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**The Relationship between english proficiency, academic reading
comprehension, and critical thinking in university students**

***Relación entre el dominio del inglés, la comprensión lectora académica y el
pensamiento crítico en estudiantes universitarios***

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ABSTRACT

The present study aims to examine the relationship between English proficiency, academic reading comprehension, and critical thinking in university students. A systematic literature review was conducted through the selection and analysis of 20 studies related to English language proficiency, second-language reading comprehension, academic vocabulary, reading strategies, critical reading, and critical thinking in higher education. The methodology made it possible to organize the evidence into thematic categories in order to identify trends, contributions, and research gaps. The findings suggest that English proficiency plays an important role in university academic performance, as it enables students to understand scientific texts, identify main ideas, interpret arguments, and evaluate information critically. In addition, academic reading comprehension was found to depend on linguistic, cognitive, and metacognitive factors, such as vocabulary, grammar, prior knowledge, and the use of reading strategies. Finally, the study concludes that critical thinking can be strengthened through academic reading activities in English that promote analysis, reflection, argumentation, and evidence evaluation.

Keywords: english proficiency, academic reading comprehension, critical thinking, critical reading, university students.

RESUMEN

El presente estudio tiene como objetivo analizar la relación entre el dominio del inglés, la comprensión lectora académica y el pensamiento crítico en estudiantes universitarios. Para ello, se desarrolló una revisión sistemática de la literatura científica, mediante la selección y análisis de 20 estudios relacionados con la competencia en inglés, la comprensión lectora en segunda lengua, el vocabulario académico, las estrategias de lectura, la lectura crítica y el pensamiento crítico en la educación superior. La metodología empleada permitió organizar la evidencia en categorías temáticas, con el fin de identificar tendencias, aportes y vacíos de investigación. Los resultados sugieren que el dominio del inglés cumple un papel relevante para el desempeño académico universitario, ya que permite a los estudiantes comprender textos científicos, identificar ideas principales, interpretar argumentos y evaluar información de manera crítica. Asimismo, se identificó que la comprensión lectora académica depende de factores lingüísticos, cognitivos y metacognitivos, como el vocabulario, la gramática, los conocimientos previos y el uso de estrategias de lectura. Finalmente, se concluye que el pensamiento crítico puede fortalecerse mediante actividades de lectura académica en inglés que promuevan el análisis, la reflexión, la argumentación y la evaluación de evidencias.

Palabras clave: dominio del inglés, comprensión lectora académica, pensamiento crítico, lectura crítica, estudiantes universitarios.



1. Introduction

English proficiency has become a crucial academic competence for university students, especially in contexts where scientific articles, textbooks, digital resources, and research materials are frequently written in English. In higher education, English proficiency is not limited to knowing grammar rules or isolated vocabulary; rather, it involves the ability to understand complex academic discourse, identify relationships between ideas, interpret arguments, and use language as a tool for learning. From this perspective second-language proficiency appears to be related to how students access, process, and evaluate academic information. Research on second-language reading has shown that successful comprehension depends on both linguistic knowledge and general reading ability, since students need enough English knowledge to make their reading strategies work effectively (Bernhardt & Kamil, 1995; Hulstijn, 2011). Therefore, English proficiency can be considered a key factor in students' academic development, particularly when reading is used as the main source of knowledge construction. DOI data for these works was verified through publisher/indexed pages.

Academic reading comprehension is a complex cognitive process that requires vocabulary knowledge, grammatical awareness, inferencing, background knowledge, and metacognitive control. University students who have a stronger command of English are usually better prepared to recognize main ideas, understand academic terminology, follow argumentative structures, and infer meanings that are not explicitly stated in the text. Vocabulary knowledge is especially important because limited lexical knowledge can interrupt comprehension and prevent students from interpreting academic texts accurately. Studies have found that both vocabulary depth and vocabulary breadth are strong predictors of academic reading performance (Qian, 2002), while meta-analytic evidence suggests a strong relationship between vocabulary knowledge and L2 reading comprehension (Zhang & Zhang, 2022). Similarly, Jeon and Yamashita (2014) demonstrated that L2 reading comprehension is related to several linguistic and cognitive variables, including vocabulary, grammar, decoding, and metacognitive knowledge. DOI and article details for the meta-analyses were checked through Wiley and SAGE pages.



