for equipping students to meet the demands of the twenty-first century, since schools are forced to encourage students' critical engagement with knowledge due to the quick development of technology. The relationship between technological development and viewing skills lies in the fact that technology delivers information in increasingly fast-paced and complex ways, thus requiring strong critical thinking to make informed decisions and effectively communicate ideas, one of which is supported by viewing skills (Salinas & Pulido, 2017). Strengthening supporting variables is equally crucial for developing seeing skills as it is for cognitive abilities. These factors include learning readiness and students' prior knowledge, both of which have a big impact on how these

skills are developed (Sari et al., 2021).

Writing, speaking, listening, presenting, reading, and viewing are the six essential language skills listed in the Merdeka Curriculum. One of these is watching, which has been incorporated into Indonesian language training since 2023 (Ni'mah et al., 2023). This skill is essential for helping elementary school pupils understand material, especially considering the demands of technological advancements in the twenty-first century. Both at home and at school, today's pupils are regularly exposed to electronic and digital media (Atma et al., 2021).

The level of proficiency in viewing abilities for learning Indonesian is still poor in Sleman Regency, Yogyakarta. Although the 2022 educational report suggests advances in the reading scores of elementary pupils in Sleman Regency, it does not provide a clear breakdown of individual skills, particularly viewing. To evaluate students' true viewing skills, the researchers decided to carry out some first fieldwork. 76 fifth-grade kids participated in the initial data collection, which was conducted in several Sleman Regency public elementary schools. They were given 2024 minimum competency assessment questions centered on markers of seeing abilities, and the learning process was also observed. The fifth-grade kids' seeing abilities were found to be at a reasonable level. One main shortcoming observed was the students' readiness to engage with the learning content (Gou et al., 2024). These results clearly show that several things affect students' viewing skills. These criteria include not just cognitive needs but also affective characteristics that help moderate and alter learning activities to increase student engagement

Beyond addressing students' cognitive development through the implementation of appropriate instructional models (Lestari et al., 2021), creative learning media (Putu et al., 2021), and supportive technologies, enhancing students' readiness for learning is a crucial factor in fostering the development of their viewing skills. Strengthening readiness has the potential to significantly increase students' learning motivation (Gyeltshen & English, 2023). In this regard, the Indonesian government has highlighted the importance of improving students' viewing skills in response to contemporary demands by integrating relevant information and activities into Indonesian language instruction (Cahyaningati & Lestari, 2018). These programs help teachers pinpoint the fundamental qualities and learning habits that must be fostered in order to guarantee that pupils are sufficiently equipped to interact with viewing-based learning materials.

Students' readiness to learn prior to engaging in instructional activities is a critical determinant of their ability to solve problems, confront life challenges, and cultivate positive character traits. This readiness is shaped by multiple factors, including physical condition, psychological state, needs, skills, knowledge, character, and prior experiences (Ortega-Dela Cruz, 2017). Consequently, student-centered instructional design must correspond with learners' intrinsic characteristics, which inherently differ among individuals, to guarantee their sufficient readiness to assimilate instructional material and be directed by educators towards achieving learning objectives (Syafi & Fauziyah). Prioritizing learning readiness, particularly as it relates to students' character, is therefore essential in minimizing barriers to achieving educational outcomes. Furthermore, Gülgez et al. (2021) underscore the importance of strong school-family cooperation, noting that while formal education fosters knowledge and judgment, families play a vital role in nurturing ethical values, character, and behavioral development, thereby reinforcing children's understanding of collaboration.

Learning readiness is central to numerous educational theories. For example, the attribution and personal causation theory by Dynan et al. (2008) asserts that students' readiness to learn equips them with essential learning motivation and critical thinking skills. However, each theory highlights different aspects of how to enhance learning readiness. According to Alwadaeen and Piller (2022), three main things must support getting students ready to learn: the physical layout of the classroom, the methods used for instruction, diagnosis, and evaluation, and the social-emotional learning environment. All three of these things depend on the teacher being involved. Accordingly, students' readiness to engage in learning is influenced by a variety of internal factors that emphasize cognitive abilities and external factors that highlight aspects

of students' character.

