

Unpacking the Antecedents of English Reading Comprehension Success in EFL Contexts: Evidence from Tertiary Education

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ABSTRACT

This study investigates the multifaceted nature of English reading comprehension success among tertiary-level English as a Foreign Language (EFL) learners. While numerous studies have examined individual factors influencing reading ability, this research proposes and empirically tests an integrated model that simultaneously assesses the predictive power of six key antecedents: Vocabulary Knowledge, Grammatical Knowledge, Reading Strategy Use, Reading Motivation, Foreign Language Reading Anxiety, and Background Knowledge. Employing a quantitative, cross-sectional design, data were collected from 434 university students through the Survey of English Reading Antecedents (SERA) and a standardized reading comprehension test. The measurement instrument was validated using Cronbach's Alpha for internal consistency and Exploratory Factor Analysis (EFA) to confirm the six-factor structure. An Ordinary Least Squares (OLS) multiple regression analysis was conducted to determine the collective and relative predictive strength of the antecedents. The overall model was found to be statistically significant, accounting for a substantial portion of the variance in reading comprehension scores. Results indicate that linguistic factors, specifically Grammatical Knowledge and Vocabulary Knowledge, emerged as the most potent positive predictors of success. Foreign Language Reading Anxiety was a significant negative predictor, while Reading Motivation and Reading Strategy Use also contributed positively to comprehension scores. These findings underscore the critical, and perhaps underestimated, role of formal linguistic competence in advanced academic reading. They also highlight a dynamic interplay between cognitive, affective, and linguistic variables, suggesting that effective pedagogical interventions must be holistic, addressing affective barriers like anxiety while simultaneously building foundational language skills and strategic competence.

Keywords: English Reading Comprehension, EFL learners, tertiary education, linguistic knowledge, foreign language reading anxiety, integrated model

INTRODUCTION

In an increasingly globalized world, proficiency in English has become an indispensable asset for academic and professional advancement. Within the spectrum of language skills, reading comprehension stands as a cornerstone, particularly in tertiary education (Alghonaim, 2020). It is the primary vehicle through which students acquire knowledge, engage with scholarly discourse, and develop the critical thinking skills necessary for success in their disciplines (Gilakjani & Sabouri, 2016). For students learning English as a Foreign Language (EFL), the challenge is amplified. They are required not only to navigate the linguistic complexities of a second language but also to process dense, discipline-specific academic texts that demand a high level of analytical and interpretive ability (Hadj Said, 2024). Consequently, the ability to read and comprehend English texts effectively is not merely an academic exercise but a gateway to full participation in the global academic community.

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Despite its recognized importance, achieving a high level of reading comprehension remains a significant obstacle for many EFL learners at the university level (Gilakjani & Sabouri, 2016). The process of constructing meaning from a foreign language text is not a monolithic skill but a complex cognitive activity influenced by a constellation of interacting factors (Alghonaim, 2020). Historically, research in this domain has often focused on single variables in isolation, such as the role of vocabulary or the impact of reading strategies. While valuable, such approaches risk oversimplifying a deeply intricate process. Reading success or failure is rarely attributable to a single cause; instead, it emerges from the dynamic interplay of a learner's linguistic proficiency, cognitive processing capabilities, and affective or emotional state. A more holistic and integrated understanding is therefore necessary to diagnose difficulties and design adequate instructional support.

LITERATURE REVIEW

This study is grounded in three complementary theoretical frameworks that, together, provide a robust conceptual lens for understanding the complex process of EFL reading comprehension. First, Schema Theory posits that comprehension is an interactive process where readers construct meaning by relating new information in a text to their pre-existing networks of knowledge, or schemata, stored in long-term memory (Arbib, 1992). These mental structures, which encompass background knowledge about the topic, the text's formal schema (structure), and its cultural context (cultural schema), guide readers' expectations and enable them to make the inferences necessary for deep understanding. This theory directly underpins the inclusion of the 'Background Knowledge' variable, highlighting that reading is not merely decoding symbols but an act of integrating text with experience.