However, academic reading is not only a matter of understanding words and sentences. It also involves constructing meaning, connecting ideas, evaluating evidence, and questioning the author's assumptions. For this reason, reading comprehension is strongly connected to critical thinking. The construction-integration model of comprehension explains that readers actively build meaning by integrating textual information with prior knowledge (Kintsch, 1988). Likewise, Perfetti and Stafura (2014) argue that word knowledge plays a central role in comprehension because understanding a text depends on how efficiently readers connect lexical, semantic, and contextual information. In academic settings, students must go beyond literal comprehension and engage in critical reading, which includes analyzing arguments, identifying bias, evaluating evidence, and forming reasoned judgments (Mokhtari & Reichard, 2002; Din, 2020).

Critical thinking is one of the most important intellectual skills expected of university students because it allows them to question information, compare perspectives, justify arguments, and make informed academic decisions. Halpern (1998) emphasizes that critical thinking should be taught in ways that promote transfer across academic and real-life domains, while Kuhn (1999) views critical thinking as a developmental process that requires argumentation, reflection, and evidence-based reasoning. In addition, Abrami et al. (2015) found that explicit instruction and guided practice can significantly improve students' critical thinking skills. These findings suggest that English proficiency and critical thinking should not be treated as separate academic abilities. Instead, they interact constantly when students read academic texts in English, especially when they must interpret complex arguments and evaluate the reliability of information.

In the university context, students with low English proficiency may struggle to understand academic texts deeply, even when they possess general reasoning abilities. Limited vocabulary, weak grammar knowledge, and lack of reading strategies can reduce their ability to analyze, synthesize, and critique information. On the other hand, students with higher English proficiency are more likely to engage with texts at a deeper level because they can focus less on decoding language and more on evaluating meaning. Recent research on English reading modules in higher education shows that reading-based instruction can support critical thinking when students are guided to analyze, question, and reflect on academic texts (Yang et al., 2025). Therefore, developing English proficiency is



not only necessary for better reading comprehension, but also for strengthening students' ability to think critically in academic environments.

Based on this context, the present study aims to analyze the relationship between English proficiency, academic reading comprehension, and critical thinking in university students. Specifically it seeks to examine how students' level of English is associated with their ability to understand academic texts, interpret arguments, evaluate information, and produce reflective responses. This topic is relevant because universities increasingly require students to read, research, and communicate in English, while also expecting them to demonstrate critical thinking as part of their academic formation. Understanding this relationship can help teachers design reading activities that do not only improve language proficiency, but also promote deeper comprehension, independent reasoning, and critical academic engagement.

2. Theoretical Framework

English Proficiency and University Academic Performance

English proficiency is a central factor in university learning because it allows students to access academic texts, understand disciplinary content, and participate in knowledge production. In higher education, English is not only a language subject; it functions as an academic tool through which students read research articles, interpret theoretical materials, and communicate ideas in written and oral forms. Waluyo and Panmei (2021) found that students' performance in English courses was significantly related to their academic achievement, suggesting that English proficiency can predict broader academic success among university students. This means that students with stronger English skills are more likely to understand academic content, complete assignments effectively, and perform better in university contexts.

From this perspective, English proficiency should be understood as a multidimensional competence that includes vocabulary knowledge, grammatical control, reading fluency, academic discourse awareness, and the ability to interpret meaning in context. For university students, these elements are especially important because academic reading requires more than literal understanding. Students must identify main ideas, follow arguments, understand technical vocabulary, and connect information across texts. Therefore, English proficiency



becomes a foundation for academic reading comprehension and for the development of higher-order thinking.

Academic Reading Comprehension in English

Academic reading comprehension refers to the ability to understand, interpret, analyze, and evaluate written texts used in university contexts. Yapp et al. (2023) argue that reading in a second language for academic purposes is essential in higher education, especially in contexts where students must work with English materials. Their study shows that reading strategy instruction can support students' academic reading comprehension because it helps learners approach complex texts in a more organized and conscious way.

Academic reading is not a passive activity. It requires students to activate prior knowledge, recognize text structure, infer implicit meanings, and evaluate the quality of information. In this process, reading strategies such as predicting, questioning, summarizing, identifying key arguments, and monitoring comprehension are essential. When students lack English proficiency, they often focus only on decoding words, which limits deeper comprehension. In contrast, students with stronger English proficiency can dedicate more cognitive effort to understanding arguments, comparing ideas, and evaluating the author's position.