Viewing skills refer to productive student activities involving the observation and comprehension of learning materials delivered through visual, audio, or audiovisual media (Begoray et al., 2014). These skills, positioned alongside reading, involve the ability of elementary school students to understand, interpret, reflect on, and extract meaning from texts, aligned with instructional goals that promote development in the cognitive, psychomotor, and affective domains. In this context, visual-literacy-based learning is often used to talk about viewing instruction.

Studies from various countries have explored strategies for viewing instruction. For example, research in China by Liu et al. (2024) demonstrated that viewing activities supported by live video streaming positively impacted students' attention to the videos, learning outcomes, performance, and metacognitive development. In the same way, visual literacy, which has the same focus, scope, and approach as viewing, has been shown to help students understand abstract ideas, help them picture messages, and explain data in spatial contexts by bringing together different types of text (Demirezer & İlkörücü, 2023). In line with this, Özsoy and Saribaş (2021) emphasized that visual-based education helps students recognize the importance of visualization skills in daily life and supports the development of critical thinking. Because these activities are part of the learning process, student readiness becomes an essential factor that must be addressed beforehand. Viewing-based learning activities often involve multimodal texts such as videos and other visual media, which help sharpen students' abilities to understand and interpret meaning from the material (Oktavianto, 2022). The literacy competencies that emerge from viewing should ideally be supported by students' readiness to engage, which in turn is facilitated by instructional innovations implemented by teachers.

Learning outcomes reflect students' accountability after completing instructional activities and can take various forms (Nur et al., 2023). Achieving satisfactory results that align with learning objectives can be influenced by the readiness of the teacher, including their confidence and preparedness in applying instructional approaches (Lay & Chandrasegaran, 2018). Moreover, infrastructure, facilities, and the effective use of instructional media provided by the school also contribute significantly to enhancing student learning outcomes (Vatamaniuk et al., 2024).

A study on students' learning readiness by Atma et al. (2021) revealed that learning motivation has a positive effect on learning outcomes, accounting for 32% of the variance. The findings demonstrate that students' motivation prior to the learning process significantly contributes to improved academic performance. However, the study also identified that other variables, such as the teacher's teaching style, could affect the results. In another study, (Alannasir, 2020) emphasized that understanding student character can serve as a powerful tool for teachers to develop students' potential. Nevertheless, that study did not explore which specific aspects of student character need to be integrated and prepared to enhance viewing-based learning outcomes. Meanwhile, Liu et al. (2024) highlighted that viewing activities positively impacts students' academic performance and promotes active peer interaction. However, they noted that further investigation is needed into the role of student character as a moderating factor in viewing-based learning instruction. Therefore, the present study addresses the gaps identified in previous research by focusing on the role of learning readiness and character moderation in supporting students' viewing skills development and improving their learning outcomes.

METHODS

This study employed a quantitative approach with a descriptive-correlational research design. This design was used to explore the strength and direction of the relationship between students' readiness-related character traits and their learning outcomes in viewing skills within elementary education. Data collection was conducted through a survey method. A questionnaire

was distributed to measure students' readiness-related character traits, and a performance test was administered to assess students' viewing comprehension skills. Participants in this study were both teachers and students from learning groups in eight elementary schools located in the Kapanewon subdistrict of Sleman Regency, Yogyakarta. A total of 76 students were selected as a random sample from the population of fifth-grade students, along with 76 teachers from grades 1 to 6.

To identify the character traits that needed to be developed in students prior to the learning process, the researchers adopted indicators from Slameto (2015). These indicators are presented in Table 1 below.

Table 1. Learning readiness indicators

Learning Readiness	Physical Condition
	Mental Condition
	Emotional Condition
	Needs and Motives
	Knowledge and skills

In preparing students for the learning process, the character indicators emphasized by teachers were derived from the social attitude competencies outlined in the 2022 *Merdeka* Curriculum. The researchers developed six assessment criteria for character moderation based on indicators of students' psychomotor competencies defined in the *Merdeka* Curriculum. From these criteria, a set of questionnaire items was constructed to assess students' character development. The indicators of character moderation are presented in Table 2 below.

Table 2. Moderated character indicators based on attitudinal competencies

Moderation Characters Traits	Discipline
	Responsibility
	Honesty
	Care and Empathy
	Self-confidence

Based on the character moderation indicators listed in Table 2, students' viewing learning outcomes were measured using a test instrument derived from the 2024 minimum competency assessment questions. Meanwhile, character moderation and learning readiness were assessed using questionnaires, each consisting of items rated on a modified four-point Likert scale: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1).

