

Exploring Key Factors and Solutions for English Academic Text Reading Difficulties among Elementary Teacher Education Students

Honest Ummi Kaltsum^{✉1}, Ratnasari Diah Utami², Anatri Desstya³, Shella Herliana⁴ & Sinta Diah Ayu Pitaloka⁵

^{1,2,3,4,5} Department of Elementary Teacher Education, Universitas Muhammadiyah Surakarta, Surakarta, Indonesia

✉ huk172@ums.ac.id

Abstract. English academic reading is an essential skill for undergraduates both in English major students and non-English major students. However, many non-English major students, particularly Indonesian Elementary Teacher Education (ETE) students, face significant challenges in comprehending academic English texts. This qualitative study explores the core causes of these difficulties, focusing on linguistic, psychological, environmental, and reading experience factors. Data were collected via interviews with lecturers and students and through focus group discussions (FGDs) to identify potential solutions. Results indicate that linguistic challenges, including academic vocabulary and grammar, and psychological barriers like reading anxiety, are primary obstacles. Although students have access to a conducive learning environment, their reading habits remain limited, averaging only one to three times per week. To address these issues, the study suggests increasing reading frequency and vocabulary mastery. Additionally, strategies such as intensive and extensive reading practices, vocabulary development, and skimming and scanning techniques are recommended to improve comprehension. The study concludes by recommending contextually appropriate strategies to enhance academic literacy and foster more effective reading skills among ETE students.

Keywords: Comprehension Challenges; Learning Obstacles; Academic Performance; English Language Learning; Higher Education

1. Introduction

The successful completion of the four language skills—reading, writing, speaking, and listening—is seen as crucial in the teaching and learning of English as a second or foreign language. But for many L2 learners, especially university students studying English as a foreign language (EFL), reading is by far one of the most crucial skills (Grabe & Stoller, 2013). However, students in L2 of EFL and ESL context struggle in reading (Al Husaini, 2013; Alenezi, 2021; Alotaibi, 2022; Baldwin & Nadelson, 2023; Mohamed, 2016). As in the age of globalization English has emerged as the dominant language of academic and scientific discourse, the demand of reading academic text in a fluent way is crucial or it can be said that academic English proficiency has become essential for students and institutions as global academia has grown (Li, 2025). However, reading academic literature in English can be difficult for undergraduate students, particularly those in non-English-speaking countries, such as Elementary Teacher Education (ETE) students in Indonesia. Despite its importance, students struggle to use effective reading strategies for a holistic understanding of reading texts (Habók et al., 2024). These challenges are caused by a variety of variables, including a limited vocabulary, ineffective reading skills, the language difficulty level, the length and complexity of the texts, as well as the bilingual or multilingual context of the students (Eriksson, 2023)

1.1. Problem Statement

Reading comprehension must be considered as a part of new literacy required to encounter today's global academic world (Setiyadi et al., 2019). Many undergraduate students who are not majoring in English have issues on the way the comprehend academic English text and it

remains critical issues to be solved since it is increasingly important in today's global academic world. These issues primarily stem from translation, vocabulary, language knowledge, and reading comprehension (Dardjito et al., 2023). Studies reveal that many students learning English as a Foreign Language (EFL) face difficulties understanding academic literature written in English, which negatively impacts their academic performance (Dardjito et al., 2023). Academic reading in English is particularly challenging for students who are not majoring in English, especially when English is being studied as a second or foreign language. These students often struggle to fully comprehend challenging academic English text due to contextual, linguistic, and cognitive challenges. This challenge is further exacerbated by the transition from secondary to higher education due to the disparity between the demands of academic English reading at the higher education level and students' pre-university language skills (Macaro et al., 2020). To address this issue, it is important to examine the underlying reasons why non-English majors struggle to read academic English literature. Reading experience, linguistics, psychology, and the environment should be addressed in this study. Understanding these factors can help educators develop contextually relevant teaching approaches that can improve students' academic literacy and reading skills.

1.2. Related Research

English academic reading skills among undergraduate students are increasingly important worldwide, but there is still little research understanding the specific issues of PGSD students in Indonesia. This study presents a unique and comprehensive approach to understanding the academic English language challenges faced by PGSD students. Unlike the research of Afdal, Spernes, and Hoff-Jenssen (Afdal et al., 2023) which views academic reading as a social practice within the broader context of higher education, this study focuses on PGSD students as a specific population facing the challenges of English as a second language, exploring the factors causing reading difficulties from the perspective of reading experience, linguistics, psychology, and environment.

Furthermore, the research of Böylü, Karagöl, and Çevik (BOYLU et al., 2024) which used a phenomenological analysis in postgraduate students highlighted psychological and motivational aspects, while this study broadens the scope by integrating linguistic and environmental factors simultaneously for a more holistic understanding.

The research of Dardjito (Dardjito et al., 2023) does discuss reading challenges for non-English students in Indonesia, but this study adds psychological dimensions and subjective experiences as key in unraveling the causes of reading difficulties at the elementary level of education, namely PGSD students, thus contributing to an earlier and different context.

Another related study was conducted by Eriksson (Eriksson, 2023), which focused on Swedish university students' perceptions and attitudes toward reading English academic texts, emphasizing emotional and motivational burdens. Eriksson's research focuses on perceptions, attitudes, emotions, and motivation. However, this study combines reading experiences, linguistic, psychological, and environmental factors within an in-depth qualitative framework contextualized in Indonesia.

