

EXPLORING CORRELATION BETWEEN VOCABULARY KNOWLEDGE AND
SPEAKING FLUENCY IN ELL AT THE UNIVERSITY LEVEL

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Abstract

In an increasingly internationalized world where English proficiency is essential, understanding the relationship between vocabulary mastery and speaking fluency among English Language Learners (ELLs) at the university level is critical. This mixed-method study examines the correlation between vocabulary knowledge and self-reported speaking fluency using a structured questionnaire distributed to 80 ELLs. The data was collected through an online questionnaire via WhatsApp, and data was analyzed in graphs. At the same time, qualitative insights derived from open-ended questionnaire responses explored learners' perceptions of vocabulary's role in speaking tasks. Results indicate a significant positive correlation between vocabulary mastery and self-reported fluency scores, with vocabulary measures explaining notable variance in perceived speaking competence. These findings align with prior research showing moderate to strong correlations between vocabularies and speaking skills, reinforcing that lexical knowledge underpins fluency development. The study highlights the need for targeted word knowledge instruction integrated with fluency-building activities in ELL curricula, emphasizing contextualized practice to bridge vocabulary depth and communicative confidence. The research aims to enhance learners' speaking proficiency and vocabulary retention while encouraging further studies to explore innovative pedagogical approaches and diverse learner contexts.

Keywords: Vocabulary Knowledge, speaking fluency, ELLs.

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INTRODUCTION

Language proficiency, specifically in English, is significant for education, employment, and social interactions (Kılıç, 2019). Among the various skills required for effective communication, speaking fluency stands out as an essential module, enabling individuals to communicate thoughts and actively engage in academic and professional settings. Vocabulary knowledge, a foundation of linguistic expertise, has been widely recognized as a significant predictor of performance across language skills, including speaking fluency (Uchihara & Clenton, 2020). Recent studies have further emphasized the importance of vocabulary mastery- encompassing size, depth, and retrieval speed- in influencing speaking proficiency (Uchihara & Clenton, 2020). In the contemporary globalized world, English language proficiency is essential for academic, professional, and social success (Uchihara & Clenton, 2020).

Thus, a key determinant of speaking ability is vocabulary mastery, which significantly influences language fluency and overall communicative competence (Uchihara & Clenton, 2020). Research indicates that vocabulary knowledge, encompassing both breadth (number of words known) and depth (understanding of word usage in context), is strongly correlated with speaking performance (Ahmed et al., 2023). Empirical research highlights that vocabulary mastery not only supports speaking fluency but also impacts dimensions such as accuracy and complexity (Bunau & Ikhsanudin, 2022). For English Language Learners (ELLs) at the university level, vocabulary acquisition poses unique challenges due to limited exposure and slower acquisition rates compared to native speakers. Furthermore, interventions combining direct teaching with incidental learning and multimedia strategies have proven effective in addressing these challenges Hill, T. D. (2024). For ELLs engaging with academic texts and contexts distinct from conversational English (Bunau & Ikhsanudin, 2022), limited vocabulary hinders comprehension and fluency. Effective vocabulary instruction combining explicit teaching with contextual learning is vital for bridging this gap. Additionally, a strong foundation in a learner's first language accelerates second-language acquisition. Vocabulary size correlates with pronunciation abilities, while greater involvement in learning leads to retention (Keys to Literacy 2024).

In Pakistan specifically-where English proficiency is critical for academic and professional success-speaking proficiency enables effective communication in diverse contexts. Studies have found positive correlations between vocabulary knowledge and speaking proficiency among Pakistani undergraduate students (Batoool et al., 2023). Deeper vocabulary knowledge impacts speaking skills significantly through collocations and idiomatic expressions (Ahmed et al., 2023). Globally, English proficiency remains vital for workforce competitiveness-reading provides essential input for speaking skills by exposing learners to new vocabulary and ideas.

This research examines how vocabulary acquisition is crucial for Pakistani English language learners ELLs at the university level, directly impacting speaking proficiency and reducing communication barriers extracted from Qian, D. D., & Lin, L. H., (2019). To effectively address this issue, targeted instructional strategies are important. However, learners face challenges, including limited exposure to English resources, insufficient teacher training, large class sizes, and complex sociolinguistic factors (Hwang et al., 2020). These issues are further compounded by limited opportunities for language practice and interaction. A combined approach integrating direct instruction with secondary learning is crucial for fostering durable vocabulary growth. This method not only enhances speaking fluency but also assures evidence-based teaching practices (Maitlo et al., 2024; Ahmad et al., 2021). By acknowledging and moderating these obstacles, educators can significantly improve the English language learning experience for Pakistani students.

