

VOCABULARY LEARNING STRATEGIES BY PAKISTANI ESL LEARNERS: CULTURAL INSIGHTS AND EDUCATIONAL PRACTICES

*Lubna Khalil, **Binish Fatima Malik, ***Suhail Anwar Malik, ****Osama Faisal

*PhD Scholar, University Utara, Malaysia

**MPhil Scholar, Riphah International University, Lahore, Pakistan

***Senior Program Specialist, Planning and Development Board, Government of Punjab

****Research Analyst, Industrial & Manufacturing Engineer, University of Engineering and Technology, Lahore, Pakistan

ABSTRACT

Vocabulary Learning Strategies (VLS) play a critical role in acquiring vocabulary and are considered as the foundation of language learning. This study examines the most frequent VLS by used Pakistani ESL (English as a Second Language) students in higher and secondary education that is an area of a notable gap in research. Research indicated that VLS facilitate vocabulary acquisition, however, little is investigated about the specific VLS employed by ESL learners in Pakistan's unique linguistic and cultural context. This study identifies the VLS utilized by Pakistani ESL students and analyzes how their cultural and educational backgrounds influence the selection and effectiveness of these strategies. To find out the most used set of VLS adopted by the learners, an e-questionnaire was conducted on 148 Pakistani ESL students. Furthermore, a thematic analysis was carried out on qualitative data gathered by in-depth interviews of 12 English language teachers. The findings show that generally the teachers have positive attitude towards the use of different VLS in language classroom using eclectic teaching approach in compared to traditional teaching. They recognize the cultural and educational diversity among Pakistani ESL students and employ appropriate VLS for vocabulary teaching. The study also highlights the challenges in vocabulary instruction, the need for evaluation and adaptation of updated teaching approaches to optimize vocabulary learning. The study findings may contribute to the development of more effective, culturally tailored vocabulary instruction methods, enhancing English language proficiency for Pakistani ESL students.

Key words: Vocabulary learning strategies, ESL, acquisition, cultural and educational backgrounds

1. Introduction

Vocabulary is the cornerstone for any language. English, being a second language in Pakistani academia and a vital skill in professional domains, necessitates effective vocabulary learning techniques for students to achieve fluency and succeed both academically and professionally. English is widely used in professional and educational contexts, which emphasizes how crucial it is to become fluent in the language. The key to achieving this level of competence is learning English vocabulary, which is essential for both gaining a competitive edge in the global job market and succeeding academically in Pakistan. Though proficiency in the English language is obviously required, there is a discernible knowledge vacuum on the best ways to teach English vocabulary to Pakistani students, who often start school speaking many native tongues. This is especially important because of their varied linguistic origins, which have a big impact on how they approach and face difficulties while learning a new language like English. Deeper investigation is necessary to improve teaching strategies and learning results since the

complexities of this language learning process are affected by the distinct multilingual setting of Pakistani students.

Previous research shows that vocabulary learning strategies (VLS) are strategies that can help greatly with efficient vocabulary acquisition and retention (Schmitt, 2009). Despite the numerous studies that have examined VLS in a variety of circumstances, there is still a knowledge gap on the vocabulary learning strategies used by Pakistani ESL students in higher and secondary education (Ashraf et al., 2021). Moreover, this study seeks to bridge that gap by providing insights into the distinctive language and cultural setting of Pakistan. As such, the strategies that learners employ to acquire vocabulary are of paramount importance (Schmitt, 2008).

Previous research has highlighted a variety of VLS, ranging from rote memorization to the use of mnemonic devices, contextual clues, and digital tools (Nation, 2001; Nation & Hunston, 2013). However, there is a scarcity of studies that focus on the efficacy of these strategies within the Pakistani educational milieu, which is characterized by its own unique set of cultural norms and educational practices. The present study seeks to fill that gap by investigating the VLS that are most prevalent among Pakistani ESL students and by understanding how students' backgrounds shape their learning experiences. This research may provide insights into the personal and cultural factors that contribute to the choice of VLS by focusing on the students' perspectives and experiences. It can also consider the implications of these choices for language proficiency and academic performance. The findings of this study are expected to contribute to the development of more effective vocabulary instruction methods tailored to the needs of Pakistani ESL learners, thereby enhancing their English language proficiency and academic success.

