

The Correlation Between Students' Perceptions of Using Visual Media and Students Reading Comprehension

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ABSTRACT

Reading comprehension is an essential skill in English as a Foreign Language (EFL) learning, yet many students continue to experience difficulties due to low engagement and limited instructional support. Visual media are commonly used to assist reading instruction, making it important to examine how students' perceptions of visual media relate to their reading comprehension. This study aimed to investigate the correlation between EFL students' perceptions of using visual media and their reading comprehension. Employing a quantitative correlational research design, the study involved 88 ninth-grade students selected through total sampling. Data were collected using a reading comprehension test and a Likert-scale perception questionnaire administered in one classroom session. The data were analyzed using Pearson Product-Moment correlation. The findings revealed a statistically significant weak to moderate positive correlation between students' perceptions of visual media and their reading comprehension ($r = .342$, $p < .05$). This suggests that positive perceptions of visual media are meaningfully associated with reading comprehension as a supportive affective factor. The study highlights the role of students' perceptions in enhancing engagement during EFL reading activities.

INTRODUCTION

Reading comprehension is a fundamental skill in English as a Foreign Language (EFL) learning because it enables students to understand written texts, construct meaning, and gain knowledge across academic subjects. For EFL learners, reading comprehension involves more than recognizing vocabulary or grammatical forms; it requires the ability to interpret ideas, connect information, and build meaning from text. However, many EFL students continue to experience difficulties in reading due to limited vocabulary, low motivation, and insufficient engagement with reading materials. These challenges often result in superficial reading practices, where students focus on decoding words rather than understanding meaning. As a result, teachers are required to adopt instructional strategies that can support comprehension and increase students' interest in reading activities.

One instructional approach that has gained increasing attention is the use of visual media in reading instruction. Visual media, such as pictures, videos, diagrams, infographics, and other graphical elements, are believed to support comprehension by providing contextual cues and reducing cognitive load. Previous studies have shown that visual elements can enhance students' ability to process and retain textual information. For example, Rahayu, Ardana, and Suarni (2024) reported that visual media used in project-based learning significantly improved students' reading comprehension and classroom engagement. Similarly, Yasa, Yufrizal, and Nurdiana (2022) found that visualization strategies helped students form mental images of texts, leading to better comprehension. On a broader scale, Guo et al. (2020), through a meta-analysis, demonstrated that the integration of graphics has a positive effect on reading comprehension across different educational levels. These findings suggest that visual media play an important role in facilitating reading comprehension by supporting both cognitive and affective aspects of learning.

In many EFL contexts, particularly in Indonesian schools, reading instruction is still dominated by traditional text-based approaches, such as word-by-word translation and routine comprehension questions. While these practices may help students recognize vocabulary, they often fail to stimulate students' interest or deeper understanding of texts. Classroom observations in the present study revealed that students tended to show low engagement during reading lessons and struggled to identify main ideas. Informal interviews further indicated that students preferred reading activities supported by visual elements, as visuals made lessons more interesting and easier to understand. Previous research supports this observation. Seng et al. (2024) found that visual information could simplify complex texts and enhance comprehension, particularly for learners with limited language proficiency. Likewise, Nikleva and Rodríguez-Muñoz (2022) showed that visual literacy programs contributed to significant improvements in reading comprehension among primary and secondary students.

Although numerous studies have confirmed the effectiveness of visual and audio-visual media in improving reading comprehension, fewer studies have examined students' perceptions of using visual media and how these perceptions relate to their reading performance. For instance, Asrul, Daulay, and Amaniarsih (2020) and Anggelina, Indryani, and Sastrawati (2025) reported positive effects of audio-visual media on reading outcomes, yet they focused primarily on achievement rather than students' attitudes. Similarly, Loviasyuni and Bhuana (2023) explored students' responses to audio-visual media but emphasized challenges rather than examining the relationship between perception and performance. Studies by Fikri, Lestari, and Z. (2024) and Asilestari, Henjilito, and Hardi (2025) also highlighted the benefits of visual information for reading comprehension across different educational levels. However, empirical evidence explaining whether students who hold positive perceptions toward visual media tend to achieve higher reading comprehension remains limited, especially in EFL junior high school contexts.

Based on this gap, the present study focuses on examining the relationship between EFL students' perceptions of using visual media and their reading comprehension. The research question guiding this study is: Is there any significant correlation between EFL students' perceptions of using visual media and their reading comprehension? This study assumes that positive perceptions toward visual media may foster higher motivation and engagement, which in turn support better comprehension outcomes. By investigating this relationship, the study aims to contribute empirical evidence to the field of EFL reading instruction. The findings are expected to offer both theoretical and practical implications, particularly for teachers in designing reading lessons that integrate visual media effectively. As suggested by Raja, Setiyadi, and Riyantika (2021) and supported by Pham and Nguyen (2023), understanding students' perceptions of instructional media is essential for improving reading comprehension and creating more engaging EFL learning environments.