Second, Attentional Control Theory (ACT) provides a robust cognitive framework for explaining the debilitating effects of anxiety on performance (Barnes et al., 2023). ACT proposes that anxiety impairs processing efficiency by consuming finite working memory resources, thereby disrupting the 'central executive' system responsible for goal-directed attention and complex cognitive tasks (Macdonald et al., 2021). The theory predicts that this interference is more pronounced for high-load tasks, such as reading comprehension, than for more automated, low-load tasks like basic word recognition (Tysinger et al., 2010). ACT thus offers a precise, testable mechanism for the 'Foreign Language Reading Anxiety' variable, explaining how anxiety undermines the comprehension process at a cognitive level.

Third, the role of linguistic knowledge is framed by the Cohesive Tie Theory in conjunction with the Linguistic Threshold Hypothesis. Cohesive Tie Theory posits that grammatical knowledge is crucial for readers to recognize and interpret the linguistic devices (e.g., pronouns, conjunctions, lexical chains) that connect sentences and ideas, thereby facilitating the construction of a coherent mental model of the text (Zheng et al., 2023). This is closely related to the Linguistic Threshold Hypothesis, which posits that a certain minimum level of proficiency in the target language is a prerequisite for learners to effectively deploy higher-order cognitive and metacognitive reading strategies (Lopez, 2008). Together, these theories establish the foundational importance of vocabulary and grammar, not as ends in themselves, but as essential tools for constructing meaning.

A well-developed vocabulary is widely acknowledged as an indispensable prerequisite for adequate reading comprehension (Manihuruk, 2020). The relationship is so fundamental that, as one scholar noted, "without grammar very little can be conveyed, without vocabulary, nothing can be conveyed" (Wilkins, 1972). Research distinguishes between vocabulary breadth (the number of words a learner knows) and vocabulary depth (the quality and richness of that knowledge, including polysemy, collocation, and connotation) (Zano & Phatudi, 2019). While both are important, vocabulary depth becomes particularly critical for comprehending the nuanced and discipline-specific texts encountered at the tertiary level. A lack of vocabulary

knowledge is consistently identified as a primary cause of comprehension failure, forcing students to guess meanings from context, which slows down the reading process and often leads to misinterpretation (Yasin & Abdullah, 2025). Numerous studies have demonstrated a strong, positive correlation between vocabulary knowledge and reading performance, confirming its status as a foundational component of reading ability (Manihuruk, 2020).

H1: Vocabulary Knowledge will be a positive predictor of English reading comprehension.

While vocabulary provides the building blocks of meaning, grammatical knowledge provides the blueprint for how those blocks are assembled into coherent thoughts. It is the ability to parse complex sentence structures and understand the logical and syntactic relationships between clauses and ideas that enables a reader to move from understanding individual words to comprehending arguments (Zheng et al., 2023). The importance of grammatical knowledge appears to be developmental, becoming more pronounced as learners progress to higher levels of education and encounter more syntactically complex texts (Zheng et al., 2023). This developmental aspect helps to resolve apparent contradictions in the literature. For instance, in their comprehensive meta-analysis, Zheng et al. (2023) noted that while some earlier studies reported weak or inconsistent correlations between grammar and reading comprehension, their findings revealed a clear pattern: the correlation effect size between grammatical knowledge and reading comprehension systematically increases with the learners' educational level. The effect size grows from moderate for primary school students (Fisher's $z=0.36$) to large for secondary students ($z=0.61$), and reaches its peak for university students ($z=0.69$; Zheng et al., 2023). This pattern strongly suggests that as the syntactic complexity of academic texts increases, the ability to deconstruct those structures becomes a non-negotiable, high-impact predictor of comprehension. For the tertiary-level participants in the present study, this finding elevates the expected importance of grammatical knowledge, positioning it as a critical variable that supports the Linguistic Threshold Hypothesis (Lopez, 2008).

H2: Grammatical Knowledge will be a positive predictor of English reading comprehension.