Vocabulary Knowledge as a Predictor of Reading Comprehension

Vocabulary knowledge is one of the most important components of English proficiency because academic texts contain specialized, abstract, and discipline-related words. Ha (2021) found that receptive vocabulary knowledge strongly predicts L2 listening and reading comprehension. The study also showed that academic vocabulary knowledge correlates significantly with academic reading comprehension, which means that students who know more academic words are better prepared to understand university-level texts.

In this sense, vocabulary is not only a matter of memorizing isolated words. It includes knowing word meanings, recognizing words in different contexts, understanding word families, and interpreting academic terminology. University students who have limited vocabulary may misinterpret texts, lose the main argument, or fail to understand the relationship between concepts. Therefore, the development of academic vocabulary is essential for improving reading comprehension and for allowing students to move from basic understanding to critical interpretation.

Critical Reading and Critical Thinking



Critical reading and critical thinking are closely connected. Critical reading involves questioning the text, identifying assumptions, evaluating evidence, recognizing bias, and judging the strength of arguments. Din (2020) explains that university students' critical thinking ability can be reflected through their critical reading skills. This means that when students read critically, they demonstrate their ability to analyze, infer, evaluate, and make reasoned judgments based on textual information.

Similarly, Arifin (2020) argues that critical reading can promote students' critical thinking and reading comprehension. In university contexts, students are expected not only to understand what a text says, but also to question why it says it, how the argument is constructed, and whether the evidence is reliable. For this reason, academic reading comprehension should not be separated from critical thinking. Reading comprehension allows students to understand the text, while critical thinking allows them to evaluate it.

Critical Thinking in EFL Learning

In English as a Foreign Language contexts, critical thinking must be integrated into language learning rather than treated as a separate skill. Cundar-Ruano (2021) states that language competence and criticality are complementary, meaning that students can improve their English while also developing their ability to analyze, judge, reflect, and create ideas. This is important because university students need English not only to communicate, but also to think academically through the language.

Yulian (2021) also emphasizes the role of active methodologies in developing critical reading among EFL learners. The flipped classroom model, for example, can support critical thinking because students prepare before class and then use classroom time to discuss, analyze, and evaluate texts. This approach helps students move beyond memorization and encourages them to become active readers and thinkers.

Teaching and Assessing Critical Thinking in Higher Education

Critical thinking is one of the main outcomes expected in higher education. Bellaera et al. (2021) explain that university instructors consider critical thinking an important academic skill, but its teaching requires clear strategies, guided practice, and activities that promote analysis and evaluation. This suggests that critical thinking does not develop automatically; it must be intentionally taught through tasks that require students to compare ideas, defend positions, solve problems, and justify conclusions.



Hart et al. (2021) highlight that assessing critical thinking should go beyond selecting correct answers. Their study suggests that constructed responses are useful because they allow students to show the quality of their reasoning. This is especially relevant for academic reading, since students may choose the correct answer in a test without fully demonstrating their ability to explain, justify, or critique an argument.

Relationship Between English Proficiency, Reading Comprehension, and Critical Thinking

The relationship between English proficiency, academic reading comprehension, and critical thinking can be understood as progressive and interdependent. English proficiency provides the linguistic foundation that allows students to decode and understand academic texts. Academic reading comprehension allows them to identify information, interpret meaning, and follow the structure of arguments. Critical thinking allows them to evaluate the quality of those arguments, question assumptions, and construct their own reasoned responses.

Therefore, students with higher English proficiency may have better opportunities to develop academic reading comprehension and critical thinking because they can focus less on basic language decoding and more on analysis, interpretation, and evaluation. However, proficiency alone is not enough. Students also need explicit reading strategies, critical reading activities, academic vocabulary development, and opportunities to discuss and defend their interpretations.

Based on this theoretical framework, the influence of English proficiency on academic reading comprehension and critical thinking in university students can be explained as follows: English proficiency supports access to academic texts; reading comprehension enables students to understand and interpret those texts; and critical thinking allows them to evaluate information and construct academic judgments. For this reason, university English instruction should not focus only on grammar and vocabulary, but also on reading strategies, argument analysis, reflection, and critical discussion.

3. Methodology

The present study was developed through a systematic literature review, with the purpose of analyzing the scientific evidence available on the relationship between English proficiency, academic reading comprehension, and critical thinking in university students. This



methodology made it possible to identify, collect, evaluate, and synthesize academic studies related to English language proficiency, second-language reading comprehension, academic reading strategies, vocabulary knowledge, critical reading, and critical thinking in higher education. In addition, the study adopted a qualitative descriptive-analytical approach, aimed at interpreting the findings reported in previous research and identifying tendencies, contributions, and research gaps in the field.