PROBLEM STATEMENT

English Language Learners (ELLs) often face challenges in developing speaking fluency, which is a critical skill for effective communication. Vocabulary knowledge is widely recognized as a

foundational element of language proficiency, but its direct impact on speaking fluency remains unclear. While some studies suggest a low correlation between vocabulary mastery and speaking fluency, others emphasize the importance of direct vocabulary instruction in improving overall language skills. This study aims to explore the correlation between vocabulary knowledge and speaking fluency among ELLs at the university level, focusing on how vocabulary acquisition contributes to their ability to articulate thoughts fluently and effectively.

QUESTIONS

RQ: 1 What is the significant correlation between vocabulary knowledge and speaking fluency among university-level English Language Learners (ELLs)?

RQ: 2 What are the noticeable differences in the vocabulary-fluency relationship among ELLs at different years of university study?

LIMITATIONS

This study focuses on exploring the relationship between vocabulary knowledge and speaking fluency among English Language Learners (ELLs) at the university level in Sindh, Pakistan. The research targets university-level participants from the English department of 1st year to 4th year students at the Shaikh Ayaz University.

SIGNIFICANCE

This study is significant because it contributes to a broader understanding of second language acquisition by examining the relationship between vocabulary knowledge and speaking fluency among English Language Learners (ELLs) at the university level. This research highlights how these factors influence oral proficiency across diverse educational and sociolinguistic contexts by addressing key aspects such as vocabulary breadth, depth, and learning strategies. The findings will offer valuable insights for educators, curriculum developers, and policymakers to design more effective language programs that emphasize vocabulary acquisition as a foundation for improving speaking skills. Furthermore, this study will serve as a resource for researchers and practitioners aiming to develop targeted interventions that address challenges faced by ELLs in spontaneous communication, ultimately fostering enhanced academic, professional, and social outcomes for learners globally.

LITERATURE REVIEW

According to Maitlo et al., 2023 and Ahmad et al., 2021 literature review insights the previous studies. It is the in-depth study of related material to present topic (Maitlo et al., 2024; Soomro et al., 2023).

THE FOUNDATIONAL ROLE OF VOCABULARY KNOWLEDGE

Vocabulary knowledge is not merely the accumulation of words; it encompasses both breadth, referring to the number of words an individual knows, and depth, which includes the quality of that knowledge, such as understanding word meanings, forms, and appropriate usage (Uchihara & Clenton, 2020). Scholars have long posited that a strong vocabulary base is fundamental to all other language skills. Pretorius, E. J., & Spaul, N. (2016). famously asserted that “without grammar very little can be conveyed, without vocabulary nothing can be conveyed,” highlighting the critical role of lexis in communication. Empirical studies have consistently demonstrated a strong positive correlation between vocabulary knowledge and various facets of language proficiency.

VOCABULARY SIZE AND DEPTH ABOUT SPEAKING FLUENCY

Research indicates that both the extent and the quality of vocabulary knowledge are crucial determinants of speaking fluency. Kılıç (2019) found that vocabulary knowledge accounted for a significant 26% of the variance in speaking performance among Turkish EFL learners, emphasizing the importance of both productive and receptive vocabulary. Similarly, Saito, Sun, and Tierney (2020) investigated the link between lexical access and speaking fluency in second language learners, revealing that faster retrieval of words significantly correlated with improved speaking performance, thus underscoring the importance of vocabulary depth and automaticity in

oral communication. Expanding on this, Uchihara and Clenton (2020) emphasize that achieving fluency requires not only knowing word meanings but also comprehending their nuances, collocations (words that frequently occur together), and appropriate usage in different contexts. Hunt and Feng (2016) observed that learners with a more profound understanding of vocabulary exhibited more fluent and natural-sounding speech. Studies focusing on specific aspects of vocabulary knowledge further clarify its connection to speaking fluency. Ahmed et al. (2017), within the Pakistani context, have highlighted the role of mastering collocations and idiomatic expressions in enhancing speaking fluency, as learners proficient in these multi-word units can produce more natural and idiomatic speech, contributing to the perception of greater fluency. A broader vocabulary also enables learners to express more nuanced ideas and utilize a wider array of grammatical structures.