Reading strategies are conscious, goal-oriented plans and actions that readers employ to construct, monitor, and maintain meaning during the reading process (Derakhshan & Nazari, 2015). A crucial distinction exists between cognitive strategies, which involve direct manipulation of the text (e.g., summarizing, questioning, visualizing), and metacognitive strategies, which involve higher-order regulation of the reading process (e.g., planning an approach, monitoring one's understanding, and evaluating the outcome) (Gilakjani & Sabouri, 2016). A hallmark of expert readers is not just the knowledge of strategies, but the flexible and orchestrated use of a broad repertoire of them to meet the demands of different texts and reading purposes (Derakhshan & Nazari, 2015). A large body of research has established a strong positive relationship between the use of such strategies and reading comprehension achievement, with explicit strategy instruction often leading to significant performance gains (Mohammed, 2022). However, the effectiveness of reading strategies is not absolute. The literature contains instances where strategy instruction failed to produce significant improvements in reading performance (Derakhshan & Nazari, 2015). This seeming contradiction can be reconciled by considering the contingency of strategy use. The Linguistic Threshold Hypothesis suggests that strategies are not a panacea that can compensate for fundamental linguistic deficits (Lopez, 2008). A learner cannot effectively use a top-down strategy like "inferring the author's purpose" if they lack the bottom-up vocabulary and grammatical knowledge to understand the literal meaning of the sentences. Proficiency has been shown to have an indirect effect on strategy use (Habók & Magyar, 2019). Therefore, the effectiveness of reading strategies is likely contingent upon a sufficient foundation of linguistic

competence. This explains the mixed results in the literature and suggests that strategy instruction must be integrated with, rather than replace, ongoing language development to be successful.

H3: Reading Strategy Use will be a positive predictor of English reading comprehension.

Motivation is the affective engine that drives the learning process; it is the impetus that creates and sustains goal-directed behavior, including the act of reading (Ahmed & Abdelrahim, 2018). It is consistently cited as one of the most critical determinants of success in second language acquisition (Al-Qahtani & Alwaheebi, 2023). Reading motivation encompasses both intrinsic factors (e.g., reading for personal interest, enjoyment, or challenge) and extrinsic factors (e.g., reading to achieve good grades, gain recognition, or meet requirements) (Santi et al., 2021). Research demonstrates that both types of motivation are significant positive predictors of reading engagement and achievement (Ma & Zhao, 2025). Motivated readers tend to read more extensively, persist longer when faced with complex texts, and are more likely to actively employ effective reading strategies to overcome comprehension challenges (Ma & Zhao, 2025).

H4: Reading Motivation will be a positive predictor of English reading comprehension.

Foreign Language Reading Anxiety (FLRA) is a situation-specific affective response, distinct from general trait anxiety, characterized by feelings of tension, apprehension, and self-doubt specifically related to the act of reading in a foreign language (Bensalem, 2020). Its sources can be manifold, including fear of encountering unfamiliar vocabulary or cultural concepts, pressure to perform, and negative self-perceptions of one's reading ability (Lu & Liu, 2015). As explained by Attentional Control Theory, the impact of this anxiety is cognitive. The worry and intrusive thoughts associated with FLRA compete for and consume limited working memory resources, which are essential for the complex task of comprehension (Barnes et al., 2023). This cognitive interference results in a consistent, moderate negative correlation between FLRA and reading performance, a finding robustly supported across numerous studies (Tysinger et al., 2010). The affective and cognitive variables do not operate in isolation. A deeper analysis of the literature reveals a dynamic, and often detrimental, cyclical relationship between them. Low motivation can lead to avoidance of reading practice, which in turn results in underdeveloped linguistic skills and poor performance (Alghonaim, 2020). This poor performance and the resulting low self-efficacy can fuel higher levels of FLRA, as predicted by the reduced competency view of anxiety (Johnson et al., 2024). The heightened anxiety then further impairs performance by consuming cognitive resources and inhibiting the use of effective reading strategies (Barnes et al., 2023). This failure reinforces the initial low motivation and high anxiety, creating a self-perpetuating "vicious cycle" of underachievement. This systemic perspective suggests that the antecedents are not merely independent inputs into a linear model but are part of a recursive system, implying that interventions must be holistic to be effective.

H5: Foreign Language Reading Anxiety will be a negative predictor of English reading comprehension.

Grounded in Schema Theory, background knowledge is the reader's pre-existing knowledge base that is activated during reading to construct meaning (Arbib, 1992). This construct is multifaceted, encompassing not only content schemata (topic-specific knowledge) but also formal schemata (knowledge of text structures and rhetorical organization) and cultural schemata (awareness of the cultural context, norms, and values embedded in a text) (Gilakjani & Sabouri, 2016). When readers can activate a relevant schema, they can make predictions, draw inferences, and fill in information that is not explicitly stated in the text, leading to a richer and more complete understanding (Chou, 2011). Conversely, a lack of relevant background or cultural knowledge can be a significant impediment to comprehension, creating

a barrier that may persist even when a reader's linguistic knowledge is strong (Yasin & Abdullah, 2025).