A systematic review was considered appropriate because this type of methodology allows researchers to organize previous evidence in a transparent, rigorous, and reproducible way. Literature reviews require clear procedures to avoid arbitrary selection of sources, while systematic reviews help strengthen the reliability of academic synthesis (Snyder, 2019; Xiao & Watson, 2019). The selection and reporting process followed the PRISMA 2020 guidelines, which provide updated criteria for identifying, screening, and including studies in systematic reviews (Page et al., 2021). Likewise, the review considered methodological recommendations that emphasize transparency, replicability, critical appraisal, and structured synthesis of scientific evidence (Tranfield et al., 2003; Haddaway et al., 2015; Paul & Criado, 2020).

The bibliographic search was carried out in academic databases of recognized scientific relevance, including Scopus, Web of Science, ERIC, ScienceDirect, Taylor & Francis Online, SAGE Journals, SpringerLink, Wiley Online Library, Google Scholar, and DOAJ. These databases were selected because they provide access to studies related to applied linguistics, English as a Foreign Language, higher education, academic literacy, reading comprehension, vocabulary knowledge, and critical thinking.

The bibliographic search was conducted approximately in March 2026. In the databases that allowed advanced search options, the search equations were applied mainly to the title, abstract, and keywords fields. In platforms with different search structures, such as Google Scholar and DOAJ, the equations were adapted according to the available search functions. Therefore, the same conceptual search strategy was maintained across databases, but the syntax and search fields were adjusted according to the characteristics of each platform.

The search process focused on studies published between 1988 and 2026. This period made it possible to include both seminal theoretical contributions and recent empirical studies. Classic studies were included because they provide foundational explanations of



reading comprehension, language proficiency, vocabulary knowledge, and critical thinking. Recent studies were included because they reflect current discussions about English proficiency, critical reading, academic achievement, and the development of critical thinking skills in university contexts.

Table 1

Records identified by database

Database	Records identified
Scopus	14
Web of Science	13
ERIC	12
ScienceDirect	10
Taylor & Francis Online	10
SAGE Journals	9
SpringerLink	9
Wiley Online Library	8
Google Scholar	14
DOAJ	7
Total	106

Note. The table presents the distribution of the 106 records identified across the ten databases consulted. Source: Authors’ own elaboration.

A total of 106 records were initially identified. After removing 18 duplicate records, 88 documents remained for the screening stage. During the review of titles and abstracts, 50 records were excluded because they did not directly address the relationship between English proficiency, academic reading comprehension, and critical thinking in university students. Then, 38 full-text documents were assessed for eligibility. Of these, 18 were excluded after full-text review. The main reasons for exclusion were: studies focused on populations other than university students (n = 6), studies without a direct relationship with English proficiency, academic reading comprehension, and critical thinking (n = 7), and studies with



insufficient or non-verifiable bibliographic or methodological information ($n = 5$). Finally, 20 studies were included in the systematic review.

The search strategy was structured using keywords in English combined with the Boolean operators AND and OR. The main search terms included: “English proficiency,” “academic reading comprehension,” “critical thinking,” “critical reading,” “university students,” “higher education,” “EFL learners,” “second language reading,” “L2 reading comprehension,” “vocabulary knowledge,” “reading strategies,” and “academic achievement.”

Search equations

To ensure a systematic and reproducible search process, specific search equations were formulated for each database and adapted according to its search options, syntax, and available fields, including title, abstract, and keywords when applicable.

Scopus and Web of Science

("English proficiency" OR "language proficiency") AND ("academic reading comprehension" OR "L2 reading comprehension") AND ("critical thinking" OR "critical reading")

ERIC and SAGE Journals

("EFL learners" OR "university students") AND ("reading comprehension") AND ("critical thinking skills")

ScienceDirect and Taylor & Francis Online

("English proficiency") AND ("academic reading" OR "critical reading") AND ("higher education")

SpringerLink and Wiley Online Library

("vocabulary knowledge" OR "reading strategies") AND ("L2 reading comprehension") AND ("university students")

Google Scholar and DOAJ

"English proficiency" "academic reading comprehension" "critical thinking" "university students"

Complementary searches were also conducted using the following equations:

"critical reading" AND "critical thinking" AND "EFL"

"English proficiency" AND "academic achievement"



"vocabulary knowledge" AND "L2 reading comprehension"

"reading strategies" AND "academic reading comprehension"

"higher education" AND "critical thinking skills"

The inclusion criteria considered peer-reviewed articles, systematic reviews, meta-analyses, theoretical studies, and empirical research directly related to English proficiency, academic reading comprehension, critical reading, vocabulary knowledge, reading strategies, critical thinking, and university students. Studies written in English, available in full text, and published between 1988 and 2026 were included. Priority was given to publications with DOI or verifiable bibliographic information.