One of the main novelties of this study is the simultaneous integration of multidimensional causal factors, the emphasis on under-researched students in the PGSD program, and the application of an in-depth qualitative approach to identify subjective aspects of subjective experiences and environmental factors as causes of reading difficulties. Furthermore, the study aims to offer practical solutions that will help improve elementary school teacher education. Therefore, this study presents a more comprehensive and useful approach to understanding and addressing the reading difficulties of English academic texts among PGSD students in Indonesia. It also fills a gap in previous research.

1.3. Research Objectives

The purpose of this study was to examine various aspects of language, reading experience, psychological factors, and environmental factors. The focus of this study was to identify what causes Elementary School Teacher Education (PGSD) students to experience difficulty reading academic texts. Therefore, this study aims to gain a better understanding of the underlying

causes of academic reading difficulties faced by PGSD students. Furthermore, this study seeks to offer relevant solutions to address these issues.

Thus, it is hoped that this research will directly contribute to improving the quality of English language learning in elementary education settings by providing a comprehensive and in-depth mapping of causal factors encompassing the linguistic, psychological, experiential, and environmental aspects of PGSD students' learning. The following research questions can be used to describe the core of this research:

1. What are the linguistic factors that contribute to difficulties reading English academic texts in PGSD students?
2. What are the psychological factors that contribute to difficulties reading English academic texts in PGSD students?
3. What are the reading experiences of PGSD students?
4. To what extent do environmental factors influence PGSD students' academic reading abilities?
5. What solutions can be implemented to address these academic reading difficulties?

2. Theoretical Framework

Students who do not major in English, such as Elementary Teacher Education (PGSD) students, face difficulties reading English academic texts. Several interrelated factors influence this problem. To comprehensively explore this phenomenon, this research framework was developed by combining established theories and findings from linguistics, reading experience, and educational psychology.

2.1. Linguistic Factors

Linguistic factors are the primary foundation of reading comprehension skills. Grabe emphasized that mastery of vocabulary, grammar, syntax, and discourse knowledge directly impact a reader's ability to comprehend text. Vocabulary enables readers to quickly recognize word meanings, while grammar and syntax help them understand complex sentence structures. Discourse knowledge, on the other hand, plays a crucial role in connecting ideas across sentences and paragraphs, resulting in a coherent understanding of the text. Therefore, limitations in linguistic competence can hinder the reading process, both at the level of literal comprehension and at a deeper level (Grabe, 2009).

Empirical findings also support the importance of linguistic factors in reading. Research by Dardjito and Eriksson shows that non-native readers still face significant difficulties due to limited grammar and vocabulary. These deficiencies not only hinder basic comprehension but also limit readers' ability to make inferences and critically evaluate academic texts. In the context of higher education, students with low linguistic competence tend to have difficulty accessing complex academic texts, resulting in decreased motivation and self-confidence. Therefore, improving linguistic competence is a key aspect in developing reading learning models, particularly in EFL/ESL contexts where exposure to the target language is relatively limited. As such, inadequate linguistic competence, impairs comprehension and enhance the challenges for students, as noted by Dardjito and Eriksson (Dardjito et al., 2023; Eriksson, 2023). They discovered that poor grammar and vocabulary are still major obstacles for non-native readers.

2.2. Reading Experiences

Academic reading achievement is strongly influenced by prior reading experience and the application of efficient reading strategies. Guthrie emphasized that text engagement and comprehension will increase if readers have strong reading motivation, relevant prior knowledge, and mastery of metacognitive techniques such as summarizing, predicting, and monitoring comprehension. Rich reading experiences enable students to build a broader schema base, making it easier for them to connect new information with existing knowledge. Conversely, a lack of exposure to academic texts can limit students' capacity to use higher-order reading strategies (Guthrie et al., 2004).

Recent research suggests that a lack of reading experience and metacognitive strategy skills often leads to a negative view of academic reading. Boylu found that students with limited reading experience tend to perceive academic reading as difficult, boring, and irrelevant to their academic needs. This negative attitude, in turn, weakens reading motivation and reduces the effectiveness of learning strategies. Therefore, this theory emphasizes the importance of building early reading experiences and providing systematic academic reading strategy training to help students improve their comprehension and engagement with texts (Boylu et al., 2024).

2.3. Psychological Factors

Psychological aspects play a crucial role in reading success, particularly in the context of reading academic texts in English. According to Krashen (Krashen, 1982) in *Principles and Practice in Second Language Acquisition*, anxiety can act as an affective filter that inhibits language input from entering students' cognitive processing, thus limiting their ability to comprehend reading. Furthermore, Bandura (2009) in *Self-Efficacy: The Exercise of Control* explains that self-efficacy, an individual's belief in their own abilities, significantly determines the level of effort, persistence, and success in completing reading tasks. Another influential factor is motivation. Gardner (1985) in *Social Psychology and Second Language Learning* emphasized that intrinsic and extrinsic motivation influence students' level of engagement in reading academic texts. Thus, these theories assert that affective factors such as anxiety, motivation, self-efficacy, and attitudes toward reading are key components that determine success or failure in comprehending academic reading.

Empirically, various studies have shown that students who experience reading anxiety tend to have lower academic performance. According to Eriksson Eriksson (2023), psychological well-being significantly impacts academic reading performance, as emotional instability can reduce focus and retention in comprehending texts. This aligns with the perspective of MacIntyre & Gregersen (2012) which emphasizes that emotional stress can hinder learning persistence and decrease reading comprehension.

2.4. Environmental factors

The social and physical environment are important factors influencing academic reading success. Bronfenbrenner (1979)'s ecological learning theory in *The Ecology of Human Development* emphasizes that an individual's interaction with their environment, both within the classroom and within the community, influences the learning process and academic outcomes. In the context of academic reading, classroom dynamics, the availability of learning resources, exposure to English in the surrounding environment, and broader cultural background can shape how students approach academic texts.