H6: Background Knowledge will be a positive predictor of English reading comprehension.

The literature provides compelling theoretical and empirical support for the inclusion of all six factors in our integrated research model of EFL reading comprehension. Linguistic knowledge (vocabulary and grammar) serves as the non-negotiable foundation. Reading strategies represent the cognitive tools for processing text, although their effectiveness is contingent upon a solid linguistic foundation. The affective states of motivation and anxiety act as powerful accelerators or brakes on the entire process, influencing engagement and cognitive efficiency. Finally, background knowledge provides the schematic framework into which textual information is integrated. Based on this comprehensive review, the six hypotheses outlined were formally proposed for empirical testing.

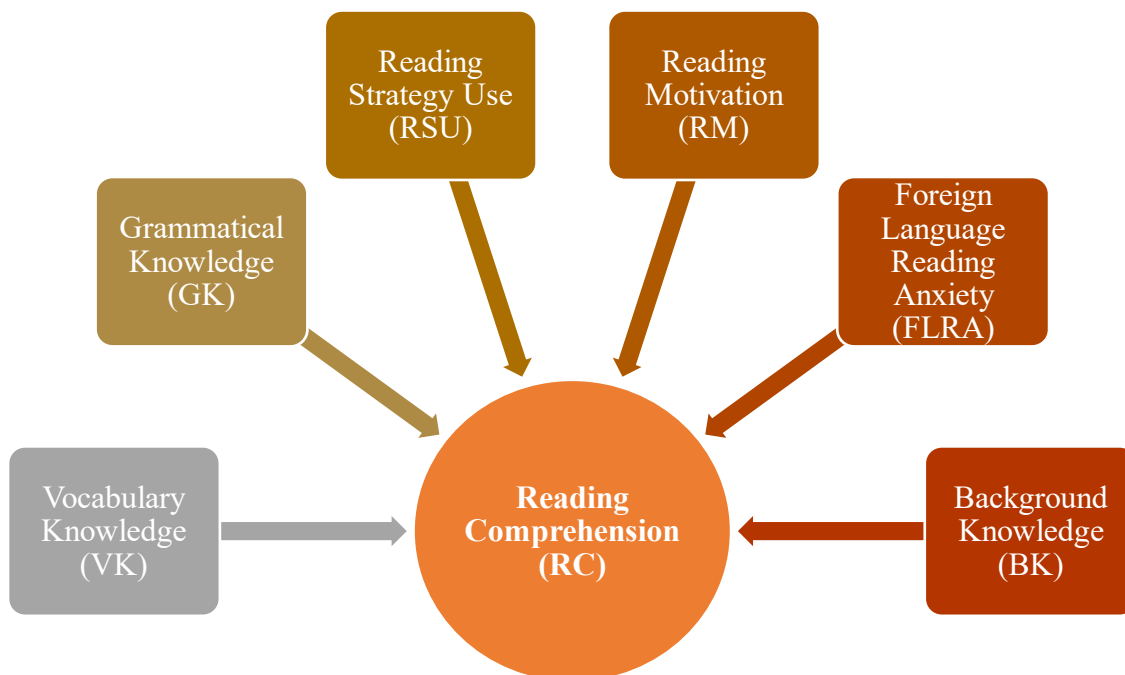


Figure 1: Proposed research model

MATERIALS AND METHODS

The study was conducted with a sample of 434 undergraduate students enrolled in a public university in Vietnam. Participants were from various non-English major disciplines (e.g., Business, Engineering, Social Sciences) and were all taking compulsory EFL courses as part of their degree requirements. The sample consisted of 295 females (68%) and 139 males (32%), with an average age of 20.3 years ($SD = 1.4$). On average, participants had been formally studying English for 9.8 years ($SD = 2.1$). This demographic represents a typical tertiary-level EFL context where students need to develop English reading skills for academic purposes across a range of subjects.

