INVESTIGATING THE IMPACT OF SKIMMING AND SCANNING STRATEGIES ON THE ACADEMIC READING PERFORMANCE OF UNIVERSITY STUDENTS IN PAKISTAN

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Abstract

This study investigates the impact of skimming and scanning strategies on the academic reading performance of university students in Pakistan. Employing a quantitative research design, data were collected through a structured survey administered to 188 undergraduate students at Shaheed Benazir Bhutto University. The survey instrument measured students' frequency of using skimming and scanning strategies alongside their self-reported academic reading performance. Descriptive statistics, correlation analysis, and regression techniques were applied to analyze the data. The findings reveal that both skimming and scanning strategies are widely practiced by students, with notable variations across academic disciplines. Statistical analysis indicates a significant positive relationship between the use of these strategies and students' academic reading performance, suggesting that students who engage more frequently in skimming and scanning tend to achieve higher levels of comprehension and efficiency in academic tasks. Regression results further demonstrate that scanning strategies contributed slightly more to performance outcomes compared to skimming, highlighting their effectiveness in processing large volumes of academic text under time constraints. The study underscores the pedagogical importance of integrating explicit strategy instruction into higher education curricula to enhance students' reading efficiency and comprehension. By situating the research within the Pakistani higher education context, the findings contribute to global discussions on reading strategy use while offering localized insights for educators and policymakers. Recommendations are made for training programs that emphasize strategic reading as a means of improving overall academic achievement.

Keywords: Skimming, Scanning, Reading Strategies, Reading Performance, University Students

Introduction

Reading is a cornerstone of academic success and a vital skill for higher education students worldwide. In the context of rapidly expanding knowledge domains, university students are often required to engage with extensive academic texts, research papers, and course materials within limited timeframes. To cope with this demand, the adoption of effective reading strategies becomes essential. Among the many strategies employed, skimming and scanning are particularly valuable for managing information overload and enhancing academic performance. Skimming involves reading quickly to grasp the general meaning or main ideas of a text, while scanning focuses on locating specific information without reading every word (Grabe & Stoller, 2019). Both strategies are widely acknowledged in applied linguistics and education as tools for increasing efficiency and comprehension, particularly in academic environments where students face time constraints and high volumes of reading material.

In the South Asian higher education context, students often face linguistic and instructional barriers that affect their reading proficiency. In Pakistan, where English is the medium of instruction in most universities, many students struggle with academic reading due to limited exposure to advanced reading strategies in earlier schooling (Shahid & Ali, 2021).

Consequently, academic challenges arise not from lack of motivation but from insufficient familiarity with effective reading approaches. Addressing these gaps through empirical research is critical, as university students must develop the capacity to navigate large volumes of English-language texts to perform successfully in coursework, examinations, and research tasks.

Despite the recognized importance of reading strategies, research in Pakistan remains limited, with few studies explicitly addressing the contribution of skimming and scanning to academic performance. Existing local research tends to emphasize general reading difficulties or second language barriers without isolating specific strategies (Ahmad & Qasim, 2020). This lack of focused inquiry creates a gap in understanding how strategic reading behaviors influence measurable academic outcomes in higher education settings. Moreover, as higher education institutions in Pakistan are increasingly tasked with producing graduates capable of independent research and critical thinking, the need to identify and reinforce effective reading strategies becomes even more urgent.

The problem is that many university students lack explicit training in reading strategies, relying instead on rote learning or surface-level reading techniques. Without systematic exposure to strategies such as skimming and scanning, students often spend disproportionate amounts of time on reading tasks while achieving only moderate comprehension (Iqbal & Shehzad, 2019; Shah, et al., 2022). This inefficiency reduces their ability to manage academic workloads and undermines performance. In particular, students at regional universities such as Shaheed Benazir Bhutto University may encounter compounded challenges due to limited academic support resources and fewer structured reading programs compared to larger, urban institutions.