The exclusion criteria included duplicated documents, opinion articles, unpublished theses, non-academic sources, studies without verifiable bibliographic data, documents focused on primary or secondary education, and studies unrelated to English proficiency, academic reading comprehension, or critical thinking in higher education.

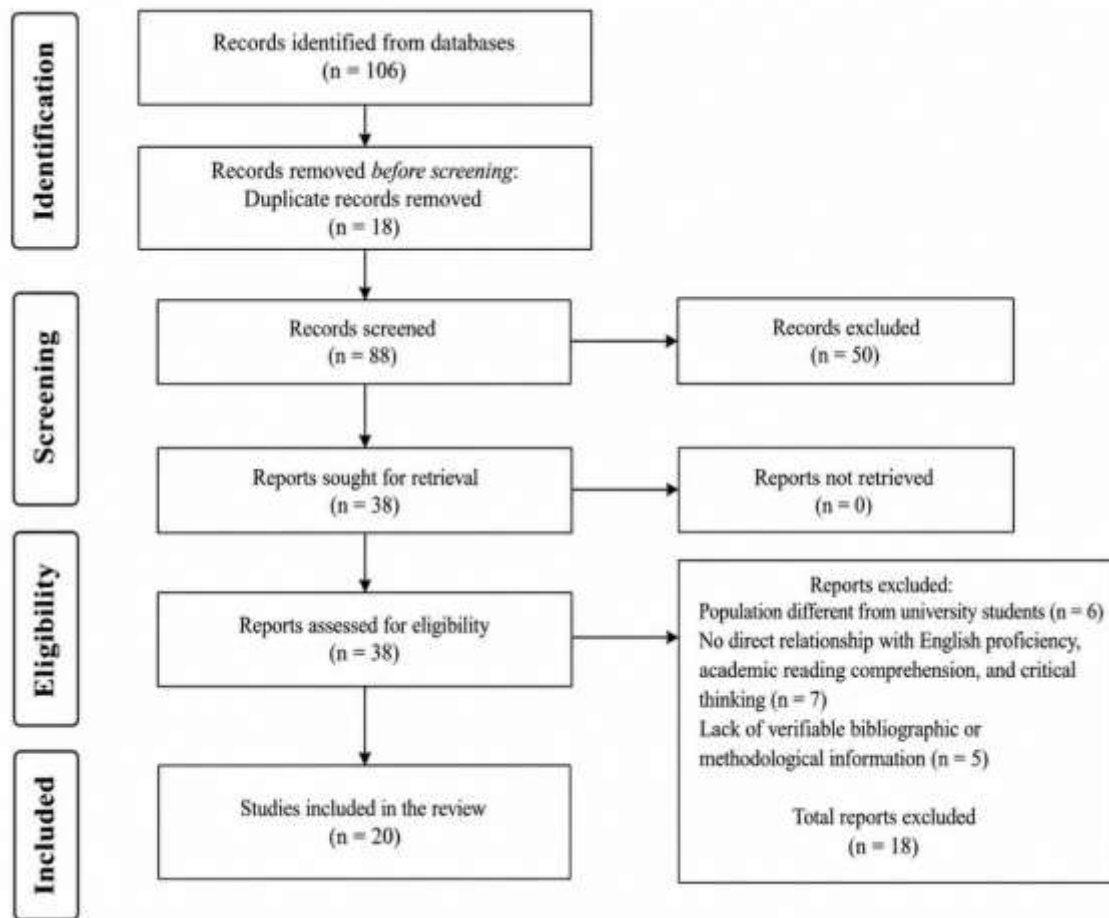
The study selection process followed the PRISMA 2020 structure. In the first stage, records were identified through selected databases. In the second stage, duplicate records were removed. In the third stage, titles and abstracts were screened to verify relevance. In the fourth stage, full-text documents were assessed according to the inclusion and exclusion criteria. Finally, the studies that met all criteria were included in the final analysis.