Two primary instruments were used for data collection: a custom-developed survey to measure the six antecedent constructs and a standardized test to measure the dependent variable, reading comprehension. A comprehensive questionnaire, the Survey of English Reading Antecedents (SERA), was developed to measure the six independent variables. The survey consisted of 29 items in total, assessing the six constructs with four to seven items per construct, rated on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The six constructs were operationalized to capture a range of linguistic, cognitive, and affective

factors. Foundational linguistic competencies were assessed through Vocabulary Knowledge (students' self-perceived command of English words) and Grammatical Knowledge (perceived ability to comprehend complex syntax). Reading Strategy Use was measured with items adapted from validated metacognitive awareness inventories to assess the application of both cognitive and metacognitive strategies. Affective factors included Reading Motivation, which gauged both intrinsic and extrinsic drivers, and Foreign Language Reading Anxiety (FLRA). The FLRA subscale was carefully adapted from the well-established Foreign Language Classroom Anxiety Scale (FLCAS; Horwitz et al., 1986), aligning with the scholarly precedent of using domain-specific scales, such as the Foreign Language Reading Anxiety Scale (FLRAS; Lu & Liu, 2015). Lastly, the Background Knowledge construct evaluated students' perceived familiarity with the topics, cultural elements, and textual structures frequently encountered in their English reading materials.

The dependent variable, English Reading Comprehension, was measured using scores from a university-wide standardized English proficiency examination administered at the end of the semester. The reading section of this exam consisted of three academic passages, each approximately 600-700 words in length, covering topics in the social sciences, natural sciences, and humanities. Comprehension was assessed through 30 multiple-choice questions that targeted a range of skills, including identifying main ideas, understanding details, making inferences, determining the meaning of vocabulary in context, and recognizing the author's purpose and tone. The test demonstrated high internal consistency (Cronbach's $\alpha = 0.88$) and was scored on a 100-point scale.

Data analysis was conducted using SPSS 28. The process commenced with a thorough data screening phase to check for missing values, outliers, and normality, ensuring the dataset met the assumptions for subsequent statistical tests. Following this, descriptive statistics, including means and standard deviations, were calculated for all variables to provide a comprehensive profile of the sample - a crucial step involved in establishing the psychometric properties of the SERA instrument. Reliability analysis was first conducted by calculating Cronbach's Alpha for each of the six antecedent scales to confirm their internal consistency. Subsequently, the instrument's construct validity was assessed through an Exploratory Factor Analysis (EFA), utilizing principal components with a Varimax rotation, a method chosen for its suitability with correlated factors.

To test the research hypotheses, the primary inferential analysis consisted of a standard Ordinary Least Squares (OLS) multiple regression. In this model, the Reading Comprehension score was designated as the dependent variable. In contrast, the six composite scores derived from the SERA scales (calculated as the mean of the items for each construct) served as the independent variables. To ensure the robustness of the findings, all key model assumptions were rigorously verified and validated. These checks included confirming linearity, verifying the independence of errors using the Durbin-Watson test, and verifying the absence of multicollinearity using the Variance Inflation Factor (VIF).

RESULTS

The internal consistency of the six antecedent scales within the SERA was assessed using Cronbach's Alpha. The results, displayed in Table 1, demonstrate excellent reliability for all scales.

Table 1: Internal Consistency Reliability of the Antecedent Scales

Construct	Number of Items	Cronbach's Alpha (α)
Vocabulary Knowledge	4	0.916
Grammatical Knowledge	5	0.933
Reading Strategy Use	7	0.949
Reading Motivation	4	0.931
Foreign Language Reading Anxiety	5	0.933
Background Knowledge	4	0.915

All alpha coefficients exceeded the conventional threshold of 0.70, indicating that the items within each scale consistently and reliably measure the same underlying construct. The exceptionally high alpha for Foreign Language Reading Anxiety ($\alpha = 0.933$) confirms the robustness of the adapted scale.

