
The Impact of Vocabulary Knowledge and Reading Habits on Academic Writing Quality at University Level

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.Abstract

Academic writing quality is a fundamental indicator of students' scholarly competence at the university level, requiring not only linguistic proficiency but also the ability to communicate ideas with clarity, coherence, and academic precision. This study investigated the impact of vocabulary knowledge and reading habits on the academic writing quality of university students at the University of the Punjab, Lahore, Pakistan. The study aimed to examine the extent to which vocabulary knowledge and reading practices influence students' academic writing performance. Data were collected from 350 undergraduate students enrolled at the University of the Punjab, Lahore, selected through a stratified random sampling technique to ensure representation from different academic disciplines. A structured questionnaire was used for data collection, and the collected responses were analyzed using appropriate statistical techniques to examine the relationship between vocabulary knowledge, reading habits, and academic writing quality. The findings revealed that vocabulary knowledge significantly contributes to students' academic writing performance by improving lexical accuracy, coherence, and the effective expression of complex academic ideas. Similarly, regular reading habits were found to enhance students' exposure to academic language structures, disciplinary vocabulary, critical thinking abilities, and effective writing conventions. The results further demonstrated a positive association between reading habits and vocabulary development, indicating that students who engage in consistent reading activities tend to demonstrate stronger academic writing abilities. The study concludes that integrating systematic vocabulary development strategies with extensive reading practices can significantly improve academic writing quality among university students. These findings provide important implications for language educators and higher education institutions aiming to strengthen students' academic literacy and writing competence.

Keywords: Lexical competence, Literacy development, Language proficiency, Written communication, Academic literacy, Higher education, Critical thinking.

Introduction

Academic writing is widely regarded as a cornerstone of higher education because it enables university students to demonstrate disciplinary knowledge, critical thinking, and scholarly competence through structured and evidence-based communication. Unlike general writing, academic writing requires learners to

synthesize information from multiple sources, critically evaluate evidence, develop coherent arguments, and present ideas using appropriate academic language and disciplinary conventions. Consequently, the quality of academic writing has become an essential indicator of students' academic literacy and intellectual development, reflecting not only their understanding of subject content but also their ability to participate effectively in academic discourse communities. In contemporary higher education, where research productivity, international collaboration, and knowledge dissemination are increasingly emphasized, effective academic writing has evolved into a fundamental graduate competency that supports both academic success and professional development (Hyland, 2007; Hyland & Jiang, 2022; Perfetti & Stafura, 2014). Despite its recognized importance, producing high-quality academic writing remains a persistent challenge for many university students, particularly those learning English as a second or foreign language. Numerous studies have shown that students frequently encounter difficulties in organizing ideas logically, maintaining textual coherence, employing appropriate academic vocabulary, and constructing grammatically accurate and persuasive arguments. These challenges often limit students' ability to communicate disciplinary knowledge effectively despite possessing adequate conceptual understanding of the subject matter. Contemporary research therefore suggests that weaknesses in academic writing should not be viewed merely as grammatical deficiencies but rather as the result of multiple interacting linguistic, cognitive, and literacy-related factors. Among these factors, vocabulary knowledge and reading habits have consistently emerged as two of the most influential determinants of writing quality because they directly influence learners' ability to comprehend academic texts, develop ideas, and express them accurately in written form (Nation, 2022; Wang & Cohen, 2023; Black & Wright, 2024).

Vocabulary knowledge constitutes one of the fundamental dimensions of language proficiency and plays a central role in the development of effective academic writing. It extends beyond the simple recognition of word meanings to include the breadth and depth of lexical knowledge, encompassing semantic understanding, collocational competence, morphological awareness, contextual appropriateness, and productive language use. Students with extensive vocabulary knowledge are generally more capable of expressing complex ideas with precision, constructing coherent arguments, and employing discipline-specific terminology appropriately. In contrast, learners with limited lexical resources often struggle to communicate nuanced meanings, resulting in repetitive expressions, vague explanations, and reduced coherence in their academic writing. Consequently, vocabulary functions not merely as a linguistic resource but as a cognitive tool that enables learners to transform knowledge into meaningful academic discourse. The Lexical Quality Hypothesis proposed by Perfetti and Stafura (2014) further explains that high-quality lexical representations facilitate efficient language processing, allowing writers to devote greater cognitive resources to planning, organization, and argument development rather than lexical retrieval. This theoretical perspective has been supported by subsequent research demonstrating that vocabulary knowledge is a significant predictor of writing quality across diverse educational contexts (Perfetti & Stafura, 2014; Nation, 2022).