Several studies have demonstrated strong evidence of the influence of environmental factors on students' reading skills. Nwokedi (2023) found that positive environmental support such as an interactive classroom atmosphere, access to adequate reading resources, and exposure to English in everyday life can increase students' engagement in academic reading. Conversely, research in Indonesia by Dardjito (2023) showed that limited environmental support and limited access to scientific reading resources exacerbate students' academic reading difficulties, particularly in education study programs. This situation confirms that without adequate environmental support, both social and physical, efforts to improve academic reading skills will be suboptimal. Therefore, pedagogical interventions must consider the students' environmental context to ensure that designed solutions are truly relevant and effective.

3. Method

3.1. Research Design

This study uses a descriptive qualitative research approach to gain an in-depth and contextual understanding of the phenomena associated with academic reading difficulties in English language PGSD students. By allowing the exploration of participants' subjective feelings and perceptions in a naturalistic setting, qualitative methods offer a depth and complexity that transcends quantitative measurements. Using a phenomenological study design, the aim is to document and record the lived experiences of students experiencing difficulties reading English academic literature. To understand the significance and characteristics of these difficulties, phenomenology prioritizes the perspectives of participants.

3.2. Participant

The subjects in this program were second-, fourth-, and sixth-semester students from the PGSD Study Program. Participants were selected to represent various academic levels in the program to gain a deeper understanding of the difficulties of reading academic English texts.

Both males and females participated in the PGSD program, reflecting an average gender balance. Participants were on average between 18 and 22 years old, comparable to the typical age range of undergraduate students in Indonesia. All of the participants are presently working toward a bachelor's degree in education with a focus on elementary teacher education. Although they all have undergraduate degrees, their semester variations enable the recording of variations in learning obstacles and experiences throughout time. The participant characteristics can be seen at table 1.

Their prior academic reading experience and exposure to English language classes are additional pertinent factors that may influence their reading challenges.

Table 1. Participant Characteristics

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	4	40.0
Gender	Female	6	60.0
Age	18	2	20.0
Age	19	1	10.0
Age	20	4	40.0
Age	21	3	30.0
Semester	2	3	30.0
Semester	4	4	40.0
Semester	6	3	30.0

3.3. Data Collection

This study used a variety of approaches to data collection, including interviews, focus group discussions (FGDs), and a literature review. Initial data for the literature review was obtained by reviewing current academic literature, including books, journals, and research on academic reading methods and difficulties. The main data collection was given theoretical support and context by these secondary data. Regarding with the interview technique, two stakeholder groups were interviewed in a semi-structured manner: PGSD students and academics who instruct English courses. Interviews with lecturers covered topics like their experience as teachers, observations of students' reading issues, linguistic and psychological elements that contribute to the difficulty in reading academic English literature.

The linguistic background, individual reading experiences, psychological obstacles, and environmental factors that can impair students' academic reading performance were all examined in student interviews.

Dealing with FGD, an expert panel of lecturers from English courses and reading comprehension specialists took part in the FGD to discuss how to address the students' challenges with reading academic texts. The main focus of the conversation was coming up with fixes for the issues that the interviews revealed. The results of the Focus Group Discussion (FGD) identified three main areas of solutions that can support the improvement of students' academic reading skills. These solutions encompass linguistic, psychological, and instructional aspects. In the linguistic aspect, emphasis is placed on academic vocabulary mastery and language competence. In the psychological aspect, attention is focused on overcoming reading anxiety and increasing student motivation. Meanwhile, in the instructional aspect, teaching strategies and reading exercise designs need to be improved to more effectively support academic reading skills. A summary of the FGD results can be seen in Table 2 below.

Table 2. A summary of the FGD results

Aspects	Alternative solution
Linguistic aspects	Improve academic vocabulary and language competence
Psychological aspects	Overcoming reading anxiety and motivation problems
Instructional aspects	Improvement of teaching strategies and academic reading practice

As shown in Table 2, the solutions resulting from the FGD reflect a multidimensional approach. The linguistic aspect emphasized the need to strengthen vocabulary and language structure, which are the foundation for understanding academic texts. The psychological aspect emphasized the importance of supporting students' affective states, particularly in reducing reading anxiety and fostering motivation. Meanwhile, the instructional aspect indicated that improved teaching strategies and a more varied reading practice design are essential for students to develop academic reading skills sustainably. Thus, the results of this FGD emphasize that improving academic reading skills cannot be achieved through a single approach but rather requires a synergy between linguistic, psychological, and pedagogical factors.

3.4. Data Analysis

The data analysis in this study adheres to the three interrelated steps of Miles and Huberman's conventional qualitative procedure namely data reduction, data display, conclusion drawing and verification. The raw data gathered from interviews, literature reviews, and focus group discussions (FGD) is meticulously compiled and categorized during the data reduction stage. In order to focus on the main concerns that are directly related to the research problem—the challenges faced by PGSD students when reading academic English texts—the researcher tries to weed out unnecessary information. The extensive data is reduced to more digestible and significant units for additional analysis through this refining procedure.

3.5. Validity and Reliability

To generate reliable, trustworthy (Lincoln, Y. S., & Guba, 1985), and significant research findings, it is essential to ensure the validity and dependability of qualitative data. To ensure that the data in this study is valid, triangulation or the use of various data sources, such as interviews with lecturers and students, is needed. According to Miles and Huberman (Miles et al., 2014), triangulation is a crucial procedure for enhancing the validity of qualitative analysis by validating data from several viewpoints. Furthermore, research reliability was achieved through

consistent and well-documented data collection and analysis procedures. This was achieved through the implementation of a coding-recoding strategy (Lincoln, Y. S., & Guba, 1985).