An Exploratory Factor Analysis (EFA) was conducted on the 29 SERA items to provide evidence of construct validity. The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.884, well above the recommended value of 0.60, and Bartlett's Test of Sphericity was significant ($\chi^2(406) = 10087.997, p < .001$), indicating that the data were suitable for factor analysis. The analysis extracted six factors with eigenvalues greater than 1, which corresponded precisely to the six proposed theoretical constructs. Together, these six factors explained 79.434% of the total variance. The pattern matrix from the Varimax rotation revealed a transparent and interpretable factor structure. All 29 items loaded strongly (loading > 0.8) on their intended factor and exhibited low cross-loadings (< 0.10) on other factors. This result provides strong empirical support for the six-factor structure of the SERA, confirming that the instrument validly measures six distinct, yet related, antecedents of reading comprehension.

The principal OLS multiple regression was then performed. The model assumptions were met, with VIF values for all predictors falling below 2.0, indicating no issues with multicollinearity. The overall model was highly significant, as shown in Table 2.

Table 2: OLS Multiple Regression Model Summary

R Square	Adjusted R Square	F-statistic	Sig. (p-value)
0.824	0.822	333.273	<.001

The model explained 82.4% of the variance in reading comprehension scores ($R^2 = 0.824$), indicating a large effect size. This result indicates that the six-factor model as a whole is a powerful predictor of EFL reading success. Table 3 presents the coefficients for the individual predictors in the model, allowing for the testing of each hypothesis and an assessment of their relative predictive strength.

Table 3: Coefficients of the OLS Regression Model Predicting Reading Comprehension Success

Predictor	Unstandardized Coefficient (B)	Std. Error (SE)	Standardized Coefficient (Beta, β)	t-statistic	Sig. (p-value)
(Constant)	30.204	1.432		21.090	<.001
Vocabulary Knowledge	3.778	0.161	0.477	23.446	<.001
Grammatical Knowledge	4.055	0.161	0.515	25.177	<.001
Reading Strategy Use	2.393	0.160	0.305	14.973	<.001
Reading Motivation	2.710	0.153	0.361	17.703	<.001
Foreign Language Reading Anxiety	-3.061	0.157	-0.395	-19.439	<.001
Background Knowledge	1.171	0.157	0.152	7.460	<.001

The results from the regression analysis show that all six predictors were statistically significant.

Grammatical Knowledge ($\beta = 0.515$, $p < .001$) and Vocabulary Knowledge ($\beta = 0.477$, $p < .001$) were the most potent positive predictors, providing strong support for H1 and H2.

Foreign Language Reading Anxiety was the strongest negative predictor ($\beta = -0.395$, $p < .001$), supporting H5.

Reading Motivation ($\beta = 0.361$, $p < .001$), Reading Strategy Use ($\beta = 0.305$, $p < .001$), and Background Knowledge ($\beta = 0.152$, $p < .001$) were also significant positive predictors, supporting H3, H4, and H6. However, their unique contributions were smaller than the linguistic and anxiety factors.

DISCUSSION

Synthesis and Interpretation of Key Findings

This study aimed to investigate the antecedents of English reading comprehension success by testing an integrated six-factor model. The results of the OLS regression analysis provide a clear and compelling picture of the relative importance of these factors. The overall model was highly successful, explaining the vast majority of the variance in students' reading scores, confirming that these six antecedents collectively form a robust explanatory framework.

The most striking finding is the preeminence of the linguistic factors. In a model controlling for strategies, motivation, anxiety, and background knowledge, Grammatical Knowledge emerged as the single strongest predictor of reading comprehension success. This finding provides robust support for H2 and aligns perfectly with recent meta-analytic evidence, which shows the heightened importance of grammatical competence for advanced learners tackling complex texts (Zheng et al., 2023). It underscores the idea that at the tertiary level, reading comprehension is fundamentally constrained by a student's ability to accurately and efficiently parse complex syntactic structures. Closely following was Vocabulary Knowledge, the second most powerful predictor, confirming H1 and the vast body of literature identifying vocabulary as a bedrock of comprehension (Manihuruk, 2020). Together, these results powerfully affirm the Linguistic Threshold Hypothesis (Lopez, 2008): without a strong foundation in the language itself, other factors can only have a limited impact.