2. Literature Review

2.1 Vocabulary Learning Strategies (VLS) definition and classification

Vocabulary acquisition in a second language (L2) poses a challenge due to the wide range and volume of words that learners should grasp. Learners are required to employ intentional and targeted strategies for learning to effectively remember and utilize this extensive lexicon (Hadi & Guo, 2020). Vocabulary learning strategies refer to the approaches and tactics employed by learners to learn new words (Nation & Hunston, 2013). Various studies have highlighted the importance of these strategies in enhancing the learning and memorization of vocabulary (Little & Kobayashi, 2015). For instance, research conducted in Malaysia shed light on the preferred methods and patterns among learners by identifying a range of strategies commonly used by ESL students in the region (Zaidi et al., 2022).

Research shows that the common types of VLS are cognitive, metacognitive, memory-related, and social strategies (Nation, 2001; Schmitt, 2008). Cognitive strategies involve direct interaction with the language, such as through guessing meanings from context or using dictionaries (Schmitt, 2009). Metacognitive strategies involve planning, monitoring, and evaluating one's learning process (Nation, 2001). Memory-related strategies include the use of mnemonics and visual imagery, while social strategies involve learning with others and using the language in communication (Schmitt, 2009).

Empirical research has proved the effectiveness of VLS at a wide scale across different learning contexts and environments. Many studies found positive correlations between the use of varied VLS and vocabulary acquisition among ESL/EFL learners (Alshammari, 2020). Moreover,

studies like those by Hadi and Guo (2020) highlight the role of contextual learning and the use of authentic materials in enhancing vocabulary retention.

2.2 Cultural and educational influences

It is necessary to cater to the needs of ESL learners while training them for using specific strategies. Given that, Pakistan's linguistic environment, with its diverse range of languages and dialects, offers an alternative picture (Mankash et al., 2023). Based on a preliminary study, it appears that Pakistani ESL learners may have advantages and disadvantages related to their multilingual origins. Moreover, diverse cultural environment and different educational backgrounds may hinder in learning English vocabulary (Ashraf et al., 2021). The present study fills the existing gap by exploring the influence of external factors such as teaching styles or curriculum design on VLS selection. It investigates whether these variables may affect the choice of VLS and their effectiveness.

Previous research highlights that the selection and effectiveness of VLS has a strong influence on the cultural and educational background of learners. Since cultural background affect learners' learning styles that in result determines their choice of learning strategies. It may be possible that in Pakistani context this influence is likely to be more pronounced because ESL learners come from diverse linguistics and educational background. Moreover, the language choices are also dependent on the educational policies (Ashraf et al., 2021). Most studies that examine the effect of Pakistani cultural and educational context on the selection and usage of VLS are scant.

VLS research present extensive literature on general ESL context (Alshammari, 2020; Zaidi et al., 2022), however, there remains a gap in studies investigating the most preferred VLS in Pakistan's higher and secondary education. This leaves an unanswered question that to what extent cultural and educational backgrounds impact on the selection and use of VLS that the present study seeks to answer. Addressing this gap is necessary for the development of updated instructional approaches that cater to the needs of Pakistani ESL learners, thereby enhancing their English proficiency and academic achievement.

3. Significance and objectives of the study

This research seeks to address the existing gap by assessing the effective VLS used by ESL students for learning vocabulary in Pakistani universities. The present study may contribute to a better understanding of the cultural and educational factors of Pakistani ESL students that affect their choice of VLS and its efficacy. Thus, assisting both learners and educators in their pursuit of effective language and vocabulary acquisition.

- a) To assess what are the specific VSL employed preferably by Pakistani ESL students for learning vocabulary
- b) To examine whether the cultural and educational backgrounds of Pakistani ESL students affect their choice of VLS and its efficacy

3.1 Research Questions

1. What specific Vocabulary Learning Strategies (VLS) do Pakistani ESL students prefer when acquiring new vocabulary?

2. Do the cultural and educational backgrounds of Pakistani ESL students affect their choice of VLS and its efficacy?

4. Methodology

This study adopts a mixed method research design, and by employing this particular research design, it aims to integrate the breadth of quantitative data with the depth of qualitative insights. This could offer a comprehensive perspective on language acquisition mechanisms. The study includes a diverse demographic spectrum of students and teachers in terms of age, gender, academic study/academic tenure, and linguistic backgrounds. This methodological approach is designed to elucidate not only the prevalent VLS but also to investigate the impact of formal English instruction and the influence of native languages. Utilizing semi-structured e-questionnaire for student responses and in-depth interviews with teachers, the research is committed to delivering a nuanced exploration of how educational backgrounds, teaching methodologies, and sociolinguistic environments influence the effectiveness of VLS. Consequently, it aspires to contribute significantly to the academic discourse on language learning strategies, aiming to inform educators, policy-makers, and learners about optimizing vocabulary acquisition in a multilingual setting.