4. Findings

The purpose of this study is to determine what causes Elementary School Teacher Education (PGSD) students to experience difficulty reading academic texts. This research focuses on linguistic elements, reading experiences, psychological and environmental factors, as well as strategies to address these issues. Consequently, the research findings will be organized as follows.

4.1. Factors Causing Difficulties Reading Academic Texts from Aspect Linguistics

Interviews with students showed that the main problem lies in understanding academic vocabulary, which includes words rarely used in everyday conversation such as "affectively," "utilize," and "convergence." This difficulty is considered a major challenge in comprehending academic texts. Furthermore, mastery of grammar is crucial for students, as it influences their understanding of the structure and meaning of sentences within a text. The following excerpt was the student's response dealing with aspect of linguistics:

Excerpt 1 (GP) describes the student's respond dealing with the question whether they have difficulties in with vocabulary when reading academic texts

Yes, it's a bit difficult because I'm not used to speaking English in everyday life. For example, affectively, utilize, convergence.

Excerpt 2 (DM) describes the student's respond dealing with the mastery of grammar

Mastering grammar is crucial for reading skills. Understanding sentence structure makes it easier to understand what's being read. We can identify the subject, predicate, and object, so we don't get confused when reading.

Information from lecturers aligns with student findings, stating that vocabulary mastery is a determining factor in successfully understanding the content of academic texts, including detailed information and the author's arguments. Grammar also presents a challenge, particularly in understanding sentence structures involving basic tenses (present, past, and future). The following excerpt was the lecturer's response dealing with aspect of linguistics:

Excerpt 3 (RF) describes the lecturer's respond dealing with the question of to what extent the influence of vocabulary on students' understanding in reading academic texts

I believe vocabulary plays a significant role in students' comprehension of academic texts. Students with a sufficient vocabulary can easily understand the text's content, including detailed information, main ideas, and arguments presented. Therefore, increasing students' vocabulary can be a strategy for improving their academic reading skills.

In the focus group discussions (FGDs), recommended learning strategies to address this linguistic barrier include the application of learning methods such as the Grammar Translation Method (GTM), Situational Language Teaching, and interactive strategies such as Focus Group Discussions, digital quizzes (Quizzes, Kahoot), game-based learning, and small group discussions. A systematic and contextual approach, including the provision of vocabulary lists, explanations of parts of speech, and training in understanding the essence of sentences, is essential to improving students' skills. Students' understanding of technical vocabulary varied by study program (50%, 35%, and 30%), depending on the difficulty level of the terms and the frequency of academic English use in their respective fields of study. This underscores the importance of the instructor's role in facilitating language comprehension through an adaptive and contextual approach.

Overall, linguistic factors in the form of academic vocabulary and grammar are the main challenges, but can be overcome by implementing holistic, contextual, and interactive

learning strategies and paying attention to the different needs of students from various study programs include elementary teacher education study program.

4.2. Factors Causing Difficulties Reading Academic Texts from Aspect of Psychology

Interviews with students revealed that anxiety was the primary psychological factor they experienced when reading academic texts in English. Many unfamiliar terms, limited vocabulary and grammar, and a tendency to quickly comprehend texts are the main causes of this anxiety. Anxiety reduces concentration and focus, leading to poor comprehension. The following excerpt was the student's response dealing with aspect of psychology:

Excerpt 4 (SA) describes the student's respond dealing with the question whether they anxious when reading academic texts in English

Yes, I feel anxious because I still know little about grammar.

Conversely, despite experiencing anxiety, all participants expressed a strong desire to continue learning and reading academic texts in English. They stated that learning this language is crucial for broadening their horizons and improving their language skills.

Excerpt 5 (DM) describe the student's respond dealing with the question how motivated they are to read English academic texts.

My motivation is quite strong because I know that reading academic texts in English is important to broaden my knowledge and support my studies.

The lecturer corroborated these findings by stating that reading anxiety affects students' ability to comprehend academic texts, primarily by reducing concentration and accuracy. The lecturer believed that a lack of understanding of sentence structure and a limited vocabulary were the main causes of anxiety. The following excerpt was the lecturer's response dealing with aspect of psychology:

Excerpt 6 (SR) describes the lecturer's respond dealing with the question that reading anxiety affects students' ability to understand academic texts?

Yes, I believe that reading anxiety affects students' ability to understand text because students judge themselves that they can't do it, then students choose to give up.

The results of the Focus Group Discussion (FGD) emphasized that instructors must intervene to reduce this anxiety by providing positive incentives and providing materials that are appropriate to students' abilities. Furthermore, learning strategies such as vocabulary enrichment, providing structured reading instructions and exercises, and independent practice can help boost students' confidence in dealing with academic texts in English.

Overall, it can be concluded that psychological factors in the form of anxiety when reading are the main obstacle, but with the support of appropriate learning strategies and maintained motivation, students' academic reading abilities can be significantly improved.

4.3. Factors Causing Difficulties Reading Academic Texts from Aspect of Reading Experiences

The majority of PGSD students began to learn and read English academic texts in elementary school, indicating a considerable amount of initial exposure and experience with English academic texts. However, reading English academic texts has not yet become a routine for the majority of students, as evidenced by the reading frequency, which ranges from one to three times a week, with only one student reading daily. The following excerpt was the student's response dealing with aspect of reading experience:

Excerpt 7 (DM) describes the student's respond dealing with the how often they read English academic texts in a week

I rarely read, in a week I only read 2-3 times

Excerpt 8 (HN)

Twice a week

In terms of reading media, the majority of students preferred books and journal articles as their primary source of English academic texts, although some also used narrative texts as a variation of their reading material. Students' comfort levels in reading English academic texts were divided into two groups: those who felt comfortable due to familiarity and strong motivation, and those who felt less comfortable due to limited vocabulary and incomplete English mastery.