The affective dimension also proved to be critically important. Foreign Language Reading Anxiety was the third most powerful predictor overall and the most substantial negative influence in the model, providing strong support for H5. This result empirically validates the mechanism proposed by Attentional Control Theory (Barnes et al., 2023), demonstrating that the cognitive cost of anxiety—the consumption of working memory resources—translates into a significant, measurable deficit in comprehension performance. On the positive side, Reading Motivation was also a significant predictor, supporting H4. This confirms that the drive to read, whether intrinsic or extrinsic, provides a vital impetus that translates into better outcomes (Ma & Zhao, 2025).

The cognitive and schematic factors, while significant, had a more modest unique impact. The significant positive coefficient for Reading Strategy Use (supporting H3) shows that conscious, goal-directed processing does contribute to success (Valizadeh, 2021). However, its relatively minor beta value compared to the linguistic factors lends credence to the notion that strategy effectiveness is contingent upon a solid linguistic base. A student may know the strategy of 'monitoring comprehension', but if they lack the grammatical and lexical knowledge to create that comprehension in the first place, the strategy has little to operate on. Similarly, Background Knowledge, though statistically significant (supporting H6), was the weakest predictor in the model. While Schema Theory correctly posits its importance (Arbib, 1992), its more minor unique contribution here may reflect the difficulty of capturing such a broad construct with self-report measures or the fact that its effects are partially mediated through other variables, such as motivation and anxiety.

Pedagogical Implications

The findings of this study have direct and significant implications for EFL pedagogy at the tertiary level. First and foremost, the results underscore the need for a renewed emphasis on the explicit instruction of advanced grammar and academic vocabulary. In an era that has often prioritized communicative fluency and strategy-based instruction, this study serves as a crucial reminder that formal linguistic competence is not merely helpful, but paramount for academic reading. Curricula should include systematic instruction on deconstructing complex sentence structures, understanding cohesive devices, and building the deep vocabulary knowledge required for specialized academic texts.

Second, the findings compel educators to move beyond isolated skill instruction and adopt a holistic, integrated approach to education. The evidence for a dynamic interplay between affect, cognition, and language—a potential "vicious cycle" of failure or "virtuous cycle" of success—means that interventions targeting only one area are likely to be insufficient. For instance, teaching reading strategies to highly anxious students without addressing their anxiety is unlikely to succeed. Instead, instructors should create supportive learning environments that simultaneously build skills and confidence. This involves integrating anxiety-reduction techniques into the classroom, such as normalizing errors as part of the learning process, using collaborative reading tasks to reduce individual pressure, and providing clear, process-oriented feedback (Ghaith, 2020). It also requires actively fostering reading motivation by selecting texts that are relevant to students' interests and academic needs, offering choice in reading materials, and explicitly connecting reading skills to students' future goals (Ahmed & Abdelrahim, 2018).

Theoretical Implications

Theoretically, this study contributes to the field of L2 reading by empirically validating an integrated model that bridges linguistic, cognitive, and affective domains. By testing these factors simultaneously, the research provides a clearer understanding of their relative contributions, moving the field toward a more nuanced, systems-level perspective. The

findings strongly reinforce the central tenets of the Linguistic Threshold Hypothesis and Attentional Control Theory in the context of EFL reading. Furthermore, the results provide empirical support for the conceptual model of a dynamic, recursive system, in which factors such as motivation, anxiety, and linguistic skill are mutually influential. This highlights the limitations of simple, linear models and underscores the need for more complex, dynamic systems theories to capture the whole nature of L2 reading development.

Limitations and Directions for Future Inquiry

While this study provides valuable insights, several limitations must be acknowledged. First, its cross-sectional design allows for the identification of predictive relationships but does not permit causal claims. We can state that higher grammatical knowledge predicts higher comprehension, but we cannot definitively claim it causes it, as the relationship could be bidirectional. Second, the measurement of several constructs (e.g., strategy use, anxiety, motivation) relied on self-report data, which can be subject to social desirability bias or inaccurate self-assessment. Finally, the sample was drawn from a single university context, which may limit the generalizability of the findings to other EFL populations with different backgrounds and instructional environments.

These limitations point to several promising avenues for future research. Longitudinal studies are necessary to track the development of these variables over time, which would enable a more direct investigation of the proposed "vicious cycle" and help clarify the causal relationships. Experimental research could be designed to test the efficacy of the holistic pedagogical interventions suggested by this study, comparing an integrated approach to more traditional, skill-isolated instruction. Finally, future studies could employ more direct and objective measures of the constructs, such as using think-aloud protocols to observe strategy use in real-time or psychophysiological measures (e.g., heart rate variability) to assess anxiety, thereby providing a richer, multi-method validation of the model.

