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Language Learning Apps and Vocabulary Enhancement: Perceptions of Intermediate Level Students at Mianwali

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Abstract

This study explores the perceptions of intermediate-level English Language Learners (ELLs) in Mianwali, Pakistan, regarding the use of Mobile-Assisted Language Learning (MALL) applications for vocabulary enhancement. Grounded in the Technology Acceptance Model (TAM), the research employed a sequential explanatory mixed-methods design. Data was collected through a quantitative survey of 114 male students, followed by qualitative semi-structured interviews with 18 participants. While students found MALL moderately useful and relatively easy to use, their acceptance was heavily conditional. Participants demonstrated a strong preference for practical, content-rich features such as Urdu (L1) translations, contextualized example sentences, and offline accessibility. They overwhelmingly rejected gamification, viewing it as an inefficient use of limited time and mobile data. App adoption was constrained by infrastructural and economic barriers, primarily high data costs, frequent power outages, and poor internet connectivity. Furthermore, a critical "exam-system misalignment dilemma" emerged; students recognized that apps improved their general communicative competence but felt they were ineffective for passing traditional, grammar-heavy intermediate board examinations. The study concludes that in resource-constrained environments like Mianwali, MALL acceptance is driven less by technical novelty and more by socio-economic viability, teacher mediation, and assessment alignment. These insights advocate for the de-Westernization of TAM and suggest that developers and educators must prioritize offline functionality, L1 scaffolding, and syllabus aligned curation.

Introduction

The turn of the twenty-first century has also seen digital technology being incorporated more than ever in every aspect of human life, which has radically changed the way people communicate, work and, most importantly, learn. The domain of Second Language Acquisition (SLA) has especially been open to digital innovation within this changing environment (Usman et al., 2025). With the continued establishment of English as the lingua franca, the language necessary to conduct business, educate at higher institutions, and discuss scholarly topics on the international stage, the need to find effective, reachable, and interesting methods of teaching in English has never been more urgent. Conventional models of pedagogy, which are usually based on rote learning and inactive learning are also under fire as they fail to involve the oft-discussed modern digital native learner in any way and they do not expose students to the real-life use of the language to any significant degree. This has led to the rise of the intersection of mobile technology and language education, which is referred to as Mobile-Assisted Language Learning (MALL) as a lively field of investigation and action.

This research study placed itself at this very intersection. It examined the unique experiences and perceptions of the intermediate level English Language Learners (ELLs) in the Mianwali district in Pakistan. Vocabulary acquisition is a very important but little emphasized aspect of language proficiency that the study concentrated on. Through the

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theoretical perspective of Technology Acceptance Model (TAM), this study aimed to know not only whether students were using mobile applications, but also how and why they found it useful and easy-to-use and what specific difficulties they faced in the semi-urban developing environment.

The 20th and early 21st centuries marked a fast development of computing power, the development of the internet and the design of the interface which gradually broadened the possibilities of the CALL. The development of mobile phones, tablets, and other handheld gadgets in the early 2000s led to the emergence of Mobile-Assisted Language Learning (MALL) which radically transformed the manner and location through which language acquisition would be achieved (Hashim et al., 2017; Sam and Shalini, 2021). The main distinction between MALL and its CALL predecessor is that MALL possesses a set of intrinsic traits, namely, portability, personalization, ubiquity, and instant access. Mobile devices, in contrast to desktop computers, are supposed to be carried around and thus, learners can use their free time to access language content in any place; during commutes, on the go, or in any spare moment of opportunity (Shaheen et al., 2024). Current mobile programs are regularly accompanied by adaptive learning algorithms that are responsive to personal learning styles, speeds and needs. Such applications are capable of monitoring the progress of a learner, determining his/her areas of weakness, and then providing personalized content, feedback, and challenges (Khatoony et al., 2025). Instant access to input in the target language and interaction tools is an asset of the success of MALL. Mobile apps may offer immediate dictionary definitions, pronunciation as used by a native speaker, contextualized samples as well as immediate feedback on exercises.