Recent scholarship has also emphasized that vocabulary development should not be considered an isolated instructional objective but rather an integral component of academic literacy. Academic writing requires students to use specialized vocabulary, abstract concepts, and discipline-specific expressions that differ substantially from everyday language. Consequently, higher education institutions increasingly recognize the importance of developing both receptive and productive academic vocabulary to enable students to engage effectively with scholarly literature and communicate disciplinary knowledge accurately. Black and Wright (2024), in their systematic review of vocabulary instruction, argue that contextualized vocabulary learning embedded within authentic literacy practices produces more sustainable learning outcomes than decontextualized memorization approaches. Similarly, Wang and Cohen (2023) emphasize that strategic vocabulary learning, repeated exposure to academic language, and meaningful writing practice collectively strengthen learners' lexical competence and contribute significantly to the quality of academic

writing. These findings indicate that vocabulary knowledge forms the linguistic foundation upon which effective academic communication is built.

Research Objectives:

- To examine the relationship between vocabulary knowledge and academic writing quality among university students.
- To explore the influence of reading habits on the academic writing quality of university students.
- To synthesize the existing literature on the combined impact of vocabulary knowledge and reading habits on academic writing quality in higher education.
- To identify key research trends, gaps, and pedagogical implications regarding vocabulary knowledge, reading habits, and academic writing quality at the university level.

Research Questions:

- Is vocabulary knowledge associated with the quality of academic writing among university students?
- Is there a significant relationship between reading habits and academic writing quality at the university level?
- Is the interaction between vocabulary knowledge and reading habits influential in enhancing university students' academic writing quality?
- Is the existing empirical evidence consistent in demonstrating the combined contribution of vocabulary knowledge and reading habits to academic writing quality in higher education?

Literature Review

1. Vocabulary Knowledge as the Foundation of Academic Writing

Vocabulary knowledge is universally recognized as one of the most influential determinants of academic writing quality because it provides the linguistic resources through which learners generate ideas, construct arguments, and communicate disciplinary knowledge with clarity and precision. In higher education, academic writing demands the effective use of discipline-specific vocabulary, lexical diversity, and contextually appropriate language. Consequently, vocabulary knowledge has been identified as a core component of academic literacy and an essential predictor of writing performance across first- and second-language learning contexts (Nation, 2022; Hyland, 2007). Contemporary vocabulary research conceptualizes lexical knowledge as a multidimensional construct comprising vocabulary breadth, referring to the number of words a learner knows, and vocabulary depth, referring to the quality of lexical knowledge, including semantic relationships, collocations, morphological awareness, register, and contextual appropriateness (Qian, 2002; Schmitt, 2014). These complementary dimensions enable students to select precise lexical items, reduce repetition, maintain textual cohesion, and develop sophisticated academic arguments. Empirical evidence consistently indicates that learners with extensive vocabulary knowledge produce writing characterized by greater lexical sophistication, syntactic complexity, coherence, and argumentative quality than students with limited lexical resources (Crossley & McNamara, 2012; Kyle & Crossley, 2018). From a cognitive perspective, the Lexical Quality Hypothesis further explains that well-developed lexical representations facilitate efficient language processing by reducing the cognitive effort required for word retrieval, thereby allowing writers to allocate greater attention to higher-order composing processes such as planning, organization, synthesis, and critical evaluation (Perfetti & Stafura, 2014). Moreover, recent research emphasizes that vocabulary learning is most effective when explicit instruction is combined with repeated exposure to meaningful reading and authentic writing activities, enabling learners to consolidate both receptive and productive vocabulary knowledge over time (Nation, 2022; Webb, 2020). Therefore, vocabulary knowledge should be regarded not merely as an element of language proficiency but

as the linguistic foundation upon which effective academic writing is constructed, directly influencing students' ability to communicate scholarly ideas accurately, coherently, and persuasively.