CONCLUSION

This research sought to provide a comprehensive, empirically grounded answer to the question of what drives success in English reading comprehension for tertiary-level EFL learners. The findings demonstrate that reading success is not the result of any single factor, but rather emerges from a complex and dynamic interplay of linguistic competence, strategic processing, and the learner's affective state. The study reaffirms the foundational role of vocabulary and, most notably, grammatical knowledge as the primary enablers of high-level academic reading. At the same time, it highlights the decisive role of affect, showing how foreign language reading anxiety can significantly derail the comprehension process, while motivation can fuel it.

Ultimately, the central message of this study is a call for balance and integration. Effective reading instruction cannot afford to focus on strategies at the expense of language, nor can it ignore the profound impact of students' emotional states on their cognitive processing. To truly support EFL learners on their path to becoming proficient and confident academic readers, educators must adopt a holistic, student-centered approach that nurtures linguistic growth, fosters strategic awareness, and builds the affective resilience necessary to engage with the challenges and rewards of reading in a foreign language.

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APPENDIX

The Survey of English Reading Antecedents (SERA)

Instructions: Please read each statement carefully and indicate the extent to which you agree or disagree with it by selecting the appropriate number on the scale below. There are no right or wrong answers. Your honest responses are greatly appreciated.

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Part 1: Vocabulary Knowledge (4 items)

This section assesses your self-perceived competence with English vocabulary.

1. My vocabulary knowledge is sufficient for understanding my academic readings.
2. I often have to stop reading because of unknown words. (R)
3. I feel that my limited vocabulary is a significant obstacle to my reading comprehension. (R)
4. I am confident in my ability to guess the meaning of unfamiliar words from context.

Part 2: Grammatical Knowledge (5 items)

This section measures your self-perceived ability to understand complex English syntax.

5. I am confident in my ability to understand long and complex sentences in English.
6. I find English grammar rules confusing when I read. (R)
7. I can easily identify the relationships between different parts of a long sentence.
8. Complicated grammatical structures often prevent me from understanding the text's meaning. (R)
9. I have a firm grasp of the grammatical patterns used in academic English texts.

Part 3: Reading Strategy Use (7 items)

This section measures your use of cognitive and metacognitive strategies while reading.

10. Before I begin reading a text, I think about what I already know about the topic.
11. I set a clear purpose or goal for myself before I start reading an English text.
12. When I do not understand a part of the text, I go back and reread it.
13. As I read, I try to summarize the main ideas in my head to check my understanding.
14. I pay attention to my understanding as I read, and I am aware when I lose concentration.
15. I use visual aids like tables, figures, and pictures in the text to help me understand.
16. After finishing a text, I take a moment to reflect on what I have learned from it.

Part 4: Reading Motivation (4 items)

This section measures your intrinsic and extrinsic motivation for reading in English.

17. I read English materials for my own enjoyment and personal interest.
18. Getting a good grade is my main reason for reading assigned English texts.
19. I read in English mainly because it is a requirement for my courses.
20. I am genuinely curious to learn new things by reading in English.

Part 5: Foreign Language Reading Anxiety (FLRA) (5 items)

This section assesses feelings of anxiety related explicitly to reading in English.

21. I feel tense and nervous when I have to read a complex English text.
22. I worry that I will not understand the main points when reading in English.
23. I get overwhelmed when I see a long reading passage in English.
24. When reading in English, I get nervous that I am not reading fast enough.
25. I feel my heart beat faster when I have to read something challenging in English.

Part 6: Background Knowledge (4 items)

This section assesses your perceived familiarity with the topics, cultural contexts, and structures of English texts.

26. The topics in my English reading materials are often unfamiliar to me. (R)
 27. I find it easier to read texts that relate to my cultural background.
 28. I often lack the necessary background to understand cultural references in English texts. (R)
 29. I am generally familiar with the way academic texts in English are organized.
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Author note: Items marked with (R) are reverse-scored. For these items, a response of 1 would be scored as 5, 2 as 4, 4 as 2, and 5 as 1 during data analysis.