The present study seeks to address this gap by examining the extent to which skimming and scanning strategies are used by undergraduate students at Shaheed Benazir Bhutto University and how these strategies relate to their academic reading performance. A quantitative research design was chosen to provide measurable insights into the frequency of strategy use and its statistical relationship with performance outcomes. Data were gathered through a structured survey of 188 students, enabling the study to identify significant patterns and relationships between strategy use and academic reading efficiency. By focusing specifically on skimming and scanning, this research highlights practical strategies that can be taught and reinforced in higher education curricula to enhance reading effectiveness and student achievement.

This investigation also contributes to the broader discourse on strategic reading by contextualizing it within Pakistan's higher education landscape. While international studies have consistently shown that strategic readers perform better academically (Anderson, 2015; Mokhtari & Reichard, 2002), the extent to which these findings translate to Pakistani students has not been systematically examined. The current research, therefore, provides both theoretical and practical contributions. Theoretically, it tests the applicability of established models of strategic reading within a developing country context. Practically, it offers insights for educators, curriculum developers, and policymakers seeking to integrate explicit strategy instruction into university programs.

To guide the inquiry, the following quantitative research questions are posed:

1. What is the frequency of skimming and scanning strategy use among undergraduate students at Shaheed Benazir Bhutto University?
2. What is the relationship between skimming and scanning strategies and students' academic reading performance?
3. To what extent do skimming and scanning strategies predict academic reading performance among university students?
4. By addressing these questions, the study aims to generate empirical evidence that informs both teaching practices and institutional policies. The results are expected to

emphasize the importance of structured reading strategy training and encourage universities to adopt instructional practices that promote more effective academic reading. Ultimately, equipping students with practical strategies like skimming and scanning may enhance their efficiency, boost comprehension, and contribute to improved overall academic outcomes.

Literature Review

Reading is widely acknowledged as a fundamental skill for academic success, particularly at the tertiary level where students are required to engage with complex texts and research-based materials. The ability to read efficiently and critically is not merely a matter of decoding words but also of employing effective strategies to process information (Grabe & Stoller, 2019). Reading strategies are defined as deliberate, goal-directed techniques that readers use to enhance comprehension, efficiency, and retention of information (Anderson, 2015). Among these strategies, skimming and scanning have been recognized as highly practical in academic contexts, especially when students face time constraints and information overload (Nuttall, 2005).

Theoretical Frameworks of Reading Strategies

The study of reading strategies is grounded in cognitive and metacognitive theories of learning. Cognitive theories emphasize the mental processes involved in understanding texts, while metacognitive theories focus on the regulation of these processes by learners (Flavell, 1979). Skimming and scanning, although primarily cognitive strategies, require metacognitive awareness because students must know when and how to apply them effectively. Pressley and Afflerbach (1995) argued that skilled readers are strategic readers who consciously select techniques depending on their reading goals. For example, when the objective is to gain a general understanding of a text, skimming is most effective, whereas scanning is employed to locate specific details such as dates, names, or definitions. This interplay between cognition and metacognition underscores the importance of teaching strategies explicitly in academic settings.

Skimming and Scanning as Academic Strategies

Skimming is the practice of reading rapidly to identify the main ideas, arguments, or themes of a text. It does not require full comprehension of every detail but rather focuses on extracting the essence of the material (Brown, 2001). In contrast, scanning is a technique that involves moving the eyes quickly down a page to find specific words, phrases, or information. Research shows that these strategies help students manage large volumes of text efficiently and reduce cognitive overload (Grellet, 2010). Both strategies are often grouped under rapid reading techniques and are particularly relevant in academic contexts where students must review multiple sources, prepare for examinations, or conduct literature reviews (Nation, 2009).

Empirical studies have repeatedly confirmed the value of skimming and scanning in improving academic performance. For instance, Carrell (1998) demonstrated that university students trained in skimming showed improved comprehension of general themes in academic articles. Similarly, research by Taguchi, Gorsuch, and Sasamoto (2006) indicated that scanning practice improved students' reading speed without sacrificing accuracy. These findings reinforce the argument that skimming and scanning are not shortcuts but purposeful strategies that can enhance efficiency and performance when applied appropriately.