This confirms that comfort in reading English academic texts is strongly influenced by reading habits, learning motivation, and individual English skills. Therefore, efforts to increase reading frequency, enrich reading sources, and improve vocabulary mastery need to be a focus so that PGSD students' reading skills in English academic texts can continue to develop optimally.

Thus, it can be concluded that the majority of PGSD students began to be exposed to English academic texts in elementary school, but have not yet made it a regular habit, reading 1–3 times per week. They tend to read books and journal articles, with a level of comfort that varies between those who are accustomed to reading and those who are motivated, and those who still struggle due to limited vocabulary and language skills. This level of comfort is influenced by habits, motivation, and English language skills. Efforts to increase reading frequency and vocabulary mastery are needed to optimize their academic reading skills.

4.4. Factors Causing Difficulties Reading Academic Texts from Aspect of Environment

From an environmental perspective, all students received positive support from lecturers and peers in the form of direct explanations, assistance in compiling difficult vocabulary lists, group discussions, and shared understanding. Learning and understanding English academic texts is easier with this support. Students also stated that their learning environment is quite conducive: comfortable, quiet, and active. When reading English academic texts, libraries, reading materials, the internet, and discussion groups are essential for improving focus and comprehension. The following excerpt was the student's response dealing with aspect of reading environment:

Excerpt 9 (DM) describes the student's respond dealing with the question whether student receives support from lecturers or peers when reading academic texts

Yes, I received support from my lecturers and friends, such as explanations and group discussions. This support was very helpful because it helped me understand the text better and wasn't confused when I encountered difficult sections.

Excerpt 10 (DW)

I get support from lecturers and friends, lecturers often provide additional explanations when we discuss English texts in class, and friends also often discuss together to help each other understand difficult terms or parts

Consequently, it can be concluded that lecturers and peers provided positive support to all PGSD students through explanations, vocabulary assistance, group discussions, and shared understanding. Their learning environment was perceived as conducive, calm and comfortable, and they had access to numerous learning resources, such as a library, books, the internet, and discussion rooms. This supportive learning environment and social support are crucial for improving students' focus and comprehension of English academic texts.

4.5. Solutions to Address the Academic Reading Difficulties

Several key learning strategies can be used to help students read English academic texts. First, regular, intensive, comprehensive reading practice lays the foundation for improving reading accuracy and speed. Vocabulary development and the habit of understanding the main ideas in texts are also emphasized, as are skimming and scanning techniques to strengthen reading comprehension. Critical thinking skills are also enhanced by analysing and discussing academic texts using high-level questions (HOTS).

In terms of learning materials and approaches, selecting reading material relevant to the subject area and students' life contexts is crucial to motivating learning. Learning approaches can be conducted individually or in groups, with a focus on analysing grammar and meaning

in texts as part of a comprehensive learning process. Digital technology is also crucial for supporting learning. Apps and platforms like Google Translate, Quizlet, Kahoot, YouTube, Edmodo, and Google Docs allow for easy, flexible, and interactive access to materials. These technologies work with the digital nature of Generation Z, increasing participation and efficiency in independent and collaborative learning when reading English academic texts.

From the explanation above, it can be concluded that learning strategies that can be applied to overcome difficulties in reading English academic texts include intensive and extensive reading exercises, vocabulary development, and skimming and scanning techniques to accelerate and deepen reading comprehension. Selecting relevant materials and individual or group learning with grammar and meaning analysis play a crucial role. The use of digital technologies such as Google Translate, Quizlet, and other interactive platforms supports independent and interactive learning, in line with the characteristics of Generation Z. The integration of these strategies and technologies increases students' learning engagement and effectiveness in understanding English academic texts.

Overall, dealing with the findings of this study, it can be said that this study contributes to applied linguistics by confirming that students' academic reading difficulties stem not only from linguistic factors but are also exacerbated by psychological factors. Furthermore, the results extend educational theory by demonstrating that a conducive learning environment does not automatically improve reading habits, necessitating a more holistic instructional approach.

5. Discussion

5.1. Factors Causing Difficulties Reading Academic Texts from Aspect Linguistics

As articulated earlier, the findings of linguistic factors revealed that academic vocabulary and grammar as the main challenges, but can be overcome by implementing holistic, contextual, and interactive learning strategies and paying attention to the different needs of students from various study programs include elementary teacher education study program. This findings are supported by Dardjito (2023) which similarly stated that linguistic barriers faced by students when reading English academic texts in the form of vocabulary and grammar. Dealing with the obstacle in vocabulary and grammar are also in line with the study conducted by Lawrence et al (2022). This article emphasizes the importance of academic vocabulary in reading comprehension as well as how linguistic factors influence the ability to read academic texts. Besides, McKeown (2019) also emphasized that effective and interactive vocabulary teaching strategies can improve students' text comprehension and academic language skills. Another similar study supporting this findings is also demonstrated by Snow (2010) which explains that the importance of learning academic vocabulary and understanding academic language that helps students become independent learners, which is in line with the idea of holistic and interactive learning.

Regarding to these findings, Li & Pei (2024) stated that students with limited language proficiency may find it difficult to comprehend written English texts and academic materials since they may struggle with vocabulary, sentence structure, and overall comprehension, which can impede their ability to grasp the content across various subjects. Another similar study which supporting this finding is also implemented by Chung & Wan (2025) which argued that a good command of academic vocabulary is important for academic success in higher education. Based on the discussion in advance, it can be said that linguistic factors such as academic vocabulary and grammar are major barriers to understanding English academic texts. These barriers can be overcome with comprehensive, contextual, and interactive learning strategies, tailored to the diverse needs of students. This approach effectively improves comprehension and overall academic success.