4.1 Population and sampling

The sample consisted of two groups of participants.

a) Students' group: 148 students from three local college/universities of Lahore, Pakistan. Following are the demographics of the student group:

1. Age Distribution

Most respondents were within the age range of 15-20 years, accounting for 60 individuals, which suggests a younger demographic. The 20-25 age bracket included 42 respondents, followed by 33 individuals in the 25-30 age range. The least represented age groups were 21-25 and 30-35, with 11 and 2 respondents, respectively. Figure 1 shows a bar chart for age distribution of the student group sample.

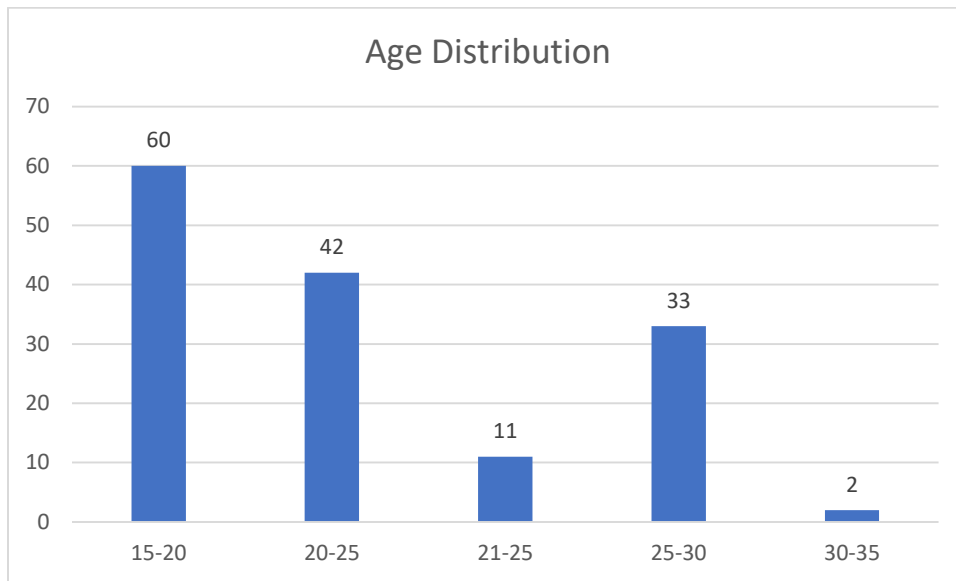


Figure 1. Bar chart for age distribution of student group

2. Gender Distribution

The gender distribution in the sample was skewed towards females, with 90 female respondents compared to 58 male respondents. This indicates a higher female participation rate in the survey. Figure 2 shows a bar chart for gender distribution of the sample of student group.

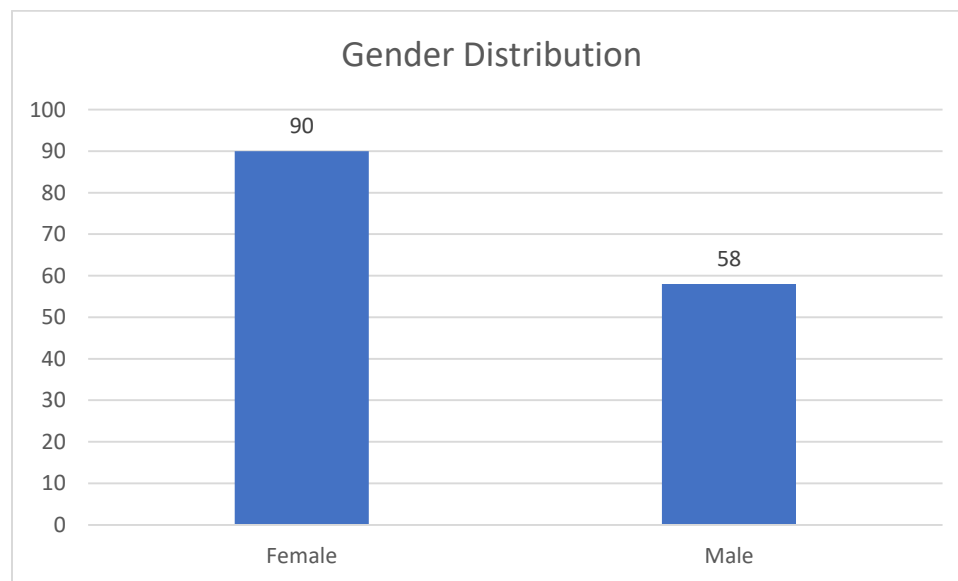


Figure 2. Bar chart for gender distribution of student group

3. Year of Study

Respondents were mostly in the early years of their academic journeys, with 47 in the 1st year and 35 in the 2nd year of study. The 3rd year had 41 respondents, while 24 respondents were in the 4th year. There was a single postgraduate respondent, indicating minimal participation from individuals in advanced stages of their education.