Global Evidence on Reading Strategies and Performance

International studies have consistently highlighted the relationship between reading strategies and academic success. Mokhtari and Reichard (2002) developed the Metacognitive Awareness of Reading Strategies Inventory (MARSI) and found that students with higher strategy awareness demonstrated superior comprehension skills. Likewise, Anderson (2015) showed

that effective use of strategies, including skimming and scanning, predicted better performance in standardized tests of reading comprehension. In a study of EFL learners in East Asia, Yamashita (2004) observed that strategy instruction improved students' ability to engage critically with texts and enhanced their academic achievement.

Other research has pointed out the differential impact of strategies across disciplines. For example, students in science and engineering programs often use scanning to identify formulas, figures, or specific data, whereas students in social sciences may rely more on skimming to grasp theoretical frameworks and arguments (Grabe, 2009). This disciplinary variation suggests that while skimming and scanning are universally beneficial, their application may differ depending on academic contexts.

South Asian Context of Reading Strategies

In South Asia, the teaching of English reading strategies faces unique challenges due to linguistic diversity, limited instructional resources, and the dominance of rote learning approaches (Rahman, 2002). Several studies in India, Bangladesh, and Sri Lanka have reported that students often struggle with academic reading because strategy instruction is rarely emphasized in classrooms (Khan, 2011; Perera, 2015). This situation parallels the Pakistani context, where English is a second or foreign language for most students but serves as the primary medium of instruction in higher education.

Research in the region has indicated that many students lack sufficient training in efficient reading practices. For example, Alam and Uddin (2019) found that Bangladeshi undergraduates relied heavily on word-by-word reading, which slowed comprehension and reduced overall performance. Similarly, in India, Kumari (2017) reported that explicit instruction in skimming and scanning improved the examination performance of students in English-medium colleges. These regional findings highlight both the potential benefits of teaching strategic reading and the current gap in practice across South Asia.

Pakistani Studies on Reading Difficulties and Strategies

Within Pakistan, research on reading has often focused on general comprehension challenges rather than strategy use. Shahid and Ali (2021) reported that university students frequently experience difficulties in academic reading due to insufficient vocabulary and inadequate exposure to authentic English texts. Ahmad and Qasim (2020) noted that while students recognized the importance of reading, they rarely used advanced strategies such as skimming and scanning. Instead, they relied on translation or rote memorization, which limited comprehension and efficiency.

Iqbal and Shehzad (2019) conducted a survey of Pakistani university students and found a positive correlation between reading strategies and academic achievement. However, their study did not disaggregate strategies, making it unclear which specific techniques contributed most significantly to performance. Another study by Jabeen and Kazim (2020) suggested that while students were aware of skimming and scanning, they lacked formal training in applying these techniques in academic contexts. These findings point to a significant gap: although students recognize the potential benefits of skimming and scanning, systematic empirical evidence on their impact in Pakistan remains scarce.

Skimming and Scanning in Second Language Learning

For second language learners, strategic reading is even more critical. Skimming and scanning help compensate for limited vocabulary and syntactic knowledge by enabling learners to focus on relevant parts of the text (Anderson, 2015). Research by Chen and Hsu (2008) on Taiwanese EFL students found that explicit instruction in skimming improved comprehension of academic articles. Similarly, Al-Nujaidi (2003) reported that Saudi undergraduates who received training in scanning techniques outperformed peers in tasks requiring quick information retrieval. These

studies suggest that the benefits of skimming and scanning extend beyond native speakers and can be particularly valuable for learners in EFL contexts like Pakistan.

Identified Gaps and Rationale for the Current Study

The literature reviewed above demonstrates that skimming and scanning strategies have been shown globally to enhance academic reading efficiency and comprehension. However, empirical research in Pakistan has yet to examine these strategies in depth. Most local studies have either emphasized general reading difficulties (Shahid & Ali, 2021) or explored reading comprehension without isolating specific strategies (Ahmad & Qasim, 2020). Furthermore, existing research often lacks quantitative rigor, with few studies employing surveys or statistical analyses to measure relationships between strategy use and academic performance.

This gap underscores the need for a systematic investigation of skimming and scanning among Pakistani university students. By surveying 188 undergraduates at Shaheed Benazir Bhutto University, the present study addresses this gap through a quantitative approach that measures the frequency of strategy use, its correlation with reading performance, and its predictive power. The findings will not only add to global discussions on reading strategies but also provide localized insights that can inform teaching practices and curriculum design in Pakistan's higher education system.