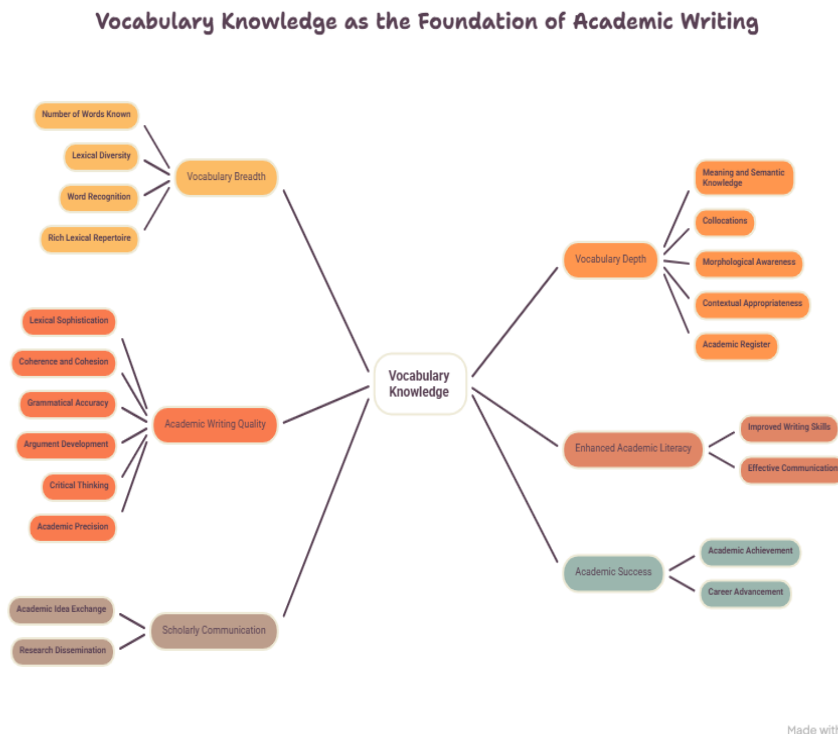


Figure 1: Vocabulary breadth and Depth for Academic Writing Quality

2. Reading Habits and Academic Literacy Development

Reading habits constitute one of the most influential determinants of academic literacy because they provide learners with sustained exposure to authentic language, disciplinary knowledge, and scholarly discourse. Academic literacy extends beyond the ability to read and write effectively; it encompasses the capacity to interpret, evaluate, synthesize, and communicate knowledge within specific academic communities. Regular engagement with academic reading enables university students to acquire not only conceptual understanding but also the linguistic and rhetorical conventions that characterize scholarly communication. Through repeated interaction with textbooks, peer-reviewed journal articles, research reports, and other academic texts, learners gradually internalize discipline-specific vocabulary, organizational patterns, argument structures, and citation practices that subsequently shape the quality of their own writing (Hyland, 2007; Grabe & Zhang, 2013). Contemporary research consistently demonstrates that students who maintain regular reading habits exhibit higher levels of reading comprehension, vocabulary growth, critical thinking, and writing proficiency than those with limited reading engagement (Nation, 2022; Webb & Nation, 2023). Reading also promotes incidental vocabulary acquisition by exposing learners to lexical items repeatedly across diverse contexts, thereby strengthening both receptive and productive vocabulary knowledge. Beyond linguistic development, extensive reading cultivates analytical reasoning and evaluative skills by encouraging students to compare perspectives, assess evidence, and synthesize information before constructing their own academic arguments. Recent educational studies further indicate that deep engagement with academic texts enhances metacognitive awareness, enabling learners to monitor comprehension, employ effective reading strategies, and transfer acquired knowledge to academic writing tasks (Schmitt, 2014; Snow, 2023).

2. The Reciprocal Relationship Between Vocabulary Knowledge and Reading Habits

Vocabulary knowledge and reading habits share a reciprocal relationship that significantly contributes to academic literacy and writing proficiency among university students. Rather than functioning independently, these constructs reinforce one another through a continuous process of language development. Regular engagement with academic reading exposes learners to diverse vocabulary, disciplinary discourse, and authentic language structures, facilitating both incidental and intentional vocabulary acquisition (Nation, 2022; Webb, 2020). In turn, a broader and deeper vocabulary enhances reading comprehension by enabling students to understand complex texts, infer meanings from context, and process information more efficiently. According to the Lexical Quality Hypothesis, high-quality lexical representations reduce cognitive demands during reading, allowing learners to focus on higher-order comprehension and critical analysis (Perfetti & Stafura, 2014). This reciprocal interaction creates a positive cycle in which reading expands vocabulary, while improved vocabulary promotes deeper engagement with increasingly sophisticated academic texts. Empirical evidence consistently demonstrates that this interaction strengthens comprehension, critical thinking, and written communication, ultimately improving students' ability to construct coherent, well-organized, and academically appropriate writing (Crossley & McNamara, 2012; Webb & Nation, 2023). Therefore, fostering both vocabulary knowledge and regular reading habits is essential for developing academic literacy and enhancing writing quality in higher education.