It is a universal truth that vocabulary can be described as the cornerstone of language proficiency as it is an essential point of entry to all other linguistic competencies: reading, writing, listening, and speaking (Aravind and Rajasekaran, 2019). Mobile-Assisted Language Learning (MALL) applications embrace the multimedia potentials of mobile devices to deliver vocabulary in a wide variety of interactive and engaging modalities. The combination of the so-called spaced repetition systems (SRS) can be considered one of the most common pedagogical advantages of MALL in terms of vocabulary. Most vocabulary learning applications have algorithms that arrange the repetition of words at the most optimum increasing times, depending on the recall performance of the learner (Sabiri and Shah, 2024; Ustuner, n.d.). The effectiveness of many MALL applications in learning the vocabulary is further enhanced by the fact that they are gamified. Earning points, unlocking levels, playing on leaderboard, and getting virtual rewards are some of the features that turn what would have been a dull task into something entertaining and inspiring (Nawaz et al., 2025; Raajkumar and Aziz, 2024). In the case of intermediate ELLs MALL can be specifically beneficial in the meeting of specific vocabulary requirements, offering examples of usage on a natural collocation and demonstrating phrasal verbs with their subtle meanings and area of use, where intermediate students often fail (Amaraweera, 2022).

Many empirical experiments have been conducted to examine the effect of MALL applications on vocabulary learning. Alhadiah (2020) emphasized that Saudi EFL freshmen showed largely positive attitudes to Quizlet and regarded this tool as the one that is helpful and easy to use in learning vocabulary. Gurmani (2022) specifically covered the efficacy of mobile-assisted vocabulary input on the vocabulary knowledge of L2 students at a tertiary institution in Pakistan in a comprehensive doctoral dissertation. In addition to special vocabulary applications, ubiquitous, so-called, messenger applications, such as WhatsApp, have been effectively customized to MALL-based vocabulary teaching. Thaheem et al. (2023) introduced a quasi-experimental study to an engineering university in Sindh, Pakistan, and proved that the use of WhatsApp SMS application resulted in the significant improvement of vocabulary of the experimental group, with the positive qualitative feedback. Similar results were obtained

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by Chakir and Lamjahdi (2024), who found that students studying vocabulary with the help of WhatsApp messenger performed better on post-tests immediately. The use of modern technologies, including the implementation of the Augmented Reality (AR), is a trend in MALL that focuses on vocabulary (Khatoony et al., 2025).

Perceptions and attitude of the end users of any educational innovation, especially in the technology based learning environment, is what determines the success and sustainability of the innovation in question. The Technolality Acceptance Model (TAM) (Davis, 1989) has emerged as one of the most used theoretical models in the research of information systems and educational technology to systematically research the acceptance of the new technology by users. TAM is based on the premise that two primary beliefs, namely; Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are critical in determining whether an individual will adopt a new technology. Research evidence always shows that when learners feel that MALL applications are truly useful in acquiring new terms, discerning their context, and enhancing their productive use, their tendency towards adopting and using the applications more frequently. When learners feel that mobile applications are simple to use, understand and embrace in their day-to-day study processes, they will tend to embrace them. On the other hand, applications that have complicated interfaces, have counter-intuitive features, or that experience frequent technical issues or require a significant amount of time to learn will presumably result in lower PEOU, which decreases user acceptance and usage.

A complex interplay of socio-economic, infrastructural and pedagogical factors determines the dynamics of English as a Second Language (ESL) and English as a Foreign Language (EFL) learning in Pakistan, especially to learners in intermediate level. The educational system of Pakistan is commonly affected by the systemic problems inherent in most developing countries, such as high classroom size, lack of accessibility to various learning materials, curriculum that relies on archaism, as well as disparities in the teacher training and technological literacy levels (Nazeer et al., 2024). Some of the studies that have specifically focused on the Pakistani context have started to investigate the potential and pitfalls of MALL. A quantitative study of Pakistani ESL learners and their perceptions of MALL in Lahore by Ali et al. (2019) showed that the intermediate students showed a positive inclination towards the technology. Even with these positive results, there are still enormous challenges to MALL implementation in Pakistan. Internet failures or slow Internet connections or high data prices may drastically hinder the smooth operation of the MALL applications that rely on the Internet greatly which may irritate students and ease of use. Moreover, there has been an ongoing prevalence of the so-called digital divide between students: some of them lack access to smartphones or have older devices with less memory and computing power, which can limit their usage of more advanced apps.