INSTRUCTIONAL STRATEGIES FOR VOCABULARY ACQUISITION AND SPEAKING FLUENCY

Effective pedagogical approaches are crucial for enhancing vocabulary knowledge and, consequently, speaking fluency among ELLs. Direct instruction methods, involving the explicit teaching of word meanings, forms, and uses, are effective in improving vocabulary acquisition (Hunt & Feng, 2016; Alshahrani, 2019). Interventions that integrate direct teaching with incidental learning opportunities and the use of multimedia resources have proven particularly effective in fostering robust vocabulary growth and improving speaking fluency (Keys to Literacy, 2024). These strategies often include pre-teaching key vocabulary before reading or listening activities, providing learners with opportunities to encounter and use new words in context, and utilizing visual aids and technology to enhance comprehension and retention. Additionally, Khan & Zainab (2018) highlighted the effectiveness of explicit strategies such as word lists and context-based activities in promoting vocabulary growth among Pakistani students. The integration of technology into language instruction has further supported vocabulary acquisition, as demonstrated by Khalid & Khan (2019), who found that computer-based programs enhanced vocabulary learning for Pakistani undergraduates, subsequently improving their speaking skills.

VOCABULARY AND SPEAKING FLUENCY IN THE PAKISTANI CONTEXT

Several studies have specifically investigated the relationship between vocabulary knowledge and speaking proficiency among Pakistani students (Jeevan et al., 2023; Kalhor et al., 2023). Batool (2019) and Shahid et al. (2023) reported positive correlations between vocabulary knowledge and speaking fluency among Pakistani undergraduate students, aligning with broader international research findings. Ahmed et al. (2017) specifically underscored the importance of deeper vocabulary knowledge, including collocations and idiomatic expressions, in enhancing the speaking skills of Pakistani learners.

METHODOLOGY

Methodology is the technique employed by the researchers for data collection to resolve the research problem (Maitlo et al., 2025; Ahmad et al., 2025). The present research adopts a mixed-methods approach. A mixed-methods research paradigm combines qualitative and quantitative elements to provide comprehensive insights. In this study, researchers investigated the target sampling of 100 participants through an online survey to explore the research objectives. For data analysis, the researchers employed a dual-phase approach: Firstly, demographic and textual elements were analyzed through qualitative examination of patterns and themes. Secondly, quantitative validation was achieved through systematic presentation of findings in tabular format and presented in charts.

SECTION-A DEMOGRAPHIC INFORMATION

CHART: 1 SHOWS PARTICIPANTS AGE

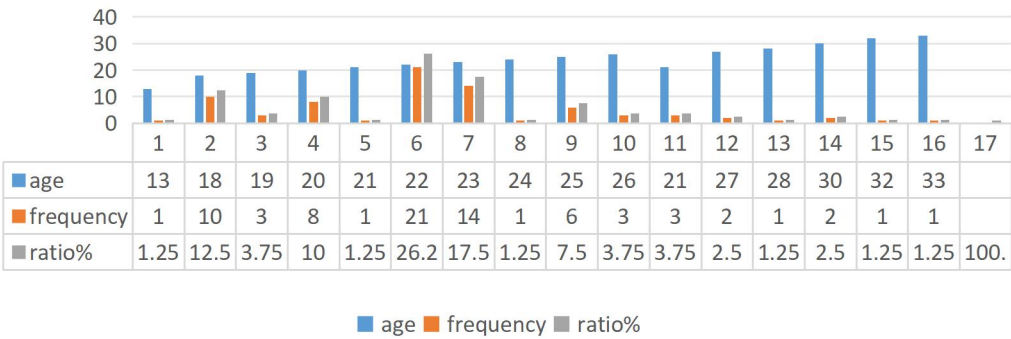
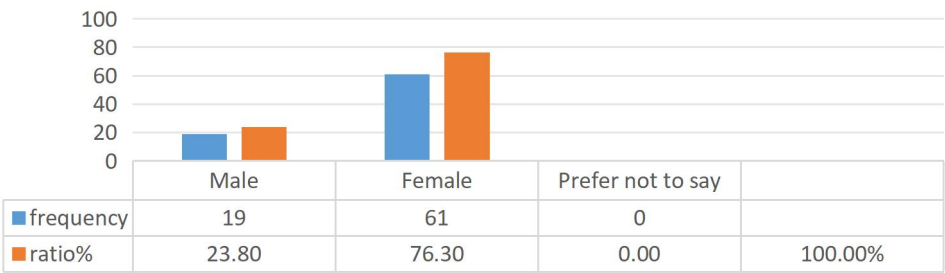