To ensure the accuracy and effectiveness of the research instruments, reliability and validity tests were conducted. The reliability of the character moderation questionnaire was examined using Cronbach's alpha, and the results met the threshold for internal consistency. As for the instruments measuring learning readiness and viewing ability, due to the heterogeneity of the item indicators, expert validation was conducted by doctoral-level experts in the field of education. These experts confirmed that the questionnaire items were appropriate for measuring both the learning readiness and viewing competence of the students (Creswell & Creswell, 2018). The results of the reliability analysis for the student character moderation instrument are presented in Table 3 below.

Table 3. Reliability test results for the student character moderation questionnaire

Character Indicator	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
Discipline	16.16	7.073	0.491
Responsibility	16.29	7.013	0.508
Honesty	16.65	5.170	0.795
Care and Empathy	16.61	5.978	0.675
Self-confidence	16.39	6.978	0.544
Courtesy	16.61	5.845	0.793

As shown in Table 3, all indicators of the student character moderation questionnaire demonstrated acceptable levels of internal consistency, with Cronbach's alpha values all above

0.70 (several exceeding 0.80). These values indicate that the instrument is sufficiently reliable and valid for use in this study. Following the reliability analysis, the researchers conducted descriptive statistical analysis and generated graphical representations of the two main variables to enhance data clarity. The data collected from the learning readiness and character moderation questionnaires were then analyzed using inferential statistics.

The primary statistical method employed was multiple linear regression analysis. Before testing the hypotheses, assumption tests were conducted, including tests for normality, linearity, multicollinearity, and heteroscedasticity, all using JASP software. To further investigate the relationships between learning readiness and character moderation, additional analyses such as Pearson product-moment correlation, Spearman's rho, and chi-square tests were conducted. All analyses were carried out using JASP, and interpretations were derived from the statistical outputs.

The hypotheses of this study were formulated to examine the influence of students' learning readiness and character moderation on their viewing ability. The null hypothesis (H_0) states that there is no significant simultaneous relationship between students' learning readiness and character moderation and their viewing ability. In contrast, the alternative hypothesis (H_1) suggests that students' viewing ability is significantly related to both learning readiness and character moderation, two predictor factors.

RESULTS AND DISCUSSION

Results

The research data consisted of three key variables: learning readiness, character moderation, and students' viewing ability. These data were collected through closed-end questionnaires (for teachers and students) and a performance test for students. Learning readiness data were obtained from 76 student respondents who completed a questionnaire consisting of five indicators. The analysis revealed that the average score for overall learning readiness was 3.39, indicating an overall strong level of readiness. Each indicator was assessed using the four-point Likert scale for learning readiness, and the detailed results for each indicator are presented in Table 4.

Table 4. Students' learning readiness indicators and scores

Learning Readiness Indicators	Score	Score Interpretation
Physical Condition	3.5	Strong
Mental Condition	3.3	Strong
Emotional Condition	3.1	Strong
Needs and Motivation	3.6	Very Strong
Knowledge and Skills	3.3	Strong
Average	3.39	Strong

Based on the table of learning readiness indicators, the strongest aspect was found in the students' mental readiness. Following this, the results of the character moderation questionnaire, which was distributed to 76 teacher respondents, are presented in Table 5 below.

Table 5. Character moderation result

Character Moderation Indicators	Score	Score Interpretation
Discipline	3.7	Very Strong
Responsibility	3.5	Strong
Honesty	3.05	Strong
Empathy	3.1	Strong
Self-confidence	3.3	Strong
Average	3.35	Strong

Table 5 shows the character moderation indicators based on teacher responses. The highest score was in the Discipline indicator, with a value of 3.7 (classified as Very Strong). The

lowest score appeared in Honesty (3.05), though it still fell within the Strong category. Other indicators, such as Responsibility (3.5), Empathy (3.1), and Self-confidence (3.3), were also categorized as Strong. The overall average score for all character moderation indicators was 3.35, indicating a strong level of character development related to students' readiness for learning.