The selection of documents was carried out by members of the research team through a two-stage review process. First, titles and abstracts were examined to determine their relevance to English proficiency, academic reading comprehension, critical reading, and critical thinking in university students. Second, the full texts of the potentially eligible studies were reviewed according to the inclusion and exclusion criteria. Any doubts or differences identified during the selection process were discussed among the reviewers until agreement was reached. In addition, a data extraction matrix was used to organize the information from each study, including author, year, objective, methodological approach, population, main focus, and contribution to the review.

Figure 1.

PRISMA 2020 Flow Diagram





Note. The figure presents the PRISMA 2020 flow diagram used for the study selection process in this systematic review.

A total of 106 records were identified through database searching. After removing 18 duplicate records, 88 records were screened by title and abstract. Of these, 50 records were excluded for not directly addressing the relationship between English proficiency, academic reading comprehension, and critical thinking in university students. Then, 38 full-text reports were assessed for eligibility. Eighteen reports were excluded for the following reasons: population different from university students ($n = 6$), lack of direct relationship with the study topic ($n = 7$), and absence of verifiable bibliographic or methodological information ($n = 5$). Finally, 20 studies were included in the systematic review

4. Results



The analysis of the 20 studies included in this systematic review made it possible to identify the main trends, approaches, and contributions related to the role of English proficiency in academic reading comprehension and critical thinking in university students. The studies were organized into four thematic categories: English proficiency and academic performance, academic reading comprehension and vocabulary knowledge, critical reading and critical thinking, and pedagogical strategies for developing critical thinking through English reading.

To strengthen the characterization of the reviewed literature, the results tables include the study design and, when available, information about the context, country, or participants. This distinction makes it possible to differentiate empirical studies, theoretical contributions, systematic reviews, and meta-analyses, since they represent different methodological approaches within the field.

Table 2

English proficiency and academic performance

Author/year	Main focus	Contribution to this review
Bernhardt & Kamil (1995)	L1 and L2 reading relationship	Explains that L2 reading depends on both linguistic knowledge and reading ability.
Hulstijn (2011)	Language proficiency	Defines proficiency as a multidimensional competence for communication and assessment.
Jeon & Yamashita (2014)	L2 reading correlates	Shows that vocabulary, grammar, and metacognition influence L2 reading.
Waluyo & Panmei (2021)	English and academic achievement	Connects English course performance with broader university achievement.

Note. This table presents studies that explain English proficiency as a key academic competence for university students. Prepared by the authors based on Bernhardt and Kamil (1995), Hulstijn (2011), Jeon and Yamashita (2014), and Waluyo and Panmei (2021).

Table 3

Academic reading comprehension, vocabulary, and reading strategies



Author/year	Main focus	Contribution to this review
Kintsch (1988)	Text comprehension	Explains comprehension as an active process of constructing meaning.
Qian (2002)	Vocabulary knowledge	Shows that vocabulary depth and breadth predict academic reading.
Mokhtari & Reichard (2002)	Reading strategies	Highlights the role of metacognitive awareness in reading comprehension.
Perfetti & Stafura (2014)	Word knowledge	Explains how lexical knowledge supports text comprehension.
Ha (2021)	Receptive vocabulary	Confirms the relationship between vocabulary and L2 reading comprehension.
Yapp et al. (2023)	Strategy instruction	Shows that reading strategy instruction improves academic reading.

Note. This table summarizes studies that explain academic reading comprehension as a process influenced by vocabulary knowledge, word recognition, metacognitive awareness, and reading strategies. Prepared by the authors Kintsch (1988), Qian (2002), Mokhtari and Reichard (2002), Perfetti and Stafura (2014), Ha (2021), and Yapp et al. (2023).

Table 4

Critical reading and critical thinking in higher education

Author/year	Main focus	Contribution to this review
Halpern (1998)	Critical thinking instruction	Explains that critical thinking must be taught for transfer across contexts.
Kuhn (1999)	Development of critical thinking	Presents critical thinking as reasoning based on evidence and argumentation.
Abrami et al. (2015)	Teaching critical thinking	Shows that explicit instruction improves critical thinking skills.
Din (2020)	Critical reading	Links university students' critical thinking with critical reading performance.



Author/year	Main focus	Contribution to this review
Arifin (2020)	Critical reading and comprehension	Shows that critical reading promotes both comprehension and reasoning.
Bellaera et al. (2021)	Higher education teaching	Highlights instructors' role in developing critical thinking in universities.
Hart et al. (2021)	Assessment of critical thinking	Shows that written responses reveal students' reasoning quality.