CHART: 2 SHOWS PARTICIPANTS GENDER:



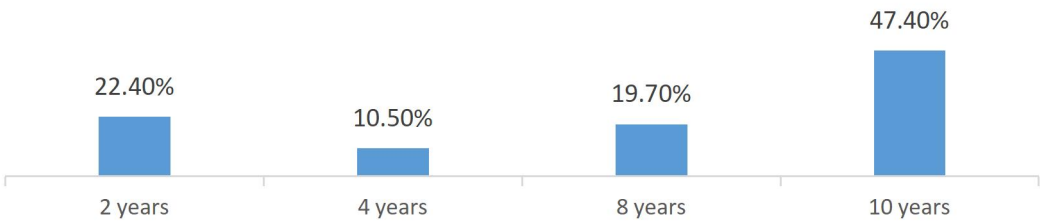
RESULTS

SECTION B

QUANTITATIVE DATA

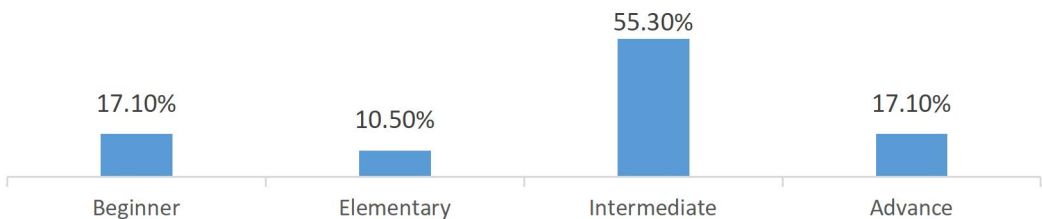
GRAPH: 3

HOW LONG HAVE YOU BEEN LEARNING ENGLISH? _____ (YEARS)?



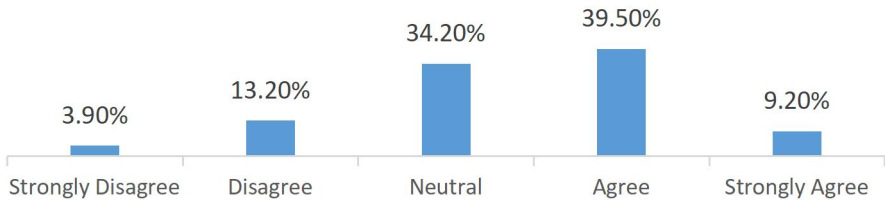
The graph above illustrates the distribution of participants based on the number of years they have spent learning English. The majority of respondents, 38 participants (47.4%), reported having learned English for 10 years, corresponding to an angle of 170.64° on a pie chart. This is followed by 18 participants (22.4%) who have been learning English for 2 years (80.64°). Additionally, 16 participants (19.7%) indicated they have been learning English for 8 years (70.92°), while the smallest group, 8 participants (10.5%), reported learning English for 4 years (37.8°).

CHART: 4
WHAT IS YOUR CURRENT LEVEL OF ENGLISH LANGUAGE LEARNING AND FLUENCY?



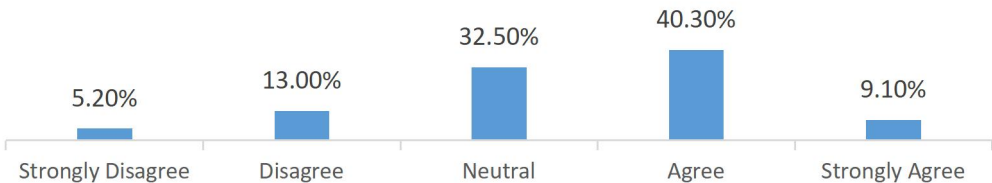
The graph shows the current English proficiency levels of 80 participants. Most respondents, 44 participants (55.3%), identified their level as Intermediate, which corresponds to an angle of 199.08° on a pie chart. Both Beginner and Advanced levels were reported by 14 participants each (17.1%), with each level representing an angle of 61.56°. The smallest group, 8 participants (10.5%), identified their level as Elementary, corresponding to an angle of 37.8°.