5.2. Factors Causing Difficulties Reading Academic Texts from Aspect of Psychology

Dealing with the psychological aspect, the finding demonstrated that reading anxiety is the main obstacle, but it can be overcome by implementing appropriate learning strategies and maintained motivation, so that the students' academic reading abilities can be significantly

improved. The study conducted by Solati et al (2024) supports the findings of this study that reading anxiety negatively affects students' reading performance and comprehension, thus hindering motivation and academic outcomes. Study conducted by Munir et al (2024) is also in line with this findings which said that there was a correlation between students' reading anxiety and their reading ability. Another similar finding also stated that reading ability was negatively correlated with reading anxiety and positively correlated with academic achievement (Soares et al., 2023). Another study dealing with anxiety demonstrated by Ocak & Yamaç (2013) which stated that there is a negative relation between cognitive awareness of reading strategies and writing anxiety.

As such, it can be concluded that psychological factors such as reading anxiety are a major barrier to academic reading ability. With the right learning strategies and maintained motivation, students' reading ability can improve significantly. Reading anxiety impacts performance and motivation, making it important to address it to support academic success.

5.3. Factors Causing Difficulties Reading Academic Texts from Aspect of Reading Experiences

As articulated earlier, from aspect of reading experiences, the findings revealed that PGSD students began to be exposed to English academic texts in elementary school, but have not yet made it a regular habit, reading 1–3 times per week. They tend to read books and journal articles, with a level of comfort that varies between those who are accustomed to reading and those who are motivated, and those who still struggle due to limited vocabulary and language skills. This level of comfort is influenced by habits, motivation, and English language skills. Efforts to increase reading frequency and vocabulary mastery are needed to optimize their academic reading skills. This finding is consistent with the study from Abid et al (2023) which states that there is a close relationship between reading habits, learning skills, and academic achievement, and this strengthens that good habits and motivation influence the understanding of academic texts. Dealing with this finding, a study shows that increasing reading habits has a positive impact on writing skills and requires repetition to become a strong habit, while vocabulary mastery is important for reading comfort (Yana, 2024). Another study that addressed the frequency of incidental and intentional vocabulary learning in young English as a second language (ESL) learners, emphasized the importance of vocabulary mastery related to frequency of exposure and learning motivation for academic reading success (Meganathan et al., 2019). As such it can be said that elementary teacher education students are exposed to academic English texts in elementary school, but this hasn't become a regular habit, only reading 1–3 times per week. Reading comfort is influenced by habit, motivation, and English language skills. Increasing reading frequency and vocabulary mastery are essential for optimizing academic performance.

5.4. Factors Causing Difficulties Reading Academic Texts from Aspect of Environment

In term of environment aspect, the finding stated that all PGSD students received positive support from lecturers and peers in the form of explanations, assistance with vocabulary lists, group discussions, and shared understanding. Their learning environment is considered conducive, calm, and comfortable, and they have a wealth of learning resources, such as libraries, books, the internet, and discussion rooms. This supportive learning environment and social support are crucial for improving students' focus and comprehension of English academic texts. Educational environment becomes factor that must be considered in reading comprehension (Yılmazlar & Görden, 2023). Dealing with this finding, Closs et al (2022) stated that although learning environment as deemed conducive, other factors such as internal motivation and individual learning strategies can further determine academic outcomes, including focus and reading comprehension.

This suggests that social support alone is not sufficient to guarantee improved academic performance. Similar statement also written by (Kappert, 2020) who argued that a positive environment is not the only factor for success. In additional (Cao et al., 2024) also stated that academic success is a combination of multiple dimensions, including personal, emotional, and social factors, not just a positive physical or social environment. Therefore, it can be concluded

that lecturers and colleagues provide positive support to all PGSD students through various forms of mentoring and discussions in a friendly learning environment. However, academic success depends not only on a positive environment but also on individual motivation, learning strategies, and other emotional factors.

5.5. Solutions to Address These Academic Reading Difficulties

Dealing with the solutions to address these academic reading difficulties, the result of this study revealed that several learning strategies that can be applied to overcome difficulties in reading English academic texts include intensive and extensive reading exercises, vocabulary development, and skimming and scanning techniques to accelerate and deepen reading comprehension. This finding is in line with the study by Bilonozhko & Syzenko (2020) which stated that effective learning strategies to overcome difficulties in reading English academic texts include intensive and extensive reading practice, vocabulary development, and skimming and scanning techniques which play a role in accelerating and deepening reading comprehension. Regarding to select relevant materials and individual or group learning with grammar and meaning analysis, Grabe & Stoller (2013) emphasize the importance of selecting relevant reading material that is appropriate to the reader's ability level to increase the effectiveness of understanding, while also using analysis of language structure and meaning to support in-depth understanding. Another study supporting this finding is also stated by Zheng which told that there is a strong correlation between grammatical knowledge and the ability to read and understand texts (Zheng et al., 2023).

Dealing with the use of digital technologies such as Google Translate, Quizlet, and other interactive platforms supports independent and interactive learning, in line with the characteristics of Generation Z., is supported by the study conducted by (Pramerta, 2024) which argued that the use of digital platforms such as Google Translate, Quizlet, and other interactive applications has been shown to support more effective independent and collaborative learning.

This integration of traditional strategies with technology increases learning engagement and increases the effectiveness of understanding academic texts. The integration of these strategies and technologies increases students' learning engagement and effectiveness in understanding English academic texts.