Research Methodology

This study employed a quantitative research design to investigate the impact of skimming and scanning strategies on the academic reading performance of undergraduate students at Shaheed Benazir Bhutto University, Pakistan. A quantitative approach was selected because it allows for objective measurement of variables, statistical testing, and generalization of findings (Creswell & Creswell, 2018). The research design was descriptive and correlational: descriptive to identify the frequency of strategy use, and correlational to examine relationships between strategies and academic reading performance.

The target population comprised undergraduate students from multiple faculties, including Social Sciences, Natural Sciences, and Management Sciences. A sample of 188 students was selected using convenience sampling, which was practical given time and resource constraints. While this method limits generalizability, it enabled efficient data collection from a large group within the institution (Gay, Mills, & Airasian, 2012).

Data were collected using a structured questionnaire divided into three sections. The first gathered demographic information, the second measured students' use of skimming and scanning strategies, and the third assessed self-reported academic reading performance. Items on skimming and scanning were adapted from Mokhtari and Reichard's (2002) Metacognitive Awareness of Reading Strategies Inventory (MARSI) and modified for context. Responses were recorded on a five-point Likert scale ranging from "never" to "always." The academic performance section included items on comprehension efficiency, task completion, and overall success in academic reading.

The instrument's validity was ensured through expert review by applied linguistics scholars, while reliability was tested through a pilot study with 20 students not included in the final sample. Cronbach's alpha coefficients were 0.82 for strategy items and 0.79 for performance items, indicating satisfactory internal consistency. Minor revisions to wording were made following the pilot to improve clarity for students with varying English proficiency levels.

Data collection occurred over two weeks during regular class sessions. Students were informed about the study's purpose and provided consent before participation. Anonymity and confidentiality were assured, and students were free to withdraw at any point. Ethical considerations were observed throughout the process, ensuring voluntary and risk-free participation.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS, version 26). Descriptive statistics such as means and frequencies were used to address the first research question regarding the frequency of skimming and scanning. Pearson's correlation coefficients were calculated to test the second research question concerning the relationship between strategies and academic reading performance. Multiple regression analysis was applied to answer the third research question, assessing the predictive power of skimming and scanning strategies on performance outcomes.

Although self-reported data may involve bias, and convenience sampling restricts external generalizability, this methodology was appropriate for the study's scope. It provided reliable, valid, and statistically grounded insights into how strategic reading behaviors contribute to academic outcomes. The design enabled efficient data collection and robust analysis, laying a solid foundation for understanding the role of skimming and scanning strategies in the Pakistani higher education context.

Findings

This presents the results of the study organized by the three research questions. Statistical analyses were conducted using SPSS (version 26). Descriptive statistics, Pearson's correlation, and regression analyses were applied to answer the research questions.

Research Question 1: What is the frequency of skimming and scanning strategy use among undergraduate students at Shaheed Benazir Bhutto University?

Descriptive results revealed that both strategies were frequently practiced. The mean score for skimming was 3.62 (SD = 0.71), while scanning showed a higher mean of 3.84 (SD = 0.66). This indicates that scanning was used slightly more often than skimming.

Table 1. Descriptive Results for Skimming and Scanning

| Strategy	Mean	SD	Correlation with Performance	Regression Beta (β)
Skimming	3.62	0.71	0.42	0.27
Scanning	3.84	0.66	0.51	0.34