4. English Language Instruction

A significant portion of the sample, 65 respondents, affirmed having received formal English language instruction. Meanwhile, 53 respondents had not, and 30 were unsure if their instruction qualified as formal, highlighting a considerable degree of uncertainty or diversity in language learning experiences.

5. Native Language

The survey predominantly featured Urdu speakers, with 81 respondents, followed by 33 individuals who speak other languages such as Punjabi, Siraiki, Pashto and Sindhi. This indicates a lesser representation of languages other than Urdu in the sample.

b) Teachers' group: Twelve teachers from two local colleges of Lahore, Pakistan.

The teacher group within this study comprised a small, specialized cohort of twelve educators from local colleges in Lahore, Pakistan. The demographics of this group were categorized by age, stratified into three distinct groups: 25-30, 31-35, and 36-40 years. The youngest age group (25-30 years) included three teachers, reflecting the nascent stage of their teaching careers with an average of 7.7 years of English teaching experience. The middle cohort (31-35 years) constituted the bulk of the sample, with six teachers. This age group showed a moderate level of experience, averaging 8.0 years. The oldest bracket (36-40 years) comprised three teachers, who on average presented the highest level of experience at 8.6 years. This variation in age and experience within the teacher sample allowed for a comparative analysis of VLS across different stages of teaching careers. Furthermore, the balance between those holding MPhil and Masters qualifications provided a diverse perspective of the educational dynamics at play. Collectively, these demographics formed a robust foundation for exploring the pedagogical intricacies and efficacy of VLS within the educational sphere of Pakistani ESL Learners.

Table 1 shows the demographics of the teacher group.

Table 1. Demographics of Teacher group

Age Group	No. of teachers	Average English Teaching Experience (Years)
25-30	3	7.7
31-35	6	8.0

4.2 Instruments

4.2.1 E-Questionnaire for Student Group

The semi-structured e-questionnaire for the student group was a carefully constructed tool aimed at assessing the frequency with which various vocabulary learning strategies (VLS) were utilized by intermediate English learners. It consisted of 10 items, each pinpointing a specific VLS, such as the employment of flashcards, guessing the contextual meaning etc. Participants had responded to each item by choosing from a 5-point Likert scale, ranging from 'Never' (score of 1) to 'Always' (score of 5). This scale provided a detailed spectrum of use, reflecting the frequency and regularity with which students engaged with each VLS, thereby offering insightful perspectives into their learning habits.

4.2.2 In-depth Interviews for Teacher Group

To achieve the qualitative objective of the research, the researchers conducted in-depth teacher interviews. This allowed for a deeper dive into the reasons for the selection of specific strategies and the influence of external factors on efficacy of VLS in learning vocabulary.

5. Results

5.1 RQ1

To answer the first research question, Table 2 synthesizes the survey data to elucidate the preferred methods for learning new vocabulary, concentrating on the strategies that learners often and always utilize.

Table 2. Student Group E-Questionnaire Results

Item	Never (1)	Rarely (2)	Occasionally (3)	Often (4)	Always (5)
I use flashcards to memorize new English words	23.65%	18.92%	24.32%	20.95%	12.16%
I write new English words in sentences to understand them better	20.27%	16.89%	20.95%	19.59%	22.30%
I try to guess the meaning of new words from the context	19.59%	18.24%	14.19%	25.00%	22.97%
I use a dictionary to look up the meaning of new words	12.84%	14.19%	23.65%	24.32%	25.00%
I practice new English words with friends or in study groups	20.27%	17.57%	16.22%	23.65%	22.30%
I use mnemonic devices to remember new	18.24%	22.30%	24.32%	21.62%	13.51%

English words

I listen to English songs or watch English movies to learn new vocabulary	24.32%	13.51%	22.30%	16.22%	23.65%
I keep a personal journal or diary in English	22.97%	22.97%	19.59%	17.57%	16.89%
I use language learning apps to build my English vocabulary	18.37%	15.65%	27.89%	19.05%	19.05%
I regularly read English books or articles to learn new words	17.57%	16.22%	18.92%	25.68%	21.62%