Note. This table presents studies that relate critical thinking to academic reading, argumentation, evidence evaluation, and higher education learning. Prepared by the authors based on Halpern (1998), Kuhn (1999), Abrami et al. (2015), Din (2020), Arifin (2020), Bellaera et al. (2021), and Hart et al. (2021).

Table 5

Pedagogical strategies for critical thinking through English reading

Author/year	Main focus	Contribution to this review
Cundar-Ruano (2021)	EFL and critical thinking	Supports integrating critical thinking into English language learning.
Yulian (2021)	Flipped classroom	Shows that active methodologies can improve critical reading.
Yang et al. (2025)	English reading modules	Shows that English reading activities can enhance critical thinking.

Note. This table includes studies that propose pedagogical strategies to strengthen critical thinking through English reading activities in EFL and higher education contexts. Prepared by the authors based on Cundar-Ruano (2021), Yulian (2021), and Yang et al. (2025).

In addition to the thematic organization presented in Tables 2 to 5, the reviewed studies were also classified according to their methodological nature. This classification helps distinguish empirical studies, theoretical contributions, systematic reviews, and meta-analyses, since each type of study contributes different forms of evidence to the review.

Table 6

Methodological classification of the reviewed studies



Author/year	Type of study
Bernhardt & Kamil (1995)	Foundational theoretical-empirical study
Hulstijn (2011)	Theoretical/methodological article
Jeon & Yamashita (2014)	Meta-analysis
Waluyo & Panmei (2021)	Empirical study
Kintsch (1988)	Theoretical model
Qian (2002)	Empirical study
Mokhtari & Reichard (2002)	Empirical/instrument validation study
Perfetti & Stafura (2014)	Theoretical article
Ha (2021)	Empirical study
Yapp et al. (2023)	Empirical intervention study
Halpern (1998)	Theoretical/instructional article
Kuhn (1999)	Theoretical article
Abrami et al. (2015)	Meta-analysis
Din (2020)	Empirical study
Arifin (2020)	Empirical study
Bellaera et al. (2021)	Empirical study
Hart et al. (2021)	Empirical content analysis study
Cundar-Ruano (2021)	Pedagogical/empirical experience
Yulian (2021)	Empirical pedagogical study
Yang et al. (2025)	Systematic review

Note. This table classifies the 20 studies included in the systematic review according to their methodological nature. The purpose is to differentiate empirical studies, theoretical contributions, meta-analyses, systematic reviews, and pedagogical experiences.

Synthesis of the Results

Overall, the systematic review of the 20 selected studies shows that English proficiency plays an important role in university students' academic reading comprehension and critical



thinking. The reviewed literature indicates that students with stronger English proficiency are better able to understand academic vocabulary, identify main ideas, interpret arguments, and evaluate information critically.

The findings also show that academic reading comprehension is not only a linguistic process, but also a cognitive and metacognitive activity. Vocabulary knowledge, grammatical competence, prior knowledge, and reading strategies help students move from literal comprehension to deeper interpretation. In this sense, English proficiency supports students' ability to understand academic texts and engage with them more critically.

Finally, the studies suggest that critical thinking can be strengthened when English reading instruction includes activities such as questioning, argument analysis, reflection, discussion, comparison of ideas, and evaluation of evidence. Therefore, the relationship between English proficiency, academic reading comprehension, and critical thinking should be understood as interconnected: English proficiency provides access to academic texts, reading comprehension allows students to interpret them, and critical thinking enables students to evaluate and use information in a reasoned way.

5. Discussion

The studies analyzed show a strong consensus that English proficiency plays an important role in university students' academic reading comprehension and critical thinking. The reviewed evidence suggests that students with higher English proficiency are usually better prepared to understand academic texts, identify main ideas, interpret arguments, and evaluate information critically. In this sense, English proficiency should not be understood only as grammatical knowledge, but as an academic competence that supports access to scientific texts, disciplinary vocabulary, written argumentation, and university learning in general (Bernhardt & Kamil, 1995; Hulstijn, 2011; Waluyo & Panmei, 2021).