6. Conclusion

While linguistic factors such as academic vocabulary and grammar are major barriers to understanding English academic texts, which can be addressed through comprehensive and interactive learning strategies tailored to students' needs, psychological factors, such as reading anxiety, also impact reading ability and require attention to maintain motivation. Elementary school teacher education students are introduced to academic texts in elementary school, but their reading habits are still low, at 1–3 times per week. Therefore, increasing reading frequency and vocabulary mastery is crucial. Support from lecturers and peers in a conducive learning environment is helpful, but academic success also depends on motivation, learning strategies, and other emotional factors. Effective strategies include intensive and extensive reading practice, vocabulary development, and skimming and scanning techniques to improve reading comprehension. The findings of this study simultaneously strengthen previous theories that emphasize limited vocabulary and grammar as the main obstacles to reading comprehension (e.g., Grabe, 2009), and provide a new contribution by showing that linguistic difficulties are intertwined with psychological barriers such as anxiety and low motivation. Furthermore, this study adds a new perspective that a conducive learning environment does not automatically result in good reading habits, thereby broadening the understanding of existing educational theories.

Limitation

This research focuses more on linguistic, psychological, learning environment, and student reading experiences, but has not accommodated other external factors such as institutional policies, social support, or the use of learning technology that can also influence academic reading ability.

Recommendation

It is recommended that future research combine qualitative and quantitative methods to gain a more comprehensive perspective. The use of more varied research instruments, such as observation or linguistic ability tests, could strengthen the validity of the findings. Besides, it is also recommended that future research broaden its focus by including external factors that have not yet been accommodated in this research, such as institutional policies and the use of digital learning technology.

Acknowledgement

The authors would like to express gratitude to the Muhammadiyah National Research Grant Batch VIII of 2024 (Number: 0258.029/I.3/D/2025), which has provided financial support in the implementation of this research.

Conflict of Interest

The Authors declare that there is no conflict of interest.

Declaration of Generative AI-assisted Technologies

This manuscript was prepared with the assistance of Generative AI for example ChatGPT, Grammarly, Quillbot. The AI was used to assist in helping to find Scopus-indexed article and to paraphrase. Intellectual contributions, critical analyses, and final revisions were conducted by the authors. The authors take full responsibility for the accuracy, originality, and integrity of the content presented in this work.

References

- Abid, N., Aslam, S., Alghamdi, A. A., & Kumar, T. (2023). Relationships among students' reading habits, study skills, and academic achievement in English at the secondary level. *Frontiers in Psychology, 14*(January), 1–10. <https://doi.org/10.3389/fpsyg.2023.1020269>
- Afdal, H. W., Spernes, K., & Hoff-Jenssen, R. (2023). Academic reading as a social practice in higher education. *Higher Education, 85*(6), 1337–1355. <https://doi.org/10.1007/s10734-022-00893-x>
- BANDURA, A. (2009). *Self-Efficacy in Changing Societies* (A. Bandura (ed.)). Cambridge University Press. <https://doi.org/10.1109/EVER.2017.7935960>
- Bilonozhko, N., & Syzenko, A. (2020). *Effective Reading Strategies for Generation Z Using Authentic Texts. January*, 121–130.
- BOYLU, E., KARAGÖL, E., & ÇEVİK, A. (2024). Academic Reading in Graduate Students: Interpretative Phenomenological Analysis. *Journal of Qualitative Research in Education, 37*, 64–92. <https://doi.org/10.14689/enad.37.1754>
- Bronfenbrenner, U. (1979). *The Ecology of Human Development* (Vol. 17). Harvard University Press.
- Cao, W., Gnana Sanga Mithra, S., & B R, A. (2024). Unraveling the factors shaping academic success: A structural equation modeling approach for college students. *Heliyon, 10*(4),