According to the results, the predominant strategy used by the students, as revealed by the survey responses, is the use of dictionaries. A combined 49.32% of respondents reported frequently resorting to dictionaries to ascertain the meanings of unfamiliar words, with 24.32% doing so often and 25% always. This finding reaffirms the enduring significance of dictionaries as a reliable and authoritative reference for language learners. Following closely is the strategy of inferring the meaning of words through context. Approximately 48.22% of the students indicated a preference for this approach—22.97% always and 25% often apply this strategy. This approach to vocabulary learning points to a dynamic interaction with the language, where students engage with words in their natural communicative environment. Another key strategy that emerged from the survey is regular reading. With 47.30% of participants (21.62% always and 25.68% often) engaging in this practice, it is evident that reading English literature and articles is a favored approach. Regular reading habits contribute significantly to the depth and breadth of students' vocabulary knowledge, fostering both recognition and recall.

Beyond these primary strategies, other methods also play a role in vocabulary acquisition. Notably, 40.87% of students incorporate multimedia into their learning, often and always using English songs or movies as a language resource. This suggests that learners value the role of entertainment and media as an enjoyable and effective means of learning. Moreover, collaborative learning is also prominent, with 45.95% of learners often or always practicing new English words with peers. This highlights the importance of social interaction and collective learning experiences in language acquisition.

Writing practices and the use of technology are also integral to vocabulary learning. Writing new words in sentences is a strategy employed by 42.29% of learners, reinforcing the connection between active usage and retention. The incorporation of language learning apps, with 38.10% of students often or always using them, reflects the growing influence of digital tools in educational settings.

In conclusion, the survey results indicate that Pakistani ESL students prefer multiple strategies to learning vocabulary, characterized by a blend of traditional and contemporary strategies. The reliance on dictionaries, contextual clues, and regular reading form the core of their learning practices, complemented by the use of media, social learning, and technology. These insights can

inform educators and curriculum developers in tailoring instruction that aligns with the learners' preferences and maximizes the efficacy of vocabulary acquisition.

5.2 RQ2

For collecting the qualitative data, interviews were conducted form twelve ESL teachers at two local colleges of Lahore, Pakistan. The interview data was carefully converted to transcript. The data was analyzed by the researcher for thematic analysis and verified by two ESL teachers. When the interviewees were asked regarding the selection and use of VLS and the effects of cultural and educational back grounds, we explored following four themes, as given in Table 3.

Table 3. Main Themes of Teachers' Interviews

Main Themes
1. Importance of strategies for Vocabulary Learning and Teaching
2. Influence of Cultural and Linguistic Backgrounds
3. Challenges in vocabulary instruction
4. Evaluation and adaptation of teaching methods

The results of this research indicate the necessity for employing a variety of vocabulary learning strategies, as relying solely on a single approach does not adequately meet the requirements of ESL learners. Consequently, there is a need for a thorough review and adjustment of teaching methodologies, with an emphasis on prioritizing the vocabulary teaching and learning processes in practice. An extensive thematic analysis revealed four main themes is given in the discussion section.

6. Discussion

6.1 RQ1: What specific Vocabulary Learning Strategies (VLS) do Pakistani ESL students prefer when acquiring new vocabulary?

The preferences for vocabulary learning strategies among Pakistani ESL students reflect deeper cognitive and pedagogical underpinnings. The predominant use of dictionaries is a strategy deeply rooted in the autonomous learning model, which emphasizes the learner's active role in the learning process (Holec, 1981). Furthermore, according to Holec (1981), autonomy also involves reflection and analysis. Therefore, by frequently using dictionaries, learners exercise control over their learning through reflection and analysis, a practice that fosters independence and self-reliance (Benson, 2013). Dictionary use aligns with the cognitive academic language learning approach, which posits that understanding the explicit forms of language, such as definitions, enhances academic language proficiency (Chamot & O'Malley, 1996). Wells et al.

(1990) supports the aforementioned studies as well, by stating that the most effective method for utilizing context and contextual word recognition is via a dictionary look-up. However, in this regard, Knight (1994) critiques this strategy, and opines that looking up words frequently interferes with short term memory and disrupts the comprehension process.