However, although the studies agree on the importance of English proficiency, they differ in the factors that most strongly explain academic reading comprehension. Some authors emphasize the role of linguistic knowledge, especially vocabulary, grammar, and word recognition, while others highlight metacognitive awareness, reading strategies, and prior knowledge as essential elements for understanding academic texts. For example, Qian (2002), Perfetti and Stafura (2014), and Ha (2021) emphasize vocabulary knowledge as a key



predictor of reading comprehension, whereas Mokhtari and Reichard (2002) and Yapp et al. (2023) show that reading strategies help students monitor their understanding and approach complex texts more effectively.

The review also shows that academic reading comprehension is not a passive process. Students do not simply decode words; they construct meaning by connecting textual information with their previous knowledge, identifying relationships between ideas, and interpreting the author's purpose. This position is supported by Kintsch (1988), who explains comprehension as an active process of meaning construction, and by Jeon and Yamashita (2014), who demonstrate that L2 reading comprehension depends on several linguistic and cognitive variables. Therefore, academic reading in English requires students to combine language proficiency with higher-order thinking processes.

Another important finding is the close relationship between critical reading and critical thinking. The studies reviewed suggest that university students develop critical thinking when they are guided to question texts, analyze arguments, identify assumptions, evaluate evidence, and justify their own interpretations. In this sense, reading comprehension becomes deeper when students move beyond literal understanding and begin to examine the quality and reliability of the information they read. This relationship is supported by Din (2020) and Arifin (2020), who connect critical reading with students' ability to reason, reflect, and evaluate academic content.

In the field of higher education, critical thinking appears as a fundamental academic outcome. Halpern (1998) and Kuhn (1999) argue that critical thinking requires reasoning, evidence, argumentation, and metacognitive control. Similarly, Abrami et al. (2015) show that explicit instruction can improve students' critical thinking skills. These findings are important because they suggest that critical thinking does not develop automatically. University teachers need to design activities that encourage students to compare ideas, defend positions, discuss interpretations, and support their answers with evidence.

The reviewed studies also highlight the importance of teaching strategies. Cundar-Ruano (2021), Yulian (2021), and Yang et al. (2025) indicate that English reading instruction can strengthen critical thinking when students participate in active methodologies, reading modules, reflection tasks, and critical discussion. This means that English classes should not focus only on vocabulary, grammar, or translation. Instead, they should include



activities that help students interpret texts, question information, and construct reasoned academic responses.

Nevertheless, the evidence also reveals some challenges. Students with low English proficiency may struggle to understand academic vocabulary, follow complex sentence structures, and interpret argumentative texts. As a result, their critical thinking may be limited not because they lack reasoning ability, but because linguistic difficulties prevent them from accessing the full meaning of academic texts. For this reason, universities should strengthen English proficiency, academic vocabulary, reading strategies, and critical reading practices as connected components of academic formation.

Overall, the discussion suggests that English proficiency, academic reading comprehension, and critical thinking are interrelated. English proficiency provides the linguistic foundation for accessing texts; reading comprehension allows students to interpret and organize information; and critical thinking enables them to evaluate, question, and use that information in academic contexts. Therefore, improving English proficiency in university students can contribute not only to better reading comprehension, but also to the development of more reflective, analytical, and independent learners.

6. Conclusions

The present systematic review fulfilled its objective of analyzing the scientific evidence related to the relationship between English proficiency, academic reading comprehension, and critical thinking in university students. The review of 20 studies made it possible to identify the main theoretical and empirical contributions regarding English proficiency, L2 reading comprehension, vocabulary knowledge, reading strategies, critical reading, and critical thinking in higher education.

The reviewed evidence suggests that English proficiency is an important factor in university academic performance because it allows students to access, understand, and evaluate academic information written in English. Students with stronger English proficiency are more likely to understand complex texts, recognize academic vocabulary, identify main arguments, and participate in critical interpretation. In contrast, limited English proficiency can make academic reading more difficult and reduce students' ability to analyze texts deeply.



The review also indicates that academic reading comprehension is associated with several connected factors, including vocabulary knowledge, grammar, metacognitive awareness, reading strategies, prior knowledge, and the ability to construct meaning from texts. Reading comprehension is not only a linguistic process, but also a cognitive activity that requires interpretation, inference, organization of ideas, and evaluation of information.

Finally, the reviewed studies show that critical thinking can be strengthened through academic reading in English when teachers use activities that promote questioning, argument analysis, reflection, discussion, and evidence-based reasoning. For this reason, English instruction in higher education should integrate language development with critical reading and critical thinking practices. Strengthening these skills can help university students become more autonomous, analytical, and capable of responding critically to academic and professional challenges.

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