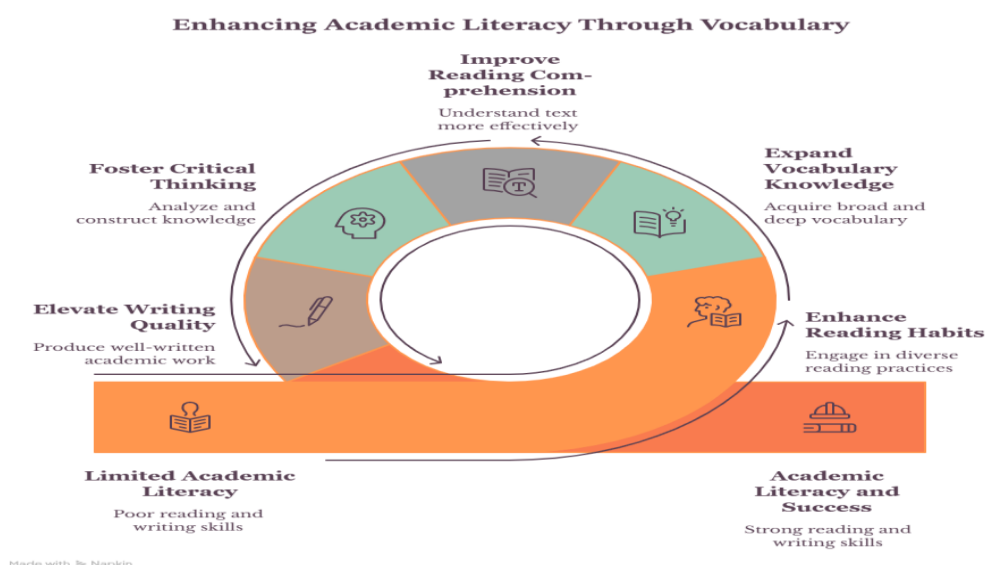


Figure 2. Conceptual Framework Linking Vocabulary Knowledge to Academic Quality

4. Vocabulary Knowledge and Lexical Sophistication in Academic Writing

Lexical sophistication is a defining characteristic of high-quality academic writing, reflecting a writer's ability to use diverse, precise, and contextually appropriate vocabulary to communicate complex ideas effectively. In higher education, students are expected to move beyond everyday language and employ academic and discipline-specific vocabulary that enhances clarity, coherence, and argumentative depth. Consequently, vocabulary knowledge is regarded as a fundamental prerequisite for lexical sophistication because it enables learners to select accurate lexical items, avoid repetition, and construct nuanced academic discourse (Nation, 2022; Hyland, 2007). Contemporary research distinguishes vocabulary knowledge into breadth and depth, both of which contribute significantly to the quality of written expression. While vocabulary breadth provides access to a wider range of lexical choices, vocabulary depth enables learners to understand semantic relationships, collocations, register, and contextual appropriateness, thereby improving

the precision and effectiveness of academic writing (Qian, 2002; Schmitt, 2014). Empirical studies have consistently shown that students with richer lexical resources produce writing characterized by greater lexical diversity, syntactic complexity, and textual cohesion, all of which are associated with higher writing proficiency (Crossley & McNamara, 2012; Kyle & Crossley, 2018). Moreover, the Lexical Quality Hypothesis suggests that efficient lexical retrieval reduces cognitive load during writing, allowing learners to focus on higher-order processes such as idea organization, critical analysis, and argument construction (Perfetti & Stafura, 2014). Recent studies also emphasize that sustained exposure to academic texts and contextualized vocabulary instruction significantly improve learners' productive vocabulary, facilitating the development of sophisticated academic writing across diverse disciplinary contexts (Webb & Nation, 2023; Nation, 2022). Therefore, strengthening vocabulary knowledge is essential for fostering lexical sophistication, which ultimately enhances coherence, precision, and the overall quality of university students' academic writing.

5. Reading Habits, Critical Thinking, and Argument Development

Reading habits play a fundamental role in fostering critical thinking and argument development, two essential components of high-quality academic writing. Regular engagement with scholarly texts exposes university students to diverse perspectives, research methodologies, and evidence-based reasoning, enabling them to evaluate information critically rather than merely recalling facts. Through sustained academic reading, learners develop the ability to analyze arguments, identify assumptions, compare contrasting viewpoints, and synthesize evidence from multiple sources, which are indispensable skills for constructing logical and persuasive academic arguments (Grabe & Zhang, 2013; Hyland, 2007). Moreover, extensive reading enhances inferential comprehension and metacognitive awareness, allowing students to question the credibility of information, recognize rhetorical strategies, and organize ideas systematically before presenting them in writing (Snow, 2023). Research has consistently shown that students with strong reading habits produce more coherent, analytically rich, and evidence-based academic writing because they possess greater familiarity with disciplinary discourse and scholarly conventions (Nation, 2022; Webb & Nation, 2023). Additionally, reading broadens learners' conceptual knowledge and strengthens vocabulary, providing the linguistic and intellectual resources necessary to support well-reasoned arguments (Schmitt, 2014; Perfetti & Stafura, 2014). Contemporary educational research also emphasizes that critical reading encourages independent learning by promoting reflection, evaluation, and synthesis, enabling students to move beyond descriptive writing toward analytical and argumentative academic discourse (Paul & Elder, 2020; OECD, 2021). Therefore, cultivating consistent reading habits is essential for developing critical thinking and argumentation skills, ultimately enabling university students to produce academically rigorous, coherent, and persuasive writing that meets the expectations of higher education.