The strategy of contextual guessing, widely embraced by the learners, resonates with the constructivist theory of learning where knowledge is constructed through experiences and interactions with the environment (Vygotsky, 1980). Inferring meanings from context allows learners to make connections with their prior knowledge, facilitating deeper cognitive processing and better retention (Nation, 2001). This strategy is also supported by the Input Hypothesis (Krashen, 1985), which suggests that language acquisition occurs when learners are exposed to language that is slightly beyond their current proficiency level, allowing them to deduce meaning and acquire new language naturally.

Regular reading as a strategy has been widely supported in literature for its impact on vocabulary acquisition. Extensive reading exposes learners to high-frequency vocabulary and reinforces incidental learning, where vocabulary is acquired without explicit instruction (Pigada & Schmitt, 2006). This method has been linked to greater vocabulary growth and retention (Horst et al., 1998) as it provides repeated exposure to new words within varied contexts, enhancing both receptive and productive language skills (Krashen, 1989).

The survey also highlights other strategies such as multimedia engagement, collaborative learning, and the use of digital tools. These methods support the sociocultural theory of learning which asserts that social interaction plays a fundamental role in the development of cognition. Learners who practice new English words with friends or in study groups benefit from the Zone of Proximal Development, where learners can achieve higher levels of understanding through social collaboration than they could independently (Donato, 1994).

Multimedia resources serve as dual-coded stimuli (Paivio, 1986) where audiovisual materials provide multiple pathways for encoding and retrieving information, making vocabulary learning more memorable. The engagement of students with English songs and movies provides authentic language input in a meaningful context, thereby supporting language acquisition in a manner that is both enjoyable and effective (Mayer, 2020).

The use of language learning apps reflects the trend towards computer-assisted language learning (CALL), which has been shown to offer personalized, flexible, and diverse learning experiences (Chapelle, 2001). These digital tools can provide immediate feedback, gamified learning experiences, and the opportunity to engage with a global community, factors that can significantly enhance the motivation and effectiveness of vocabulary learning (Godwin-Jones, 2011).

In summary, the strategic preferences exhibited by Pakistani ESL students can be understood through various theoretical lenses, and they reflect a combination of proven, research-backed strategies. The integration of these strategies, supported by pedagogical literature, has shown to facilitate effective vocabulary acquisition by catering to diverse learning styles and needs, fostering independence, and providing rich, meaningful linguistic input.

6.2 RQ2: Do the cultural and educational backgrounds of Pakistani ESL students affect their choice of VLS and its efficacy?

Theme 1. Importance of strategies for Vocabulary Learning and Teaching

As highlighted by the teachers' interview results, various VLS are employed to facilitate ESL students' vocabulary learning process. Some VLS are found to be more useful than others, such as VLS that focus on the practical use of words in real life situation helps students in responding context specific language usage. In contrast, memorization, though practiced a lot, is not found aiding in communicative activities. This teaching approach indicates the shift from traditional vocabulary teaching methods towards more interactive, engaging, and contextually relevant practices. Another factor mentioned by a teacher is less exposure to target language input. Research shows that the students have limited language exposure and opportunities to practice the language in real life situations. This makes language learning a challenging task for ESL/EFL learners (Easterbrook, 2013).

Teachers may enhance learners' vocabulary by providing them rich input and a variety of learning strategies. A teacher said, *"Being a language trainer, I try to use multiple strategies for teaching vocabulary. I prefer to focus on the use of a word rather than its meaning. For this, I allow the students to make simple sentences."* In this way, students get awareness on how to use appropriate VLS for learning unknown words in different contexts. As a teacher stated, *"Students love to do jumbled up word activities."* As a result, learners become more autonomous and independent in their learning process, which makes them confident enough to deal with unfamiliar situations.

Theme 2. Influence of Cultural and Linguistic Backgrounds

Aligning with the previous research (Hadi & Guo, 2020), the present study found the second most prominent theme in the teachers' interviews is the strong influence of cultural and educational background of the learner on the selection and effectiveness of VLS. Since these two factors play an important role in ESL vocabulary acquisition, teachers recognize their values. Moreover, the study found that students' cultural experiences can deeply influence their approach to learning new words. The findings propose that teaching methods should be culturally responsive. This may involve presenting examples and contexts that are relatable to the students' own cultural backgrounds. Through this strategy, they feel more comfortable and relatable in learning English. Additionally, a significant finding was that certain strategies may be more effective with students from specific linguistic backgrounds since Pakistan has rich and diverse linguistic context that is supported by Mankash et al. (2023). They also highlight the necessity for teachers to tailor their teaching methods to accommodate diverse learning needs for vocabulary learning.