1.1 EFL Students Reading Comprehension

Reading comprehension refers to learners' ability to understand, interpret, and evaluate written texts by constructing meaning and linking textual information with prior knowledge and experience. In EFL contexts, reading comprehension is recognized as a complex process that requires the integration of linguistic competence, background knowledge, and strategic reading skills (Alyousef, 2006). EFL learners frequently encounter difficulties such as limited vocabulary, unfamiliar grammatical structures, and culturally embedded content, which may hinder effective comprehension. Consequently, reading instruction should extend beyond word recognition to include strategy development, such as predicting, summarizing, questioning, and clarifying meaning at the discourse level. Reading comprehension also plays a crucial role in supporting other language skills, particularly writing and speaking, as it exposes learners to authentic language use and discourse organization (Kusumarasdyati, 2023). Moreover, comprehension activities foster critical thinking by encouraging learners to infer meaning and interpret information from textual cues. Nevertheless, EFL students' reading performance may decline when motivation and confidence are low, highlighting the teacher's role in selecting appropriate materials and facilitating engaging reading tasks. In addition, technological developments have influenced reading practices, particularly through the use of digital texts. While digital reading

offers accessibility and interactive features, print reading may still promote deeper concentration for some learners (Pardede, 2019). Therefore, combining printed and digital materials, supported by explicit instruction in reading strategies and digital literacy, is essential to develop effective and adaptable EFL readers across diverse learning contexts.

1.2 EFL Students' Perceptions of English Learning Using Visual Media

Students' perceptions refer to their personal views, attitudes, and beliefs toward a particular learning process, which play a crucial role in shaping motivation, engagement, and learning outcomes. In educational research, perceptions can be examined through quantitative approaches to understand how learners respond to specific instructional strategies or learning materials (Creswell, 2012). In EFL contexts, students' perceptions of visual media are particularly significant because they reflect how learners value the use of images, videos, and other visual elements in supporting English learning. Visual media can facilitate comprehension by providing contextual cues, clarifying abstract concepts, and linking verbal information with visual representations, thereby making learning activities more engaging and accessible. Perception is influenced by students' prior experiences and their interactions with instructional practices; consequently, effective and consistent use of visual media may foster positive attitudes toward English learning (Sugiyono, 2019). Positive perceptions are associated with increased attention, motivation, and active participation, which may contribute to improved reading comprehension. To examine students' perceptions objectively, reliable instruments and appropriate statistical analyses are required. Pallant (2016) emphasized that questionnaires employing Likert-scale items enable researchers to capture learners' attitudes systematically and analyze their relationship with learning outcomes. Understanding EFL students' perceptions of visual media is therefore essential, as it provides empirical insight into how instructional tools are received by learners and informs the design of more effective, student-centered English learning environments.

METHODOLOGY

This study employed a quantitative approach using a correlational research design to examine the relationship between EFL students' perceptions of using visual media and their reading comprehension. A quantitative design was selected because it allows variables to be measured systematically and relationships between them to be analyzed statistically, producing objective and generalizable findings (Creswell, 2012). In this study, students' perceptions of visual media functioned as the independent variable (X), while reading comprehension served as the dependent variable (Y). The correlational design was considered appropriate because the study aimed to identify the degree and direction of the relationship between the two variables as they naturally occurred in the classroom context, without any experimental manipulation. As stated by Sugiyono (2019), correlational research is suitable for examining associations between variables in real educational settings. Therefore, this design aligned with the research objective of determining whether students' perceptions of visual media were significantly related to their reading comprehension performance.

The population of this study consisted of all EFL students enrolled in three ninth-grade classes—Class 9-A, Class 9-B, and Class 9-C—taught by the same English teacher during the academic term of the research. These classes were selected because they shared similar instructional conditions, learning materials, and teaching strategies, particularly in the use of visual media during reading instruction. Since the total population was relatively small and accessible, total sampling was applied, meaning that all 88 students from the three classes were included as research participants (Sugiyono, 2019). Prior to conducting the main correlation analysis, a homogeneity test was carried out to ensure that students' reading comprehension scores across the three classes were statistically comparable. As presented in **Table 1**, the significance value exceeded .05, indicating no significant differences among the classes. This result suggests that the variance of reading comprehension scores was homogeneous, confirming that the sample met the assumption of group comparability and was appropriate for further correlational analysis.