CHART: 5
I HAVE A WIDE RANGE OF ENGLISH VOCABULARY.



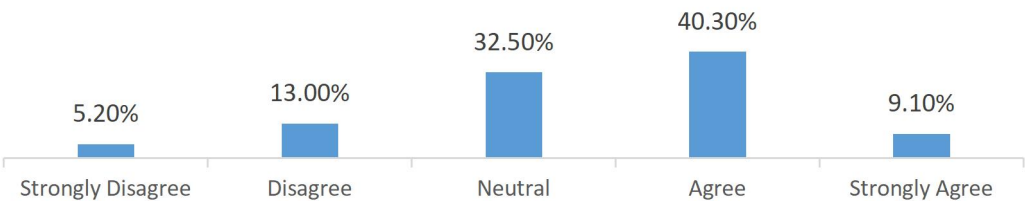
The graph shows how 80 participants responded to the statement “I’ve a wide range of English vocabulary.” Most people agreed with the statement: 32 participants (39.5%) selected “Agree,” and 7 participants (9.2%) chose “Strongly Agree,” totaling 48.7% in positive responses. 27 participants (34.2%) were “Neutral,” while 11 participants (13.2%) “Disagreed,” and 3 participants (3.9%) “Strongly Disagreed.” The data suggests that a large portion of participants feel confident about their English vocabulary, with nearly half agreeing with the statement.

CHART: 6
I UNDERSTAND THE MEANING OF MOST ACADEMIC WORDS I ENCOUNTER IN MY STUDIES.



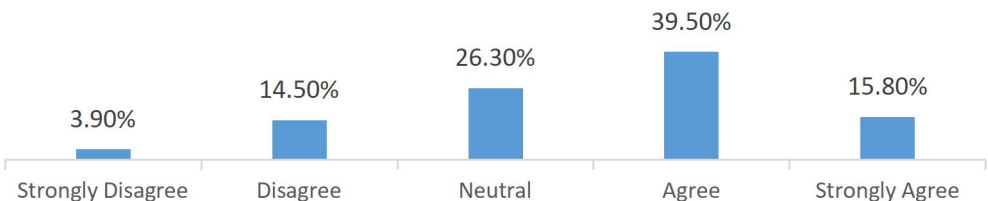
The graph shows responses from 80 participants about how well they understand academic words. Most people agreed with the statement: 32 participants (40.3%) selected “Agree,” and 7 participants (9.1%) chose “Strongly Agree,” totaling 49.4% in positive responses. 26 participants (32.5%) were “Neutral,” 10 participants (13.0%) “Disagreed,” and 4 participants (5.2%) “Strongly Disagreed.”

CHART: 7
I AM FAMILIAR WITH MANY ENGLISH IDIOMS AND EXPRESSIONS.



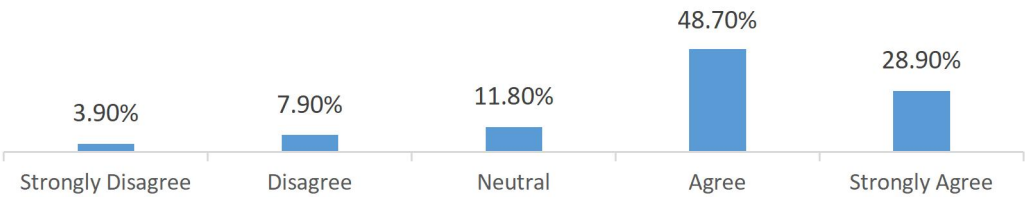
The Chart shows how 80 participants responded to the statement about familiarity with English idioms. Most participants agreed: 32 (40.3%) selected “Agree” and 7 (9.1%) chose “Strongly Agree,” totaling 49.4% positive responses. 26 participants (32.5%) were “Neutral,” 10 (13.0%) “Disagreed,” and 4 (5.2%) “Strongly Disagreed.”

CHART: 8
I CAN EASILY RECALL THE RIGHT ENGLISH WORDS WHEN I AM SPEAKING.