A teacher responding to the question related to the effect of cultural and educational background of the students on VLS, *"I believe that cultural background defines the suitable strategies for VLS. It's a fact that shared knowledge is very important for language learning. Cultural related examples can be given to understand the meaning of specific words."*

Moreover, another teacher suggests that VLS may also be helpful in creative writing. As said, *"Students would learn comfortably the use of words if vocabulary list were provided with a*

suitable topic for creative writing so that they can use the words by using cohesive devices in form of paragraph."

Theme 3: Challenges in vocabulary instruction

The third leading theme in the teachers' interviews is the challenges teachers encounter in vocabulary instruction during their lesson delivery. The most common problems are students' lack of familiarity and training with lexical classes of words such as parts of speech and difficulties in using abstract words and adverbs. These challenges underline the need for instructional strategies that not only introduce new vocabulary but also create awareness about the grammatical and syntactical aspects of word usage. Addressing these challenges requires innovative teaching approaches that ensure students comprehend both the meaning and the correct application of words in different contexts. A teacher shares his experience as *'Firstly, students are not normally aware with the word class (parts of speech) so they would use word within wrong sentence structure. Secondly, Abstract words with adverbs are difficult for learners to use words.'*

Theme 4: Evaluation and adaptation of teaching methods

Findings from teachers' interviews highlighted the importance of evaluating vocabulary acquisition process. They also acknowledge the adoption of innovative teaching approaches are critical for effective vocabulary acquisition, thus satisfying students' learning objectives. Most common way of assessing the vocabulary width and breath is the lexicon range in speaking and writing skills. Some teachers pointed out that this is the only way that we can opt for a traditional teaching system and most students belonging to diverse cultural and educational backgrounds do not fit in this evaluation system. Hence, the challenge is to provide equal learning and assessment opportunities to all students. For example, a teacher says, *"I would evaluate through giving worksheets to the students to make sentences of the words. Honestly, I allow my students to use words in their natural context within class but only a few can attempt them confidently."*

Some teachers share the solution to this problem and recommend weekly workshops for problem language areas can help students improve their word power: *"Different workshops must be conducted with the planned and controlled worksheets so that students would learn not only the meaning but the use of language."* Emphasizing the importance of students' evaluation and adaptation of appropriate strategies may optimize vocabulary learning.

These four themes reflect teachers' experiences and perceptions about VLS awareness, the impact of cultural and educational background on their selection and usage, challenges in teaching ESL vocabulary. The findings highlight the importance of adoptive teaching approaches to developing student vocabulary knowledge.

Figure 3 summarizes the main themes and their characteristics, as found from the teacher's interviews.



Figure 3. Main themes and their characteristics (Answer to RQ2)

7. Implications and limitations of the study

The study provides insights on most preferred VLS used by ESL students in Pakistani classrooms. It may also guide instructors and educators to design appropriate vocabulary learning resources that align with cultural and diverse educational background of students. The study has certain limitations. Due to the restricted time and resources available to the researchers, a narrow range of VLS was investigated. Future research may include more VLS that are used by ESL students.

8. Conclusion

This study identifies a set of frequently used VLS among Pakistani ESL learners. These results can be used as an initial foundation for developing English language courses and instructional strategies in the future that are specific to Pakistan. Furthermore, understanding the role of educational and cultural factors affecting vocabulary acquisition might help develop more effective and culturally appropriate teaching pedagogies. Furthermore, the study offers an insight on Pakistani ESL students' usage of VLS to acquire vocabulary can provide educators, curriculum developers, and policymakers with an extensive source of information. VLS that students are naturally drawn to can be integrated into teaching approaches to make vocabulary learning more efficient and enjoyable. This study highlights the value of context-specific research to contribute to ESL teaching and learning in Pakistan.

Acknowledgement

The authors pay sincere thanks to Professor Ahmed Qureshi for his invaluable assistance in data collection for this research. His expertise and support were crucial and greatly appreciated.