6. The Combined Influence of Vocabulary Knowledge and Reading Habits on Academic Writing Quality

Academic writing quality is shaped by the combined influence of vocabulary knowledge and reading habits, as these interrelated factors collectively strengthen students' linguistic competence, cognitive development, and academic literacy. While vocabulary knowledge equips learners with the lexical resources necessary to express ideas accurately and coherently, regular reading habits provide continuous exposure to authentic academic language, disciplinary discourse, and effective writing conventions that enrich both receptive and productive vocabulary (Nation, 2022; Webb & Nation, 2023). This complementary relationship enables students to comprehend complex texts, critically evaluate information, and integrate evidence into well-structured academic arguments. Research consistently demonstrates that learners possessing extensive vocabulary and engaging in sustained academic reading produce writing characterized by greater lexical sophistication, coherence, grammatical accuracy, and argumentative depth than students with weaker

vocabulary knowledge and limited reading engagement (Crossley & McNamara, 2012; Kyle & Crossley, 2018). Furthermore, the Lexical Quality Hypothesis explains that efficient lexical processing enhances reading comprehension and reduces cognitive demands during writing, allowing learners to devote greater attention to planning, critical analysis, and organization of ideas (Perfetti & Stafura, 2014). Similarly, socio-cognitive perspectives on literacy emphasize that continuous interaction with academic texts simultaneously develops vocabulary, critical thinking, and disciplinary knowledge, which together improve writing performance (Hyland, 2007; Grabe & Zhang, 2013). Consequently, contemporary higher education increasingly advocates integrated instructional approaches that combine explicit vocabulary instruction with extensive academic reading to strengthen students' academic literacy and writing competence. Such evidence suggests that vocabulary knowledge and reading habits should be viewed as complementary rather than independent predictors of writing quality, as their combined influence significantly enhances students' ability to produce coherent, academically rigorous, and persuasive written discourse.

7. Research Gaps and Future Directions

Despite the growing body of literature examining vocabulary knowledge, reading habits, and academic writing, several important research gaps remain that warrant further investigation. Existing studies have predominantly explored the individual effects of vocabulary knowledge or reading habits on writing performance, while comparatively fewer studies have examined their combined and interactive influence on academic writing quality within a unified theoretical framework (Nation, 2022; Webb & Nation, 2023). Moreover, much of the current evidence is derived from cross-sectional research, limiting understanding of how vocabulary development and reading habits evolve over time and contribute to sustained improvements in academic writing. Another notable limitation is the inconsistency in measuring vocabulary knowledge and reading habits, with researchers employing diverse indicators such as vocabulary breadth, vocabulary depth, reading frequency, reading motivation, and digital reading engagement, making comparisons across studies difficult (Qian, 2002; Schmitt, 2014). Furthermore, although digital technologies have transformed students' reading behaviors, limited research has investigated how digital reading practices influence vocabulary acquisition, critical thinking, and academic writing quality in higher education. Future studies should therefore adopt longitudinal, mixed-methods, and cross-cultural research designs to provide a more comprehensive understanding of these relationships across diverse educational contexts (Hyland, 2007; Grabe & Zhang, 2013). Additionally, greater attention should be directed toward evaluating integrated instructional interventions that combine explicit vocabulary instruction with extensive academic reading to determine their long-term effectiveness in improving academic literacy and writing performance. Such investigations would provide stronger empirical evidence for curriculum development and pedagogical practices while contributing to a more comprehensive understanding of the mechanisms through which vocabulary knowledge and reading habits jointly enhance academic writing quality among university students.

Research Methodology

This study employed a quantitative research approach using a cross-sectional survey design to investigate the impact of vocabulary knowledge and reading habits on academic writing quality among university students. The target population of the study consisted of undergraduate students enrolled at the University of the Punjab, Lahore, Pakistan. A sample of 350 students was selected through a stratified random sampling technique to ensure adequate representation from different academic disciplines and minimize sampling bias. Data were collected through a structured questionnaire consisting of demographic information and measurement items related to vocabulary knowledge, reading habits, and academic writing quality. Vocabulary knowledge was assessed through items measuring lexical awareness, vocabulary breadth, academic word usage, and appropriate word selection, whereas reading habits were evaluated through

indicators including reading frequency, engagement with different types of texts, and regular reading practices. Academic writing quality was measured through dimensions such as coherence, organization, grammatical accuracy, vocabulary application, argument development, and clarity of expression. All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Prior to data collection, participants were informed about the purpose of the research, and their voluntary participation, anonymity, and confidentiality were ensured. The collected data were analyzed using statistical techniques including descriptive statistics, Pearson correlation analysis, and multiple regression analysis to examine the relationships among vocabulary knowledge, reading habits, and academic writing quality. Additionally, interaction analysis was conducted to determine whether the combined effect of vocabulary knowledge and reading habits significantly contributed to improving students' academic writing performance. The reliability of the measurement instrument was assessed using Cronbach's alpha coefficient, while appropriate validity procedures were followed to ensure the accuracy and consistency of the constructs. The statistical significance level was maintained at $p < .05$.