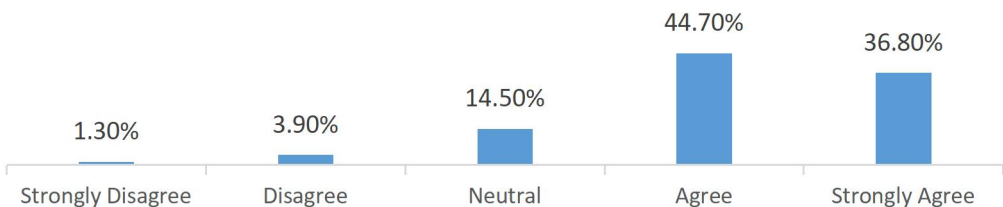
The chart shows responses from 80 participants about how easily they recall English words while speaking. Most participants agreed: 32 (39.5%) selected “Agree” and 13 (15.8%) chose “Strongly Agree,” totaling 55.3% positive responses. 21 participants (26.3%) were “Neutral,” 12 (14.5%) “Disagreed,” and 3 (3.9%) “Strongly Disagreed.”

CHART: 8
I ACTIVELY TRY TO LEARN NEW ENGLISH VOCABULARY.



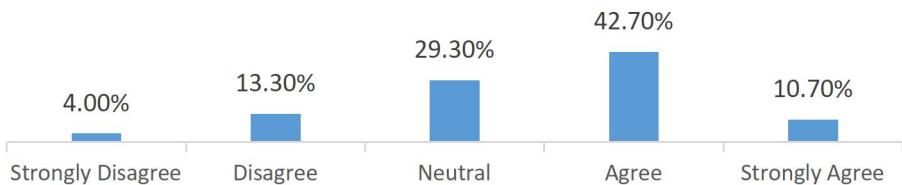
The chart shows responses from 80 participants about how actively they learn new English words. Most participants agreed: 39 (48.1%) selected “Agree” and 23 (28.6%) chose “Strongly Agree,” totaling 76.7% positive responses. 9 participants (11.7%) were “Neutral,” 6 (7.8%) “Disagreed,” and 3 (3.9%) “Strongly Disagreed.”

CHART: 9
I BELIEVE MY VOCABULARY KNOWLEDGE HELPS ME TO SPEAK ENGLISH MORE FLUENTLY.



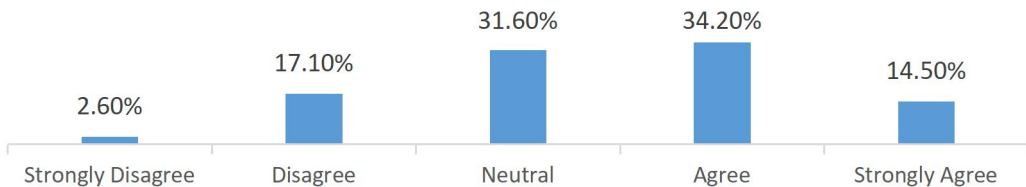
The graph shows responses from 80 participants about how vocabulary knowledge impacts speaking fluency. Most participants agreed: 36 (44.2%) selected “Agree” and 29 (36.4%) chose “Strongly Agree,” totaling 80.6% positive responses. 12 participants (14.3%) were “Neutral,” 3 (3.9%) “Disagreed,” and 1 (1.3%) “Strongly Disagreed.”

CHART: 10
I FEEL CONFIDENT SPEAKING IN ENGLISH.



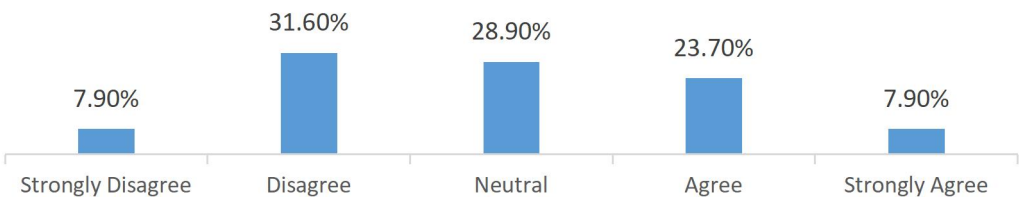
The chart shows responses from 80 participants about their confidence in speaking English. Most participants agreed: 34 (42.7%) selected “Agree” and 9 (10.7%) chose “Strongly Agree,” totaling 53.4% positive responses. 23 participants (29.3%) were “Neutral,” 11 (13.3%) “Disagreed,” and 3 (4.0%) “Strongly Disagreed.”