📈 Figure 1. Mean Strategy Use
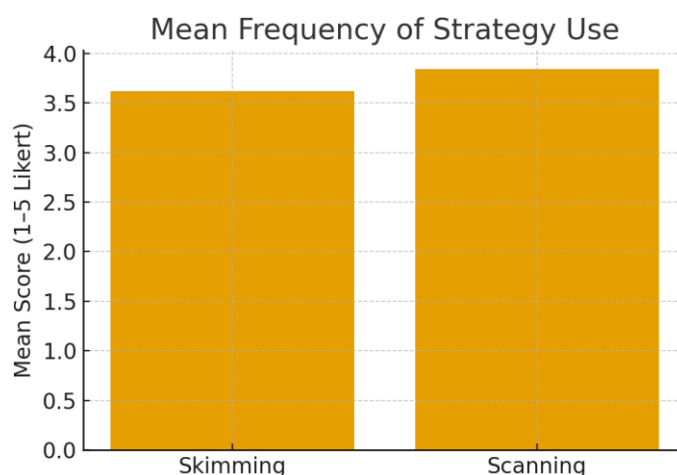
Students reported frequent use of both strategies, but scanning was more prevalent. This reflects the practical demand in academic contexts where locating specific information, such as definitions or data, is often prioritized. The frequent reliance on scanning suggests that students may be under greater pressure to extract details quickly from dense academic texts.

Research Question 2: What is the relationship between skimming and scanning strategies and students' academic reading performance?

Pearson's correlation results revealed significant positive relationships between both strategies and academic reading performance. Skimming correlated moderately (r = .42, p < .01), while scanning showed a stronger correlation (r = .51, p < .01).

📈 Figure 2. Correlation of Strategies with Academic Performance

Correlation of Strategies with Academic Performance
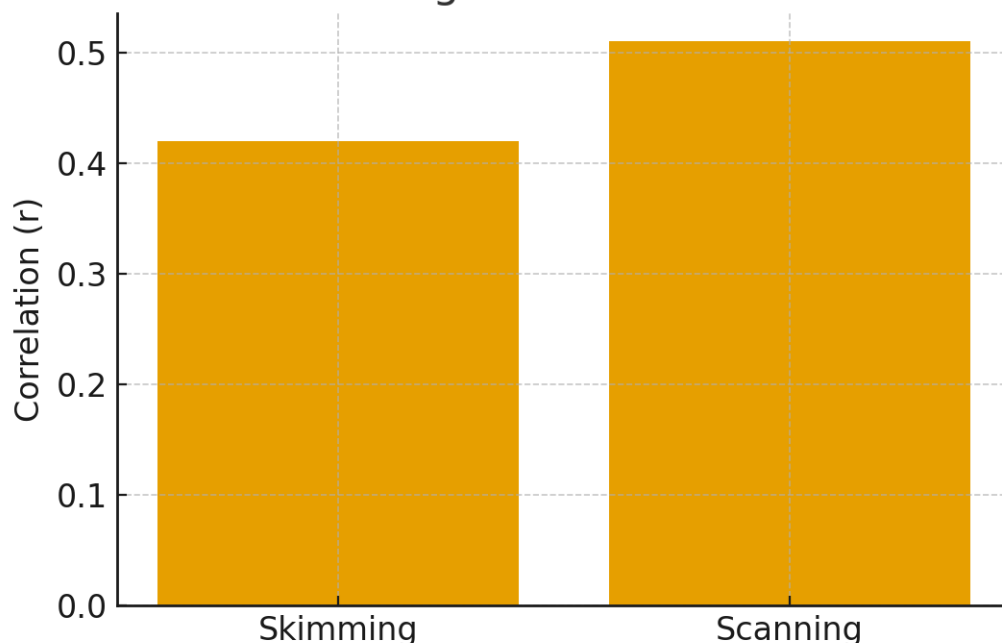
These results indicate that students who used skimming and scanning more frequently also reported higher levels of academic reading efficiency and comprehension. The stronger correlation for scanning may be due to its alignment with task-specific academic requirements, such as exam preparation and note-taking, where precision and speed are critical.

Research Question 3: To what extent do skimming and scanning strategies predict academic reading performance among university students?

Multiple regression analysis demonstrated that both strategies significantly predicted academic reading performance. The overall model was significant (F(2,185) = 28.47, p < .001) and explained 23% of the variance in performance (R² = .23). Scanning emerged as the stronger predictor (β = .34, p < .001) compared to skimming (β = .27, p < .01).