e25775. <https://doi.org/10.1016/j.heliyon.2024.e25775>

- Chung, E., & Wan, A. (2025). Examining the use of academic vocabulary in first-year ESL undergraduates' writing: A corpus-driven study in Hong Kong. *Assessing Writing*, 63(October 2024), 100913. <https://doi.org/10.1016/j.asw.2024.100913>
- Closs, L., Mahat, M., & Imms, W. (2022). Learning environments' influence on students' learning experience in an Australian Faculty of Business and Economics. *Learning Environments Research*, 25(1), 271–285. <https://doi.org/10.1007/s10984-021-09361-2>
- Dardjito, H., Rolls, N., Setiawan, A., Sumekto, D. R., Tamansiswa, S., & Tamansiswa, U. S. (2023). Challenges in Reading English Academic Texts for Non-English Major Students of an Indonesian University. *10(3)*, 1290–1308.
- Eriksson, L. (2023a). "Gruelling to read": Swedish university students' perceptions of and attitudes towards academic reading in English. *Journal of English for Academic Purposes*, 64(June). <https://doi.org/10.1016/j.jeap.2023.101265>
- Eriksson, L. (2023b). "Gruelling to read": Swedish university students' perceptions of and attitudes towards academic reading in English. *Journal of English for Academic Purposes*, 64(June), 101265. <https://doi.org/10.1016/j.jeap.2023.101265>
- Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. Edward Arnold. [https://doi.org/10.1016/0346-251x\(87\)90081-9](https://doi.org/10.1016/0346-251x(87)90081-9)
- Grabe, W. (2009). *Reading in a Second Language: Moving From Theory to Practice*. In Cambridge University Press. Cambridge University Press.
- Grabe, W., & Stoller, F. L. (2013). Teaching and researching reading, second edition. In *Teaching and Researching Reading, Second Edition*. <https://doi.org/10.4324/9781315833743>
- Guthrie, J. T., Wigfield, A., & Perencevich, K. C. (2004). Motivating reading comprehension: Concept-oriented reading instruction. In *Motivating Reading Comprehension: Concept-Oriented Reading Instruction*. <https://doi.org/10.4324/9781410610126>
- Habók, A., Oo, T. Z., & Magyar, A. (2024). The effect of reading strategy use on online reading comprehension. *Heliyon*, 10(2), e24281. <https://doi.org/10.1016/j.heliyon.2024.e24281>
- Kappert, A. (2020). Professional and Personal Experiences as Leverage for Learning. *Frontiers in Education*, 5(July), 1–17. <https://doi.org/10.3389/educ.2020.00098>
- Krashen, S. D. (1982). *Principles and Practice in Second Language Acquisition*. Pergamon Press Inc.
- Lawrence, J. F., Knoph, R., McIlraith, A., Kulesz, P. A., & Francis, D. J. (2022). Reading Comprehension and Academic Vocabulary: Exploring Relations of Item Features and Reading Proficiency. *Reading Research Quarterly*, 57(2), 669–690. <https://doi.org/10.1002/rrq.434>
- Li, H. (2025). Teaching academic English in higher education: strategies and challenges. *Frontiers in Education*, 10(April), 1–6. <https://doi.org/10.3389/educ.2025.1559307>
- Li, M., & Pei, L. (2024). Exploring challenges in academic language-related skills of EFL learners in Chinese EMI settings. *Acta Psychologica*, 247(December 2023), 104309. <https://doi.org/10.1016/j.actpsy.2024.104309>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. SAGE Publications. <http://dx.doi.org/10.1016/j.bpj.2015.06.056><https://academic.oup.com/bioinformatics/article-abstract/34/13/2201/4852827><https://semisupervised-3254828305/semisupervised.ppt><http://dx.doi.org/10.1016/j.str.2013.02.005><http://dx.doi.org/10.10>
- Macaro, E., Akincioglu, M., & Han, S. (2020). English medium instruction in higher education: Teacher perspectives on professional development and certification. *International Journal of Applied Linguistics (United Kingdom)*, 30(1), 144–157.

<https://doi.org/10.1111/ijal.12272>

- MacIntyre, P., & Gregersen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching*, 2(2), 193. <https://doi.org/10.14746/sslft.2012.2.2.4>
- McKeown, M. G. (2019). Effective vocabulary instruction fosters knowing words, using words, and understanding how words work. *Language, Speech, and Hearing Services in Schools*, 50(4), 466–476. https://doi.org/10.1044/2019_LSHSS-VOIA-18-0126
- Meganathan, P. M., Thai, Y. N., Paramasivam, S., & Jalaluddin, I. (2019). Incidental and intentional learning of vocabulary among young ESL learners. *3L: Language, Linguistics, Literature*, 25(4), 51–67. <https://doi.org/10.17576/3L-2019-2504-04>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis A Method Sourcebook* (3rd ed.). SAGE Publications.
- Munir, S., Suzanne, N., & Fitri, H. (2024). The Correlation between Students' Reading Anxiety and Their Reading Ability. *Ahmad Dahlan Journal of English Studies*, 10(2), 89–99. <https://doi.org/10.26555/adjes.v10i2.354>
- Nwokedi, B. F. C. (2023). Influence of Classroom Environment on the Academic Performance of Students in English Language. *International Journal of Advance Social Sciences and Education (IJASSE)*, 1(4), 191–198. <https://doi.org/10.59890/ijasse.v1i4.732>
- Ocak, G., & Yamaç, A. (2013). Examination of the relationships between fifth graders' self-regulated learning strategies, motivational beliefs, attitudes, and achievement. *Educational Sciences: Theory and Practice*, 13(1), 380–387.
- Pramerta, I. G. P. A. (2024). What Do Gen Z Students Need to Succeed in Reading Comprehension? *Voices of English Language Education Society*, 8(2), 444–457. <https://doi.org/10.29408/veles.v8i2.26908>
- Setiyadi, R., Kuswendi, U., & Ristiana, M. G. (2019). Learning of Reading Comprehension through Reading Workshop in the Industry 4.0. *Mimbar Sekolah Dasar*, 6(2), 160. <https://doi.org/10.17509/mimbar-sd.v6i2.17397>
- Snow, C. E. (2010). Academic language and the challenge of reading for learning about science. *Science*, 328(5977), 450–452. <https://doi.org/10.1126/science.1182597>
- Soares, S., Boyes, M. E., Parrila, R., & Badcock, N. A. (2023). Does reading anxiety impact on academic achievement in higher education students? *Dyslexia*, 29(3), 179–198. <https://doi.org/10.1002/dys.1738>
- Solati, A., Amani, A., & Armat, M. R. (2024). Impact of learning environment on reading anxiety: a study of medical students in online and traditional settings. *BMC Medical Education*, 24(1). <https://doi.org/10.1186/s12909-024-06516-6>
- Yana, F. (2024). the Correlation Between Student Reading Habit and Their Ability of Writing Narrative Text. *BRIGHT VISION Journal of Language and Education*, 4(2), 173. <https://doi.org/10.30821/brightvision.v4i2.3877>
- Yılmazlar, H. Ş., & Görgen, İ. (2023). The Effect of Learning Environments Enriched with Multisensory Reading Activities on Reading Comprehension, Reading Comprehension Strategies and Reading Motivation. *Mimbar Sekolah Dasar*, 10(3), 527–546. <https://doi.org/10.53400/mimbar-sd.v10i3.53092>
- Zheng, H., Miao, X., Dong, Y., & Yuan, D. C. (2023). The relationship between grammatical knowledge and reading comprehension: A meta-analysis. *Frontiers in Psychology*, 14(March), 1–13. <https://doi.org/10.3389/fpsyg.2023.1098568>