Most teachers identified discipline as the primary character trait that students must possess as a foundation for effective learning. However, this result remains a preliminary finding and was further examined through multiple linear regression analysis to assess the simultaneous relationships between independent and dependent variables.

In addition, the researchers administered a viewing skills test for the student participants, consisting of five questions. The average test score was 80, which is generally considered a good result. However, the individual results of each variable (learning readiness, character moderation, and viewing score) on their own does not illustrate the nature of the relationships between them. Therefore, a multiple linear regression test was conducted to analyze the connections between these variables. The results of the regression model are presented in Table 6.

Table 6. Regression model summary

Model	R	R ²	RMSE
M ₀	0.000	0.000	2.528
M ₁	0.079	0.006	2.554

Table 6 indicates that in the regression model M₁, the coefficient of determination (R²) is 0.006. This means that only 0.6% of the variance in students' viewing ability can be explained by the combined influence of learning readiness and character moderation. The adjusted R² value was negative (-0.021), suggesting that this model performs worse than a model with no predictors in explaining the data. Additionally, the Root Mean Square Error (RMSE) is 2.554, indicating a relatively high level of prediction error.

Next, the significance of the regression model for the simultaneous influence of the independent variables is presented in Table 7.

Table 7. ANOVA for regression model

Source	SS (Sum of Squares)	df	MS (Mean Square)	F	Sig. (p)
Regression	3.023	2	1.512	0.232	0.794
Residual	476.134	73	6.522		
Total	479.158	75			

Table 7 shows the results of the F-test, which determines the overall statistical significance of the regression model. The F-value of 0.232 with a p-value of 0.794 (greater than 0.05) indicates that the regression model is not statistically significant. This suggests that learning readiness and character moderation, when considered together, do not have a significant effect on students' viewing ability.

Following this, a regression coefficients analysis was conducted to examine the contribution of each independent variable and to check for multicollinearity. The results of this analysis are presented in Table 8.

Table 8. Regression coefficients and multicollinearity statistics

Variable	B (Unstd.)	SE B	β (Std.)	t	Sig. (p)	Tolerance	VIF
(Constant)	15.847	4.099	—	3.866	<0.001	—	—
Character Moderation	0.070	0.112	0.073	0.623	0.535	0.998	1.002
Learning Readiness	-0.062	0.210	-0.035	-0.298	0.767	0.998	1.002

Table 8 presents the results of the partial regression coefficient analysis. Neither of the independent variables was found to have a significant individual effect on the students' viewing ability, as indicated by p-values greater than 0.05 for both predictors. Specifically, the regression

coefficient for character moderation was $B = 0.070$ ($p = 0.535$), and for learning readiness it was $B = -0.062$ ($p = 0.767$), suggesting no significant individual influence of either variable on viewing scores. The Tolerance and Variance Inflation Factor (VIF) values indicate no multicollinearity in the model (Tolerance ≈ 1.0 and VIF ≈ 1.0 for both predictors), meaning that learning readiness and character moderation were not highly correlated with each other. This implies that each variable contributes independently to the model without overlapping in explaining the outcome variable (students' viewing ability)

Discussion

The current era has brought about rapid changes in social conditions, particularly influenced by technological advancements that significantly impact students' behavior and focus (Kumsawai et al., 2022). These changes have affected student engagement, reduced learning motivation, and lowered students' readiness to receive instruction. According to (Alvarez, 2020) and (Morgan & Nica, 2020) several factors influence students' readiness to learn, one of which is the availability of learning facilities and infrastructure. Teachers who clearly present and explain the tools and media to be used in learning can enhance students' interest and motivation before the learning process begins.

A study by Gyeltshen and English (2023) revealed that parental involvement and educational background significantly affect students' learning readiness. Readiness, in turn, benefits students by making them more responsive and capable of answering questions during the learning process. Moreover, building strong character traits like creativity, responsibility, and good communication makes students more ready to learn and do better in school. Alwadaeen and Piller (2022) emphasized that these traits help students construct knowledge independently and acquire essential lifelong learning skills.

The findings of this study, based on multiple linear regression analysis, indicate that learning readiness and character moderation do not significantly influence students' viewing skills. The coefficient of determination (R^2) was only 0.006, meaning that just 0.6% of the variance in students' viewing scores could be explained by these two independent variables. This suggests a very weak relationship. Such a result could be due to several other factors that directly influence viewing skills, such as the quality of instructional models (Jirasatjanukul et al., 2023) teaching strategies employed by teachers, or the use of multimedia and interactive tools (Akbar & Fajri, 2018).