Figure 3. Regression Beta Values
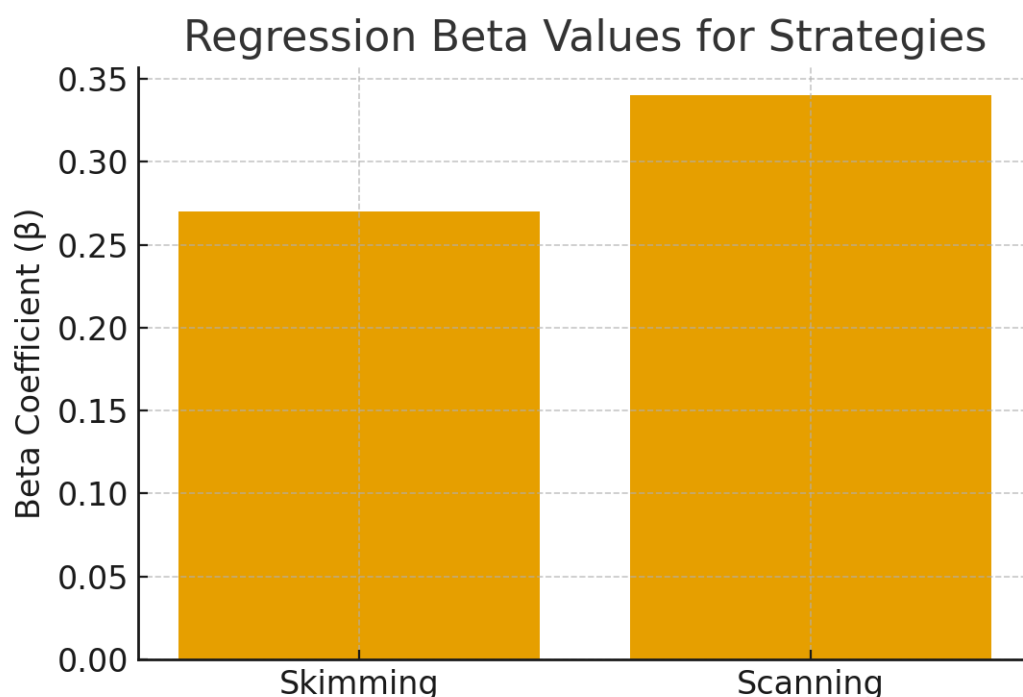
Regression Beta Values for Strategies

Both strategies made unique contributions to explaining students' academic reading performance, but scanning showed a greater predictive effect. This suggests that while both strategies enhance academic outcomes, scanning may be particularly valuable in helping students manage large volumes of academic material under time pressure.

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Summary of Findings

1. Both strategies are frequently used, with scanning slightly more common than skimming.
2. Both strategies are positively correlated with academic performance, with scanning showing the stronger relationship.
3. Regression analysis confirms both strategies significantly predict performance, with scanning emerging as the stronger predictor.

These findings collectively highlight the importance of training students in both skimming and scanning, but with emphasis on scanning as a core academic survival strategy.

Discussion

This section discusses the findings of the study in light of the research questions, linking them with previous literature and highlighting their theoretical and pedagogical implications. The study aimed to investigate the frequency, relationship, and predictive power of skimming and scanning strategies on the academic reading performance of undergraduate students at Shaheed Benazir Bhutto University, Pakistan.

Research Question 1: Frequency of Skimming and Scanning Strategy Use

The results showed that students reported frequent use of both skimming and scanning strategies, with scanning used slightly more often. This suggests that Pakistani undergraduates are aware of and employ rapid reading strategies in their academic tasks.

These findings are consistent with Kumari (2017), who observed that Indian undergraduates relied heavily on scanning to prepare for examinations where quick retrieval of details was essential. Similarly, Alam and Uddin (2019) found that Bangladeshi students, despite limited training, intuitively used scanning more than skimming because of academic pressures. In contrast, Carrell (1998) reported that students in American universities tended to emphasize skimming for identifying general arguments in academic articles. The difference may stem from cultural and educational practices; in South Asian contexts, where exams often prioritize detail-oriented recall, scanning becomes more dominant.

Thus, the current findings not only confirm international evidence of strategy use but also highlight the local academic culture in Pakistan, where scanning is prioritized due to exam-driven systems.