Table 1: Results of Homogeneity Test on Students' Reading Comprehension Scores

Group	N	Mean	SD	t	Sig. (2-tailed)
Class 9-A	31	77.4	5.3	-0.62	0.54
Class 9-B	29	78.1	5.0		
Class 9-C	28	76.9	5.6		

Data were collected using two research instruments: a reading comprehension test and a perception questionnaire. The reading comprehension test was designed to measure students' ability to understand English texts and consisted of multiple-choice items based on short reading passages appropriate to the students' proficiency level and curriculum objectives. The items assessed key aspects of reading comprehension, including identifying main ideas, understanding detailed information, making inferences, and interpreting vocabulary in context. Each correct response received one point, while incorrect answers received zero. To ensure content validity, the test items were reviewed by an English teacher, and a pilot test was conducted prior to the main study. The reliability analysis using Cronbach's alpha yielded a coefficient of .81, indicating satisfactory internal consistency. The perception questionnaire was used to measure students' perceptions of using visual media in English learning. It employed a Likert-scale format covering students' attitudes, interest, motivation, and perceived usefulness of visual media. The questionnaire demonstrated high reliability, with a Cronbach's alpha coefficient of .87, indicating that the items consistently measured the same construct.

The data collection process was conducted in a structured and controlled manner to ensure accuracy and consistency. The researcher coordinated with the classroom teacher to schedule the administration of the instruments. Data collection took place in a single meeting for each class to maintain uniform conditions. During each session, students first completed the reading comprehension test and then responded to the perception questionnaire. Each session lasted approximately 40–60 minutes, including instructions. All responses were checked for completeness and then coded and organized using Microsoft Excel before being analyzed with SPSS. Data analysis employed the Pearson Product–Moment correlation to examine the strength and direction of the relationship between students' perceptions of visual media and their reading comprehension scores (Pallant, 2016). Prior to the analysis, assumption testing was conducted, including normality and linearity tests, which indicated that the data met the required assumptions. A significance level of .05 was applied to determine statistical significance, and the results of the analysis are presented in the following section.

FINDINGS

The analysis was based on data obtained from 88 ninth-grade students who completed both the perception questionnaire and the reading comprehension test. Prior to the correlation analysis, descriptive statistics were calculated to summarize the distribution of each variable. These results provide an overview of students' general tendencies in perceiving visual media and their overall reading comprehension performance before examining the relationship between the two variables.

As presented in Table 2, students' perceptions of using visual media ranged from a minimum score of 64 to a maximum score of 91. The mean score for students' perceptions was 76.82, with a standard deviation of 6.91, indicating that most students held moderately positive perceptions toward the use of visual media in reading instruction. The standard deviation suggests a reasonable spread of responses, showing some variation in how students evaluated the usefulness and attractiveness of visual media. In contrast, students' reading comprehension scores ranged from 68 to 87, with a mean score of 78.06 and a standard deviation of 5.84. This result indicates that students' reading comprehension ability was generally at a moderate level, with relatively consistent performance across participants. Overall, the descriptive statistics in Table 2 show that both variables were adequately distributed and suitable for further correlational analysis.

Table 2: Descriptive Statistics of Students' Perceptions of Using Visual Media and Reading Comprehension

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Students' Perceptions of Using Visual Media	88	64	91	76.82	6.91
Reading Comprehension	88	68	87	78.06	5.84

To test the research hypothesis, a Pearson Product–Moment correlation analysis was conducted to examine the relationship between students' perceptions of using visual media and their reading comprehension. The results of the correlation analysis are shown in Table 3. The analysis yielded a correlation coefficient of $r = .342$, with a significance value of $p = .001$ ($p < .05$). This finding indicates a statistically significant weak to moderate positive correlation between the two variables. In practical terms, students who reported more positive perceptions of visual media tended to achieve higher reading comprehension scores, although the strength of the relationship was not strong.

Table 3: Results of Pearson's Correlation between Students' Perceptions of Using Visual Media and Reading Comprehension

Variables		Reading Comprehension	Students' Perception
Reading Comprehension	Pearson Correlation	1	.342**
	Sig. (2-tailed)	—	.001
	N	88	88
Students' Perception	Pearson Correlation	.342**	1
	Sig. (2-tailed)	.001	—
	N	88	88

Furthermore, the significance value reported in Table 3 is below the established alpha level of .05, indicating that the observed correlation is unlikely to have occurred by chance. Based on these results, the null hypothesis stating that there is no significant correlation between students' perceptions of using visual media and their reading comprehension was rejected. However, the magnitude of the correlation suggests that students' perceptions function as a supportive factor rather than a dominant determinant of reading comprehension. Thus, the findings provide empirical evidence that students' perceptions of visual media are significantly related to their reading comprehension outcomes in the EFL classroom context, while also indicating that other cognitive and instructional factors may contribute to reading performance.