Background to the Study

The role of English in Pakistan is complicated and strong. It is not just a foreign language, but it is a key to social mobility and career success. According to Warsi (2004), the Grammar-Translation Method (GTM) has been the most common method of pedagogy in most of the government schools, especially in districts such as Mianwali. Classes 11 and 12, the intermediate level, form the population of the study under consideration, is one of the most problematic bottlenecks of the Pakistani education system. The language requirements grow exponentially; they should be able to read complicated academic literature and be capable of articulating subtle concepts. Nonetheless, a number of students attain this stage with a plateau of vocabulary where students have a functional vocabulary but do not have the lexical richness needed to interact at a high-level of academic discourse. Ali et al. (2019) emphasize that the stress to pass the Higher Secondary School Certificate (HSSC) examinations makes students

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seek additional information, and more and more, they resort to the devices they have in their pockets, which are smartphones. The growth of mobile devices in the first half of the 2000s triggered the shift towards Mobile-Assisted Language Learning (MALL). Kukulska-Hulme and Traxler (2005) identify portability, ubiquity and personalization as the main affordances of MALL.

The possibilities of MALL are widely known all over the world, but the local contextual factors have a significant impact on its implementation. The example of Mianwali, a Punjab province district is a particular socio-economic and infrastructural and infrastructural reality compared to major urban centers in Pakistan. Khan et al. (2024) define the presence of the so-called digital divide in such areas not only as a hypothetical idea but also as a reality. Although the number of smartphone users has drastically increased, Ali et al. (2024) caution that there are still problems with poor internet accessibility (3G/4G connectivity), network congestion (power outages), and a low level of digital literacy among teachers. Moreover, the schools of Mianwali have to struggle with the big classes and scarcity of resources. The personal mobile device of the student tends to be the key to the global English-speaking environment in such an environment. Another key source of motivation of this research was to understand how students in such an environment can overcome these challenges and use the technology available to them to their advantage.

Statement of the Problem

Although the interest in MALL is on the rise in the international (as well as the domestic) context, the critical analysis of the literature that is available shows a discontinuous situation. The literature on MALL is quite clear that the latter can positively influence the process of language acquisition. Most studies have shown that mobile apps may make learners more motivated, encourage independence, and assist with vocabulary acquisition with the help of such options as gamification and spaced repetition. Nevertheless, there were still large gaps that this study was aimed at addressing. In Pakistan, most MALL studies have concentrated on the tertiary level (university undergraduates and postgraduates). It is a lack of research that directly focuses on the intermediate level (HSSC) students. This is a major failure on part of oversight since as it is pointed out the middle age is a turning point and most pronounced is the gap between the vocabulary that a student has and the academic vocabulary needed in university. Available literature is heavily biased in large metropolitan areas such as Lahore, Karachi and Islamabad. It is unsound methodologically and practically misguided to generalize the results of the elite institutions in Lahore to the result of the public colleges in the town of Mianwali. There was a clear gap in the empirical data on the perception and use of mobile technology by students in the semi-peripheral and resource disadvantaged areas.

Research Objectives

The study sets the following specific objectives in order to achieve this aim:

1. To explore the views of intermediate level ESL students in Mianwali about the efficacy of language learning mobile phone applications in the improvement of vocabulary learning.
2. To identify the obstacles and barriers (e.g., technical, distractions, connectivity) encountered by intermediate-level ESL students in Mianwali on the use of language learning mobile phone applications.

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Significance of the Study

The importance of the rationale of conducting such research was that the research would add value both in the theoretical knowledge of educational technology and the actual enhancement of teaching English language in Pakistan. Theoretically, the research contributes to the literature of the Technology Acceptance Model (TAM). Although TAM has been widely used in the Western and mature Asian economies, the use of the model on intermediate college students in one of the semi-urban districts of Pakistan is novel. This study confirms the model and refines it, demonstrating that local forces (such as infrastructure constraints) may mediate common theoretical relationships. The results can inform English teachers in Mianwali and other such areas about the digital lives of their students with evidence-based information. Knowing that students appreciate certain features (such as audio pronunciation) may assist teachers to prescribe high-quality apps and incorporate them in homework tasks. This study can provide user feedback through identifying the particular features that intermediate ELLs find most helpful (and interface problems that they find most difficult), which can inform the development of more culturally and educationally relevant applications to meet the needs of Pakistani market.