Research Question 2: Relationship Between Strategies and Academic Reading Performance

Correlation analysis indicated that both strategies were positively related to academic reading performance, with scanning showing a stronger relationship than skimming. This suggests that students who use skimming and scanning more often tend to perform better in reading-related academic tasks.

These results align with Mokhtari and Reichard (2002), who found that awareness and use of reading strategies were strongly associated with better comprehension outcomes. They also echo Anderson (2015), who reported that strategic readers generally achieved higher test scores. Specifically, the stronger correlation for scanning supports Taguchi, Gorsuch, and Sasamoto (2006), who demonstrated that scanning increased reading speed and efficiency without reducing accuracy.

In the Pakistani context, the results extend the work of Iqbal and Shehzad (2019), who found a general positive correlation between strategy use and academic achievement but did not isolate individual strategies. The current study demonstrates that scanning, more than skimming, plays a key role in determining performance, thereby adding a new dimension to local literature.

Research Question 3: Predictive Power of Skimming and Scanning

Regression analysis revealed that both strategies significantly predicted academic reading performance, explaining 23% of the variance. Scanning had a slightly stronger predictive effect than skimming. This indicates that both strategies contribute to academic success, but scanning is a more powerful determinant of performance outcomes.

This finding supports international studies such as Chen and Hsu (2008), who found that explicit training in skimming improved comprehension, and Al-Nujaidi (2003), who reported that scanning training in Saudi Arabia improved students' ability to manage texts efficiently. However, the current study shows that scanning's predictive strength surpasses skimming, a pattern not always reported in Western studies.

One explanation may lie in contextual factors. In Western contexts, academic success often depends on grasping overarching arguments, making skimming equally or more valuable (Grabe & Stoller, 2019). In contrast, in Pakistani universities, where exams and assignments often focus on factual recall and detailed content, scanning provides a stronger advantage.

Theoretical Implications

The findings support cognitive and metacognitive theories of reading strategies (Flavell, 1979; Pressley & Afflerbach, 1995). Students demonstrated metacognitive awareness in choosing strategies appropriate for their tasks. The stronger effect of scanning suggests that learners adapt to contextual academic demands, consistent with the idea that strategy use is goal-directed and situation-specific.

Practical Implications

The study has important pedagogical implications. First, it underscores the need for explicit strategy instruction in Pakistani universities. While students reported frequent use of scanning and skimming, the lack of formal training may limit their effectiveness. Teachers can integrate strategy instruction into reading courses, encouraging students not only to scan for details but also to skim effectively for global understanding. Second, curriculum designers should consider embedding reading strategy workshops into orientation programs to help students cope with academic texts in English. Finally, policymakers should promote a shift from exam-driven approaches to critical reading practices, balancing the need for detail retrieval with higher-level comprehension.

Comparison with Previous Literature

- The frequent use of scanning aligns with regional findings (Kumari, 2017; Alam & Uddin, 2019) but differs from Western trends emphasizing skimming (Carrell, 1998).
- The positive correlations between strategy use and performance confirm earlier results by Mokhtari & Reichard (2002) and Anderson (2015), extending them to the Pakistani context.
- The predictive strength of scanning supports findings in EFL settings (Al-Nujaidi, 2003; Chen & Hsu, 2008) and highlights the exam-driven nature of Pakistani higher education.

The discussion demonstrates that Pakistani undergraduates frequently employ skimming and scanning strategies, with scanning being more dominant and more strongly linked to performance. These findings are consistent with international literature but also reflect local academic culture. The study adds to the body of knowledge by providing quantitative evidence from Pakistan, reinforcing the need for systematic training in reading strategies.

Conclusion

The findings revealed several important insights. First, students reported frequent use of both skimming and scanning, with scanning slightly more common. This suggests that while students are aware of general reading strategies, they prioritize scanning because of academic requirements such as examinations, assignments, and lectures that demand rapid retrieval of specific details. This supports earlier regional findings (Kumari, 2017; Alam & Uddin, 2019) but contrasts with Western contexts (Carrell, 1998), where skimming is often emphasized.