REFERENCES

- Alshammari, S. R. (2020). EFL VOCABULARY LEARNING STRATEGIES USED BY SAUDI ARABIA UNIVERSITY STUDENTS. *Advanced Education*, 7(16), 28–38.
<https://doi.org/10.20535/2410-8286.202436>
- Ashraf, M. A., Turner, D. A., & Laar, R. A. (2021). Multilingual Language Practices in Education in Pakistan: The Conflict Between Policy and Practice. *SAGE Open*, 11(1), 215824402110041. <https://doi.org/10.1177/21582440211004140>
- Benson, P. (2013). *Teaching and Researching: Autonomy in Language Learning* (0 ed.). Routledge. <https://doi.org/10.4324/9781315833767>
- Chamot, A. U., & O'Malley, J. M. (1996). The Cognitive Academic Language Learning Approach: A Model for Linguistically Diverse Classrooms. *The Elementary School Journal*, 96(3), 259–273.
- Chapelle, C. A. (2001). *Computer Applications in Second Language Acquisition* (1st ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9781139524681>
- Donato, R. (1994). Collective scaffolding in second language learning. In J. P. Lantolf & G. Appel, *Vygostkian approaches to second language research*. Ablex.
- Easterbrook, R. M. (2013). *The process of vocabulary learning: Vocabulary learning strategies and beliefs about language and language learning* [[object Object]]. <https://doi.org/10.26191/VJ8D-K318>
- Godwin-Jones, R. (2011). MOBILE APPS FOR LANGUAGE LEARNING. *Language Learning & Technology*, 15(2), 2–11.

- Hadi, H. U. R., & Guo, X. (2020). A survey of beliefs and vocabulary learning strategies adopted by EFL learners at Shaikh Zayed University. *Cogent Education*, 7(1), 1829803. <https://doi.org/10.1080/2331186X.2020.1829803>
- Holec, H. (1981). *Autonomy and Foreign Language Learning*. Pergamon Press.
- Horst, M., Cobb, T., & Meara, P. (1998). Beyond A Clockwork Orange: Acquiring second language vocabulary through reading. *Reading in a Foreign Language*, 11(2), 207–223.
- Knight, S. (1994). Dictionary Use While Reading: The Effects On Comprehension and Vocabulary Acquisition For Students Of Different Verbal Abilities. *The Modern Language Journal*, 78(3), 285–299. <https://doi.org/10.1111/j.1540-4781.1994.tb02043.x>
- Krashen, S. (1989). We Acquire Vocabulary and Spelling by Reading: Additional Evidence for the Input Hypothesis. *The Modern Language Journal*, 73(4), 440–464. <https://doi.org/10.2307/326879>
- Krashen, S. D. (1985). *The input hypothesis: Issues and implications*. Longman.
- Little, A., & Kobayashi, K. (2015). Vocabulary Learning Strategies of Japanese Life Science Students. *TESOL Journal*, 6(1), 81–111. <https://doi.org/10.1002/tesj.141>
- Mankash, M. A., Khan, Z., & Ali, Z. (2023). Investigating Vocabulary Learning Strategies of ESL Undergraduate Learners in Karachi Pakistan. *Research Journal of Social Sciences & Economics Review*, 4(1), 97–111.
- Mayer, R. (2020). *Multimedia Learning* (3rd ed.). Cambridge University Press. <https://doi.org/10.1017/9781316941355>
- Nation, I. S. P. (2001). *Learning Vocabulary in Another Language* (1st ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9781139524759>
- Nation, I. S. P., & Hunston, S. (2013). *Learning Vocabulary in Another Language* (2nd ed.). Cambridge University Press. <https://doi.org/10.1017/CBO9781139858656>
- Paivio, A. (1986). *Mental Representations: A Dual Coding Approach*. Oxford University Press.
- Pigada, M., & Schmitt, N. (2006). Vocabulary acquisition from extensive reading: A case study. *Reading in a Foreign Language*, 18(1), 1–28.
- Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329–363. <https://doi.org/10.1177/1362168808089921>
- Schmitt, N. (2009). Vocabulary learning strategies. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (10. print, pp. 199–227). Cambridge Univ. Press.
- Vygotsky, L. S. (1980). *Mind in Society: Development of Higher Psychological Processes* (M. Cole, V. Jolm-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press. <https://doi.org/10.2307/j.ctvjf9vz4>
- Wells, C. J., Evett, L. J., Whitby, P. E., & Whitrow, R. J. (1990). Fast dictionary look-up for contextual word recognition. *Pattern Recognition*, 23(5), 501–508. [https://doi.org/10.1016/0031-3203\(90\)90071-R](https://doi.org/10.1016/0031-3203(90)90071-R)
- Zaidi, A., Raslee, N. N., Abd Karim, R., Awaludin, F. A., Hanafi@ Mohd Ghani, M., & Ikhsan, H. (2022). The Use of Vocabulary Learning Strategies by High, Medium, and Low ESL Proficiency Learners in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 12(10), Pages 2184-2197. <https://doi.org/10.6007/IJARBS/v12-i10/15056>