Results Analysis

Table 1: Descriptive Statistics and Correlation Analysis of Study Variables

Variables	Mean	SD	1	2	3
Vocabulary Knowledge	4.12	0.61	1		
Reading Habits	4.05	0.67	.52**	1	
. Academic Writing Quality	4.09	0.63	.61**	.57**	1

Note. *N = 350. * $p < .01$.

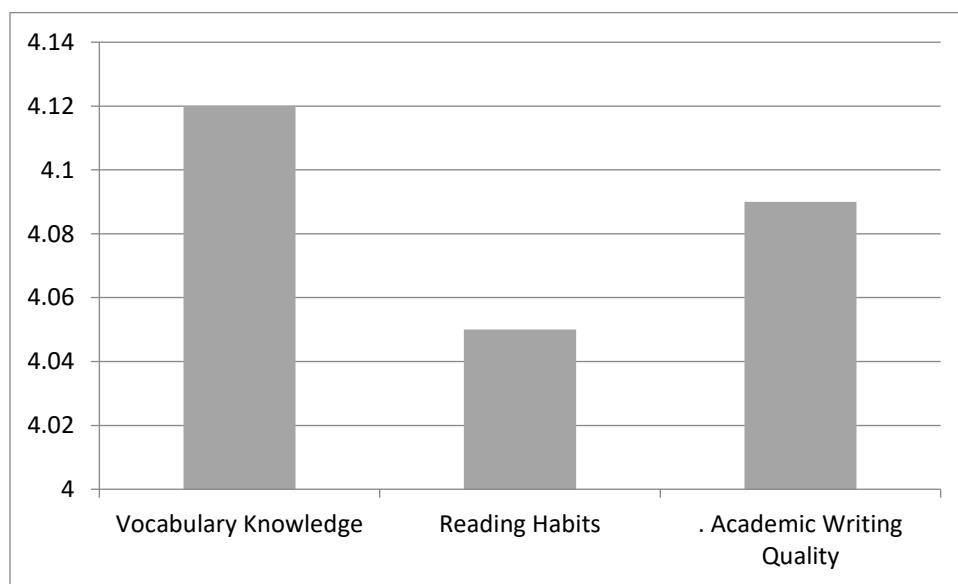


Figure 1: Statistics and Correlation Analysis

Interpretation

The correlation analysis presented in Table 1 indicates significant positive relationships among all study variables. Vocabulary knowledge demonstrated a strong positive correlation with academic writing quality ($r = .61$, $p < .01$), supporting the assumption that students with higher vocabulary competence tend to produce better academic writing. Similarly, reading habits showed a significant positive association with

academic writing quality ($r = .57$, $p < .01$), indicating that regular reading practices contribute to improved writing performance. The significant correlation between vocabulary knowledge and reading habits ($r = .52$, $p < .01$) further suggests that students who engage in frequent reading activities are more likely to develop stronger vocabulary skills.

Table 2: Regression Analysis for the Effect of Vocabulary Knowledge on Academic Writing Quality

Predictor	B	SE	β	t	p
Constant	1.42	0.21	—	6.76	<.001
Vocabulary Knowledge	0.65	0.05	.61	12.85	<.001
Sample Size (N)	350				
R ²	.37				