This study examined the relationship between students' perceptions of using visual media and their reading comprehension in an EFL classroom context. The findings revealed a statistically significant weak to moderate positive correlation between the two variables. This result indicates that students who reported more positive perceptions toward the use of visual media tended to achieve better reading comprehension scores, although the strength of the relationship was not strong. Given the correlational nature of the study, causal conclusions cannot be drawn. However, the findings suggest that students' perceptions of visual media are meaningfully associated with their reading comprehension performance and should be considered as an affective factor that accompanies the reading process rather than as a direct cause of achievement.

The weak to moderate magnitude of the correlation suggests that students' perceptions play a supportive and facilitative role in reading comprehension rather than a dominant one. This interpretation aligns with Alyousef (2006), who described reading comprehension in EFL contexts as a complex process influenced by multiple factors, including linguistic knowledge, background knowledge, and reading strategies. Positive perceptions of visual media may help students maintain attention, reduce boredom, and approach reading tasks with greater interest.

When visual elements are perceived as helpful, they can provide contextual clues and assist students in constructing meaning from texts. Guo et al. (2020), in their meta-analysis, demonstrated that visual graphics can reduce cognitive load and support comprehension, particularly when learners are able to connect visual information with textual input. Therefore, students' perceptions may influence how effectively visual media support their comprehension processes.

The findings of this study are consistent with previous research reporting positive relationships between the use of visual or audio-visual media and reading comprehension outcomes. Studies by Asrul, Daulay, and Amaniarsih (2020) and Anggelina, Indryani, and Sastrawati (2025) showed that audio-visual media contributed to improved reading performance, especially among younger learners. However, these studies mainly focused on instructional effectiveness rather than learners' perceptions. The present study extends earlier research by showing that students' subjective evaluations of visual media are related to their reading performance, even though the relationship is not strong. This finding supports Loviasyuni and Bhuana's (2023) argument that students' responses to audio-visual media influence their engagement with reading tasks, including their motivation and willingness to participate. When students perceive visual media positively, they may be more inclined to interact with texts and persist in understanding meaning.

In addition, the results support earlier studies emphasizing the importance of affective factors in reading comprehension. Raja, Setiyadi, and Riyantika (2021) found a significant relationship between students' perceptions of digital interactive media and their reading ability, while Pham and Nguyen (2023) reported that positive attitudes toward visual aids were associated with better comprehension among secondary school students. Similar patterns have been observed across different educational levels, including secondary education (Fikri, Lestari, & Z., 2024) and higher education (Asilestari, Henjilito, & Hardi, 2025). These studies suggest that students' perceptions of visual media consistently function as an affective dimension that supports reading comprehension across contexts. Research involving special populations, such as deaf students, also highlights the importance of visual input in supporting comprehension when learners rely heavily on visual information (Nikolarazi, Vekiri, & Easterbrooks, 2013).

Despite the significant association identified in this study, the weak to moderate correlation indicates that students' perceptions of visual media alone cannot fully explain reading comprehension performance. Other factors, such as vocabulary knowledge, reading strategies, text difficulty, and instructional design, remain essential in shaping comprehension outcomes, as noted by Kusumarasdyati (2023) and Pardede (2019). Therefore, visual media should be viewed as a complementary instructional resource rather than a standalone solution. Teachers are encouraged to integrate visual media thoughtfully alongside explicit reading strategies to support comprehension more effectively. Future research may employ experimental or mixed-method designs to explore how students' perceptions of visual media interact with cognitive and instructional variables over time, providing deeper insight into their combined influence on reading comprehension development in EFL classrooms.

CONCLUSIONS AND SUGGESTIONS

This study concludes that students' perceptions of using visual media are meaningfully associated with their reading comprehension in the EFL classroom context, although the strength of the relationship is weak to moderate. The findings indicate that positive perceptions of visual media do not function as a direct determinant of reading achievement but rather as an affective factor that supports students' engagement and comprehension processes during reading activities. From a pedagogical perspective, this suggests that visual media can play a supportive role in reading instruction by helping students approach texts with greater interest and attention when the media are perceived as useful and relevant. However, visual media should not be viewed as a standalone solution for improving reading comprehension, as their contribution depends on how they are integrated with explicit reading strategies and appropriate instructional design. This study is limited by its correlational research design, which does not allow causal interpretation, and by

its focus on a single school context with a specific group of learners, which may limit the generalizability of the findings. In addition, the use of self-report data may involve subjective bias in measuring students' perceptions. Therefore, future research is recommended to employ experimental or mixed-method approaches to further examine how visual media interact with cognitive factors such as vocabulary knowledge, reading strategies, and text difficulty, as well as to explore how students' perceptions develop over time in diverse EFL learning contexts.

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