CHART: 11
I CAN EXPRESS MY IDEAS CLEARLY AND EASILY IN ENGLISH.



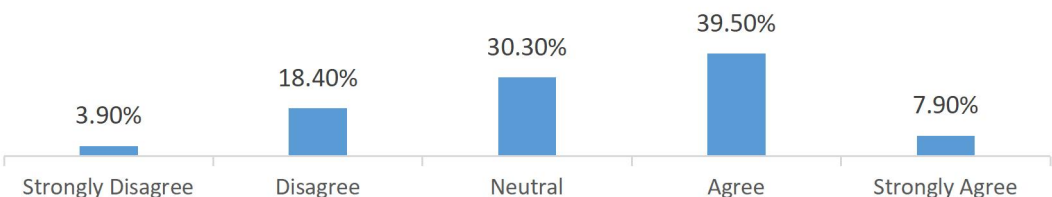
The chart shows responses from 80 participants about their ability to explain ideas clearly in English. Most participants agreed: 27 (34.2%) selected “Agree” and 12 (14.5%) chose “Strongly Agree,” totaling 48.7% positive responses. 25 participants (31.6%) were “Neutral,” 14 (17.1%) “Disagreed,” and 2 (2.6%) “Strongly Disagreed.”

CHART: 12
I SPEAK ENGLISH WITHOUT MANY PAUSES OR HESITATIONS.



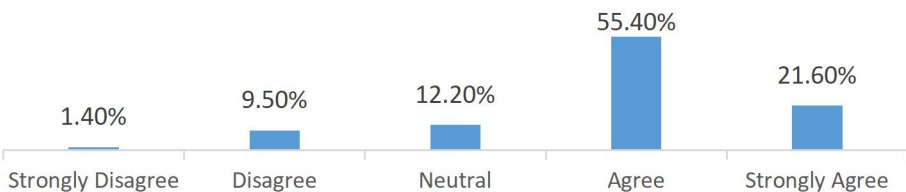
The chart shows responses from 80 participants about their ability to speak English fluently without pauses. Most participants were divided: 19 (23.7%) selected “Agree” and 6 (7.9%) chose “Strongly Agree,” totaling 31.6% positive responses. 23 participants (28.9%) were “Neutral,” 25 (31.6%) “Disagreed,” and 6 (7.9%) “Strongly Disagreed.”

CHART: 13
I FIND IT EASY TO PARTICIPATE IN ENGLISH CONVERSATIONS.



The chart shows responses from 80 participants about their ease in joining English conversations. Most participants agreed: 32 (39.5%) selected “Agree,” and 6 (7.9%) chose “Strongly Agree,” totaling 47.4% positive responses. 24 participants (30.3%) were “Neutral,” 15 (18.4%) “Disagreed,” and 3 (3.9%) “Strongly Disagreed.”

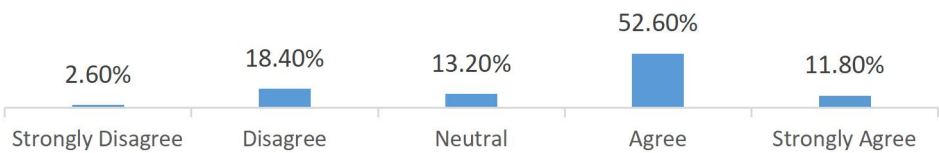
CHART: 14
MY LIMITED VOCABULARY SOMETIMES MAKES IT DIFFICULT FOR ME TO SPEAK FLUENTLY IN ENGLISH.



The graph shows responses from 80 participants about how limited vocabulary affects their speaking fluency. Most participants agreed: 44 (55.3%) selected “Agree,” and 17 (21.6%) chose “Strongly Agree,” totaling 76.9% positive responses. 10 participants (12.2%) were “Neutral,” ≈7–8 (9.5%) “Disagreed,” and ≈1 (1.4%) “Strongly Disagreed.”

CHART: 15

I SOMETIMES AVOID SPEAKING IN ENGLISH BECAUSE I LACK THE NECESSARY VOCABULARY.