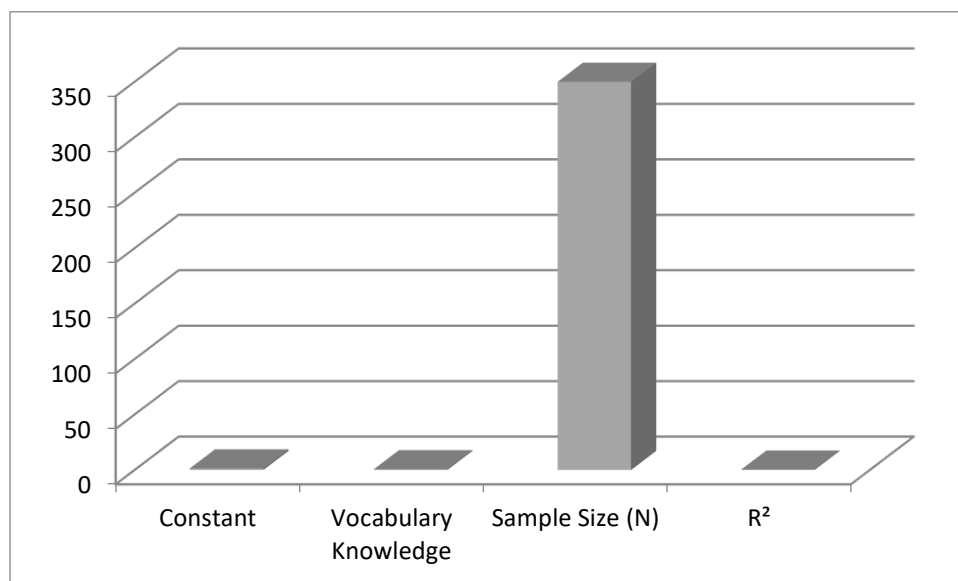


Figure 2: Regression Analysis

Interpretation

The regression results demonstrate that vocabulary knowledge significantly predicts academic writing quality ($\beta = .61$, $p < .001$). Vocabulary knowledge explains approximately 37% of the variance in students' academic writing performance. The findings support H1, indicating that students with stronger vocabulary knowledge demonstrate greater lexical accuracy, improved coherence, and enhanced ability to express complex academic ideas.

Table 3: Regression Analysis for the Effect of Reading Habits on Academic Writing Quality

Predictor	B	SE	β	t	p
Constant	1.58	0.19	—	8.31	<.001
Reading Habits	0.59	0.06	.57	11.92	<.001
Sample Size (N)	350				
R ²	.32				

Interpretation

Table 3 shows that reading habits significantly influence academic writing quality ($\beta = .57, p < .001$). The model explains 32% of the variation in academic writing quality. This finding confirms that students who regularly engage in reading activities develop stronger awareness of academic structures, vocabulary usage, and writing conventions.

Table 4: Moderation Analysis of Vocabulary Knowledge $\times$ Reading Habits on Academic Writing Quality

Predictor	B	SE	β	t	p
Constant	1.21	0.18	—	6.72	<.001
Vocabulary Knowledge	0.41	0.07	.39	5.86	<.001
Reading Habits	0.36	0.06	.34	5.77	<.001
VK $\times$ RH Interaction	0.18	0.05	.21	3.60	<.001
R ² Change	.04				

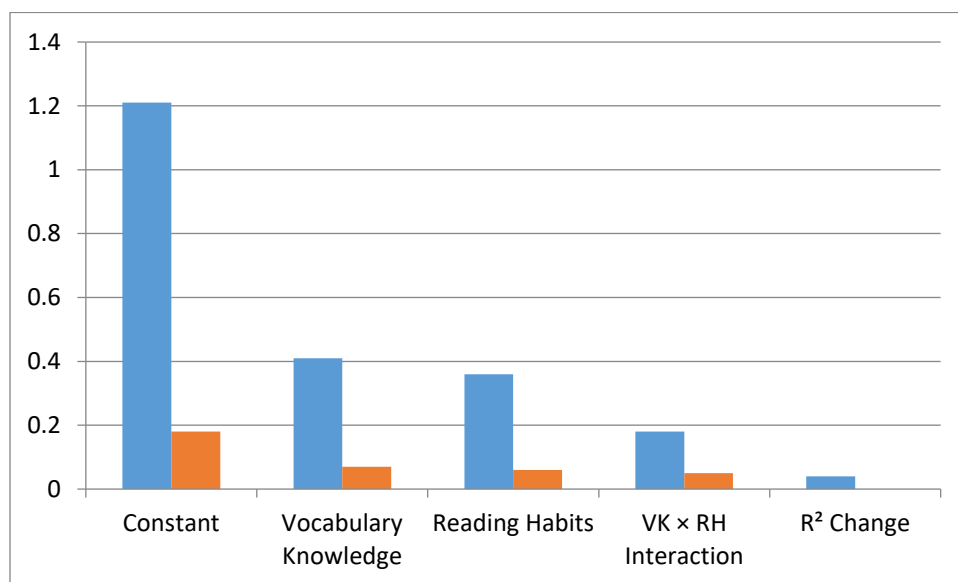


Figure 3: Moderation Analysis of Vocabulary Knowledge

Interpretation

The moderation analysis reveals that the interaction between vocabulary knowledge and reading habits has a significant positive effect on academic writing quality ($\beta = .21, p < .001$). The significant interaction term indicates that the combined presence of strong vocabulary knowledge and frequent reading habits produces greater improvement in academic writing performance than either factor independently. Therefore, students who possess both higher vocabulary competence and stronger reading engagement demonstrate superior academic writing outcomes.