Despite the lack of significant effect in this study, learning readiness still plays a crucial role in overall academic success. Labib et al. (2024) highlight that both student and teacher readiness are vital prerequisites for effective classroom learning. However, in the present study, the ANOVA test revealed an insignificant regression model, and the individual regression coefficients for both predictors were also insignificant ($p = 0.535$ for character moderation and $p = 0.767$ for learning readiness). These findings suggest that indicators such as physical condition, emotional state, prior knowledge, and motivation did not directly influence students' viewing test outcomes. Teachers also encouraged students to have traits like discipline, responsibility, honesty, empathy, confidence, and politeness, but these traits did not have a big effect on how well students did in Bahasa Indonesia classes.

These results imply that other factors outside of readiness and character play more prominent roles in students' viewing performance. These may include the quality of instructional delivery (Ni'mah et al., 2023), the teaching strategies employed by teachers (Moneus & Albatool, 2023), or various cognitive and affective dimensions of learners that were not captured in this study. Adl-Amini et al. (2024) also emphasize the importance of using multimodal and contextualized learning approaches to enhance students' ability to process and interpret visual and verbal messages. Similarly, Bardach and Klassen (2021) argue that student motivation, closely linked to learning readiness, is influenced by teacher-related factors, including teacher competence and the quality of instructional materials. Ndiung et al. (2023) support this by stating

that well-structured teaching materials can improve students' enthusiasm and readiness to learn. Furthermore, [Syafi'i et al. \(2024\)](#), in a study on mathematical readiness and geometry learning outcomes, found that although readiness had a positive influence, some readiness indicators showed only weak effectiveness on learning outcomes.

From a statistical standpoint, multicollinearity was not an issue in our regression model (VIF values were well below 10 and tolerance levels were close to 1). This suggests that the lack of significant effects is not due to overlapping predictive contributions of readiness and character, but rather to their individually low predictive power. [Fire and Guestrin \(2019\)](#) remind us that determining the true impact might be challenging when dealing with statistically insignificant results; occasionally, more comprehensive indicators or improved methods of evaluation are required. [Santyasa et al. \(2020\)](#) found similar results in which internal readiness (student potential) had a weak direct effect on learning outcomes, possibly due to intervening factors like procrastination.

Other studies ([Matsuri et al., 2024](#); [Miarsyah et al., 2021](#)) also point out the influence of students' cognitive levels, the use of instructional media ([Meialldy, 2021](#)), and specific learning strategies on learning outcomes. [Sharmin \(2023\)](#) noted that students' language skills are strengthened by exposure to multimodal texts and targeted strategies in teaching. Thus, the insignificant findings in this study might stem from the need to incorporate more dynamic and engaging learning methods when developing viewing skills. [Lay and Chandrasegaran \(2018\)](#) add that confident and well-prepared teachers are critical for boosting students' academic performance. This aligns with the notion that teacher quality and instructional design can mediate the relationship between student readiness and learning outcomes

CONCLUSION

Overall, this study provides valuable insights into the roles of learning readiness and character moderation in shaping elementary students' viewing skills. Although these factors had small statistical effects on viewing skills, the results provide new avenues for investigating non-cognitive components, especially student character traits, as essential parts of multimodal literacy development, which is a significant contribution of this study. Rather than suggesting that learning readiness and character have no impact at all, the results highlight the possibility that other, more dominant variables may influence students' ability to comprehend and respond critically to audiovisual texts.

This study also recognizes its limitations, including the relatively small sample size and the limited scope of character indicators employed. Future research should expand the set of character-related indicators to encompass broader dimensions such as intrinsic motivation, grit, and self-regulation, while also considering external factors like the learning environment and parental support, which may interact with students' readiness to learn and ultimately affect their viewing skills. Taken together, the findings underscore the importance of designing instructional approaches that account for both cognitive and non-cognitive variables. For teachers, school leaders, and curriculum developers, this implies the need to develop contextual, multimodal, and student-centered strategies that foster not only literacy skills but also character development as part of a 21st-century education

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