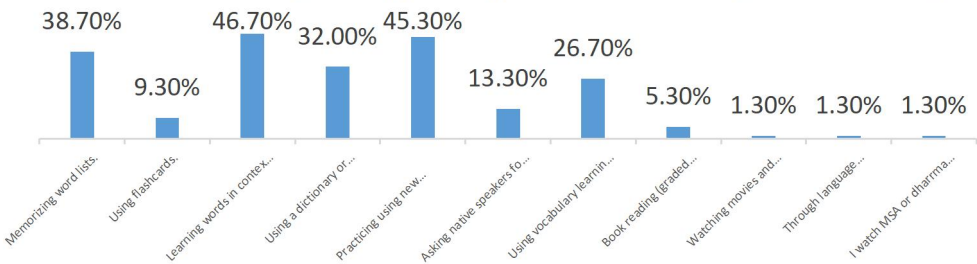


The graph shows responses from 80 participants about avoiding English due to limited vocabulary. Most agreed: 43 (53.3%) selected “Agree” and 9 (11.2%) chose “Strongly Agree,” totaling 64.5% positive responses. 11 participants (13.4%) were “Neutral,” 15 (18.7%) “Disagreed,” and 2 (2.6%) “Strongly Disagreed.”

SECTION-C QUALITATIVE DATA

CHART: 16

Which of the following strategies do you use to learn English vocabulary?



The analysis highlights that participants primarily relied on contextual learning approaches for vocabulary acquisition, with reading-based strategies and sentence practice appearing as the most frequently adopted methods. While traditional techniques like memorization and dictionary consultation maintained balanced popularity, resource-intensive methods such as book reading and flashcards showed limited adoption. Notably, a small subset of learners incorporated multimedia resources, including English-language media consumption and educational YouTube content, alongside formal language center activities into their learning strategies. These findings suggest a preference for practical, context-driven vocabulary acquisition methods over isolated memorization techniques among participants.

DISCUSSION

The findings of this study reveal a strong positive correlation between vocabulary knowledge and speaking fluency among English language learners (ELLs), aligning with recent research on lexical competence and oral proficiency (Cheema, et al., (2023: Jalbani et al., (2023: Aswad et al., 2022). Vocabulary Mastery and Fluency, over 76.9% of participants acknowledged that vocabulary gaps directly hinder their fluency, while 80.6% affirmed the role of lexical competence in enhancing fluency. This bidirectional relationship underscores vocabulary as both a facilitator and a barrier in oral communication, consistent with studies linking lexical depth to fluency gains (Sage, 2022). Learners with richer vocabularies demonstrated greater confidence in retrieving words during speech, reducing pauses, and enhancing coherence. This aligns with findings on automaticity in lexical retrieval where vocabulary size predicts speaking performance. This study confirms that vocabulary knowledge is a critical driver of speaking fluency, mediated by learning strategies and psychological factors. For ELLs, a dual focus on lexical expansion (e.g., contextual learning) and confidence-building (e.g., anxiety-reducing practices) is essential to foster fluent communication, as validated by recent tech-integrated approaches.

CONCLUSION

In conclusion, this study highlights the vital connection between vocabulary knowledge and speaking fluency in English Language Learners (ELLs), emphasizing that a strong vocabulary foundation—spanning breadth, depth, and retrieval speed—is key to effective communication. By addressing challenges such as limited exposure, communication anxiety, and sociocultural barriers, targeted teaching strategies can significantly enhance learners' speaking proficiency. The findings underscore the importance of integrating contextual learning, active practice, and confidence-building approaches into language instruction, particularly in Pakistan, where English fluency is crucial for academic and professional success. As educators and policymakers strive to improve English language education, this research serves as a valuable resource, advocating for innovative pedagogical methods that empower learners to overcome barriers and achieve fluency. Future studies should expand on these insights by exploring diverse learner groups and employing advanced assessment techniques to further refine our understanding of this relationship. Ultimately, fostering vocabulary mastery not only enhances speaking skills but also opens doors to greater academic, professional, and social opportunities globally.

RECOMMENDATIONS

- Future researchers should explore why and how vocabulary knowledge and speaking fluency are linked in ELLs.
- Test if teaching vocabulary through real-life conversations or apps improves fluency.
- Combine vocabulary practice with speaking tasks in lessons.
- Use speech-rate tracking and pronunciation rubrics to measure fluency better.
- Study how anxiety, motivation, or first language affects fluency.
- Try vocabulary apps or online speaking platforms to boost learning speed.

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