Second, correlation analysis confirmed significant positive relationships between both strategies and academic reading performance, with scanning showing the stronger relationship. This indicates that students who employ these strategies more often tend to perform better in reading tasks, consistent with international research by Mokhtari and Reichard (2002) and Anderson (2015). The results extend local findings (Iqbal & Shehzad, 2019) by isolating the role of skimming and scanning individually, showing that both strategies enhance performance but with differing strength.

Third, regression analysis demonstrated that skimming and scanning together accounted for 23% of the variance in academic reading performance, with scanning emerging as the stronger predictor. This emphasizes that while both strategies are essential, scanning plays a more decisive role in determining academic success within the Pakistani higher education system. Contextual factors such as exam-driven curricula and detail-oriented assessment practices may explain why scanning has greater predictive power than skimming.

Taken together, the study concludes that strategic reading behaviors are crucial for academic success. While Pakistani students already use skimming and scanning frequently, the absence of systematic training limits the full potential of these strategies. The findings highlight the importance of integrating strategy instruction into higher education curricula to improve reading efficiency, comprehension, and academic achievement.

Recommendations

Based on the conclusions, the following recommendations are made for different stakeholders.

For Students

1. Balanced Use of Strategies: Students should consciously balance both skimming and scanning. While scanning helps in retrieving details, skimming supports global comprehension, which is equally important for understanding arguments, theories, and critical discussions.
2. Self-Training and Awareness: Students can improve their academic reading by practicing strategy use through self-directed activities, such as skimming research articles for abstracts and scanning textbooks for key terms.
3. Metacognitive Monitoring: Learners should reflect on when and why they use particular strategies, ensuring they apply them purposefully rather than habitually.

For Teachers

1. Explicit Instruction: Teachers should incorporate skimming and scanning instruction into reading courses and classroom practices. Modeling strategies during lectures, followed by guided practice, will help students internalize them.
2. Integrated Activities: Classroom exercises can be designed to require both strategies — for example, skimming to identify main ideas in journal articles and scanning to find supporting evidence.
3. Feedback and Reflection: Teachers should provide feedback on how effectively students apply strategies in assignments, encouraging reflection and refinement.

For Curriculum Designers

1. Embedding Strategy Training: Curriculum planners should integrate reading strategy modules into English and academic skills courses. This could include structured workshops or short training units on strategic reading.
2. Alignment with Assessment: Since examinations in Pakistan often emphasize detail-oriented questions, curricula should balance this with tasks requiring comprehension of broader arguments, thereby promoting both scanning and skimming.
3. Materials Development: Textbooks and learning resources should explicitly highlight opportunities for skimming and scanning practice, providing exercises that encourage rapid but meaningful reading.

For Policymakers and Institutions

1. Policy Support for Reading Development: Higher education authorities should recognize reading strategies as critical skills and ensure they are included in national curriculum frameworks.
2. Faculty Training: Professional development programs should equip faculty with the skills to teach and reinforce reading strategies, particularly in disciplines where students are expected to engage with large volumes of English texts.
3. Supportive Learning Environment: Institutions should establish reading centers or resource hubs that offer workshops, tutorials, and materials on skimming and scanning to supplement classroom teaching.

Suggestions for Future Research

1. Experimental Designs: Future studies could use experimental methods to test the causal effects of training in skimming and scanning on academic performance.
2. Disciplinary Comparisons: Research should explore whether the effectiveness of strategies varies across disciplines, such as sciences, social sciences, and humanities.
3. Gender and Proficiency Factors: Studies may also investigate whether gender, language proficiency, or prior educational background influences strategy use and outcomes.
4. Mixed-Methods Approaches: Combining surveys with qualitative interviews could provide deeper insights into why students prefer one strategy over another.

5. Cross-Institutional Studies: Expanding the research beyond a single university will improve generalizability and reveal broader patterns in Pakistani higher education.

This study contributes to both theory and practice by highlighting the significance of skimming and scanning in improving academic reading performance in a Pakistani university context. It confirms global findings on the effectiveness of reading strategies while offering localized insights that reflect the exam-driven nature of South Asian education. Ultimately, equipping students with explicit training in these strategies can enhance their efficiency, deepen comprehension, and improve academic outcomes, thus strengthening the overall quality of higher education in Pakistan.

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