Table 5: Multiple Regression Analysis Predicting Academic Writing Quality

Predictor	B	SE	β	t	p
Constant	0.98	0.22	—	4.45	<.001
Vocabulary Knowledge	0.42	0.06	.40	7.02	<.001
Reading Habits	0.34	0.05	.36	6.51	<.001

Predictor	B	SE	β	t	p
Model F-value	104.62				<.001
R ²	.46				

Interpretation

The multiple regression results indicate that vocabulary knowledge and reading habits together significantly predict academic writing quality ($F = 104.62$, $p < .001$). The combined model explains 46% of the variance in academic writing quality. Vocabulary knowledge emerged as the stronger predictor ($\beta = .40$), followed by reading habits ($\beta = .36$). These findings demonstrate that academic writing competence develops through the combined contribution of linguistic knowledge and sustained reading engagement.

Discussion

The present study examined the influence of vocabulary knowledge and reading habits on academic writing quality among university students at the University of the Punjab, Lahore. The findings demonstrated that vocabulary knowledge significantly contributes to students' academic writing performance, supporting the argument that lexical competence is a fundamental component of effective academic communication. Students with stronger vocabulary knowledge were found to demonstrate improved writing quality through more precise word selection, better expression of complex ideas, stronger coherence, and greater academic language proficiency. These findings are consistent with previous research emphasizing that vocabulary development enhances learners' ability to construct meaningful arguments and communicate disciplinary concepts effectively. The results further revealed that reading habits have a significant positive relationship with academic writing quality. This finding highlights the importance of regular reading exposure in developing academic literacy. Students who frequently engage with academic and diverse reading materials are more likely to acquire sophisticated vocabulary, recognize effective writing patterns, and develop stronger awareness of organizational structures and rhetorical conventions. Reading therefore functions not only as a source of knowledge acquisition but also as a practical mechanism through which students internalize language patterns required for successful academic writing.

Moreover, the interaction analysis indicated that vocabulary knowledge and reading habits jointly produce a stronger influence on academic writing quality than either factor independently. This finding suggests that vocabulary development and reading engagement are interconnected processes. While reading provides continuous exposure to new words, sentence structures, and academic discourse, vocabulary knowledge enables students to comprehend and effectively utilize the language encountered through reading. Thus, students who possess both strong vocabulary competence and consistent reading practices are more capable of producing well-structured, coherent, and academically appropriate written work. The overall findings support the view that academic writing competence is not developed through isolated language skills but through the combined development of linguistic knowledge, reading experience, and continuous practice. In the context of higher education in Pakistan, where students often face challenges related to academic English proficiency, these findings emphasize the need for integrated literacy development strategies within university curricula.

Conclusion

This study concludes that vocabulary knowledge and reading habits are significant determinants of academic writing quality among university students. The findings confirm that students with stronger vocabulary abilities demonstrate improved academic writing performance due to their greater capacity for accurate lexical choices, effective argument construction, and clear expression of ideas. Similarly, consistent reading habits enhance students' exposure to academic language, improve comprehension abilities, and

contribute to the development of effective writing practices. The study further concludes that vocabulary knowledge and reading habits operate in a complementary manner. Reading activities support vocabulary expansion, while developed vocabulary enables students to understand and produce more advanced academic texts. Therefore, improving academic writing quality requires a balanced approach that combines vocabulary enrichment with sustained reading engagement.

The findings provide valuable implications for higher education institutions, language educators, and curriculum developers. Universities should recognize academic writing as a multidimensional skill that requires continuous development rather than a single classroom-based activity. By implementing structured reading programs and vocabulary enhancement initiatives, institutions can strengthen students' academic literacy and improve their overall educational performance.

Recommendations

Based on the findings of this study, several recommendations are proposed to enhance university students' academic writing quality. First, higher education institutions should introduce structured vocabulary development programs focusing on academic terminology, contextual word usage, and discipline-specific vocabulary to strengthen students' lexical competence. Universities should also promote extensive reading practices by encouraging students to engage with academic journals, books, and other diverse reading materials, as regular reading exposure contributes significantly to vocabulary growth, critical thinking, and effective writing skills. Furthermore, academic writing support centers should be established to provide students with continuous guidance regarding writing organization, coherence, argument development, grammatical accuracy, and appropriate academic expression. Language instructors are encouraged to adopt integrated teaching approaches that combine vocabulary instruction, reading activities, and writing practice rather than treating these skills as separate components. In addition, curriculum developers should incorporate reading-based writing tasks across different academic disciplines to ensure that students continuously practice academic communication skills throughout their university education. Finally, future researchers are encouraged to explore additional factors affecting academic writing quality, such as writing motivation, digital literacy, feedback mechanisms, and writing anxiety, through longitudinal studies and broader samples involving multiple higher education institutions.

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