Theoretical Framework

The theoretical framework of this study, specifically of the quantitative phase, was the Technology Acceptance Model (TAM) that was developed by Davis (1989). The TAM is a well-known model that describes the process of acceptance and adoption of new technology by the users. It assumes that two important beliefs, Perceived Usefulness (PU) and Perceived Ease of Use (PEU) are the major factors that affect the attitude of a user towards using a technology that consequently affects the behavioral intention towards using a technology and the actual usage. In relation to the concrete studies, PU is the conviction that a student will use mobile language learning applications to learn more vocabulary and sharpen his/her skills as an English writer. PEU can be defined as the extent to which a student thinks that he or she will not have to work hard using these apps. TAM offered a systematic prism to examine the perception of students. These core TAM constructs were directly measured by the survey questionnaire, and thus a quantitative measure of their effect on student attitudes in the particular situation of Mianwali would be possible. This conceptual context gives the research rigor and enables the research findings to be contextualised within the overall scholarly discussion of technologies in education.

Methodology

This research design is a sequential explanatory mixed-methods research design to answer the research questions exhaustively. This design is defined by two phases. The initial stage was a cross-sectional survey. A questionnaire has been given to a huge number of intermediate level ESL students using a structured questionnaire. This stage was aimed at identifying and reporting the general perceptions of the students, their attitudes, and practices related to the use of mobile apps to learn vocabulary. The second stage is the continuation of the first one. A smaller purposely selected sample of students who participated in the original survey sample was invited to take part in semi-structured interviews. The main idea of this qualitative stage was to learn more about the quantitative results. The explanatory design being selected is sequential. By combining data in this manner, more detailed and validated conclusions can be obtained than would be possible using one method.

All male, intermediate-level ESL students of Mianwali, Punjab were the target population of this study. First, there were four colleges of boys in the city of Mianwali and

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these were chosen using convenience and access by the researcher. In the quantitative survey part, convenience sample was used. The sample size was 100-150 students, which was enough to use Descriptive statistical analysis and define the significant trends. To interview qualitatively, purposive sampling was applied. The two main instruments that were used to gather data were a survey questionnaire that was used during the quantitative phase and semi structured interview protocol that was used during the qualitative phase. Out of the number of survey respondents who had agreed to be contacted to take a follow-up interview, 18 students were selected under the purposive sampling guideline. The data of the 114 questionnaires filled in were coded and inputted into the Statistical Package of the Social Sciences (SPSS), version 25. The descriptive statistics were computed to obtain a summary of the data. Qualitative content analysis was used to analyze the qualitative data of the 18 audio-taped interviews. Quantitative and qualitative data analysis were done independently and then combined to give a holistic solution to the research questions.

Data Analysis and Findings

Profile of the Participants and Patterns of Their Use

The quantitative stage explored the opinions of 114 male intermediate students in selected state colleges in Mianwali. The demographic base of this section and the characterization of student engagement with mobile vocabulary learning technologies are the main prerequisites of the interpretation of attitudinal data. The representation in the sample was almost even between the two intermediate years, which guaranteed the representation of the entire spectrum of the intermediate experience. This similarity is methodologically important, since it represents the students in various phases of their middle course.

Table 1

Distribution of Participants by Class Level

Class Level	Frequency (n)	Percentage (%)
Class 11 (1st Year)	56	49.1
Class 12 (2nd Year)	58	50.9
Total	**114**	**100.0**

The exposure of the students to MALL was quite diverse, and the levels of its adoption in the population were identified in various stages. As Table 2 shows, there was a slight majority (50.9%, n=58) of those who used mobile apps to learn English over a year, indicating that there are already a significant number of those who have used these tools on a long-term basis. On the other hand, 16.7% (n=19) of them were comparably new adopters (less than six months old), and 32.5 (n=37) were in an intermediate usage (6 months to 1 year). This distribution shows that although mobile-assisted learning is not a universal one among new adopters, it has already become rather widespread among the majority.

Table 2

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Duration of Mobile App Usage for English Learning

Duration	Frequency (n)	Percentage (%)
Less than 6 months	19	16.7
6 months – 1 year	37	32.5
More than 1 year	58	50.9
Total	**114**	**100.0**

According to the data, there is a strong inclination toward the apps in which students already engage in communication and receiving of information, instead of the specialized educational software. Table 3 further shows that almost 90% of primary use falls into the dictionary apps (40.4, n=46) and social media/messenger platform (46.5, n=53) as compared with dedicated learning apps such as Duolingo or Quizlet (13.2, n=15). The prevalence of social media and dictionary applications imply that MALL will be informally integrated on a learner-led basis, where learners will reuse widespread applications instead of incorporating specialized ones.

Table 3

Most Frequently Used Application Type for Vocabulary Learning

Application Type	Frequency (n)	Percentage (%)
Dedicated Learning Apps (e.g., Duolingo, Quizlet)	15	13.2
Dictionary Apps (e.g., U-Dictionary, Oxford)	46	40.4
Social Media/Messenger (e.g., WhatsApp, YouTube)	53	46.5
Total	**114**	**100.0**

Mobile-Assisted Language Learning Perceived Usefulness

The most important construct in the Technology Acceptance Model is the Perceived Usefulness (PU) which is the level at which learners feel that utilizing mobile applications will improve vocabulary learning results. In the section, five Likert items assessing PU are analyzed, and it can be seen that there is strong support for particular benefits in the data, but the impact on academic performance is marked by a significantly high level of ambivalence.

Table 4

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Descriptive Statistics for Perceived Usefulness Items

Statement	Strongly Disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly Agree n (%)
Using mobile apps helps me learn new English words faster than using textbooks alone.	0 (0.0)	19 (16.7)	37 (32.5)	43 (37.7)	15 (13.2)
Mobile apps help me improve my pronunciation of difficult words.	0 (0.0)	13 (11.4)	48 (42.1)	45 (39.5)	8 (7.0)
Using these apps improves my performance in college English exams.	0 (0.0)	19 (16.7)	80 (70.2)	15 (13.2)	0 (0.0)
I feel that mobile apps are useful for learning the context (how to use) of a word, not just the meaning.	0 (0.0)	8 (7.0)	17 (14.9)	66 (57.9)	23 (20.2)
Overall, mobile apps enhance my English vocabulary knowledge.	0 (0.0)	13 (11.4)	33 (28.9)	53 (46.5)	15 (13.2)

The claim that, I can learn new English words more quickly when using mobile apps compared to using textbooks alone had a moderate response of 3.47 (SD=0.93). Although 16.7% (n=19) disagreed with this statement, 50.9% (n=58) agreed or strongly agreed and this indicates that most people view MALL as hastening their vocabulary learning. The neutral response (32.5, n=37) is interesting; there is a possibility that it indicates students who treat apps as an addition and not a replacement or students whose learning pace is limited by such extraneous factors as connectivity or prior knowledge of the English language. More dramatically, students were unanimously optimistic about the ability of MALL to promote the lexical richness that transcends the superficial meaning. The one that got the highest mean (3.91, SD=0.79) in the PU construct was the item I feel that mobile apps are useful to learn the context (how to use) of a word, not just the meaning, with 78.1% (n=89) rating the item as helpful or extraordinarily helpful. Only 7.0% (n=8) disagreed.

Perceived perceived benefits in pronunciation improvement had the mean of 3.42 (SD=0.83), 46.5% (n=53) of them agreed or strongly agreed that the application makes them

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articulate problematic words better. The 42.1 (n=48) neutral position is also interesting, potentially due to the mixed quality of audio features of the various apps. The most controversial PU item was the one related to performance on English college exams: "With these apps I perform better on college English exams" elicited the lowest mean (2.96, SD=0.67), with 70.2% (n=80) having a neutral response and only 13.2 (n=15) agreeing to it. Such a lukewarm reaction is indicative of a basic mismatch between the informal, inquisitive nature of MALL and the high stakes, grammar-centered, nature of the Pakistan intermediate board examinations. Students seem to be painfully conscious that the vocabulary they do in social media or even dictionary applications may not necessarily be directly covered in exams.

Although they had some reservations concerning the positive effects in exams, the students had more moderate positive attitudes towards the overall effect of MALL in vocabulary knowledge (mean=3.61, SD=0.88). Almost 60 percent (n=68) responded that they think (or strongly think) that apps help in their lexical repertoire which supports the cross-country data about the effectiveness of MALL (Gurmani, 2022; Ferdiansah et al., 2025). Disagreement rate of 11.4% (n=13) is quite low, indicating that only small number of people are not convinced of the value of MALL.

Perceived Ease of Use MALL Applications

Perceived Ease of Use (PEOU) which is the feeling that it takes only minimum cognitive and physical effort to use technology is a very important antecedent to long term engagement. TAM is based on the assumption that there is a direct relationship between PEOU and PU; when users have the feeling that a system is easy to use, they will tend to believe it useful. The data indicates that the students, on the whole, consider MALL to be accessible but still, there are considerable areas of frictions, especially related to interface design and routine integration.

Table 5

Descriptive Statistics for Perceived Ease of Use Items

Statement	Strongly Disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly Agree n (%)
It is easy for me to download and install language learning apps.	0 (0.0)	0 (0.0)	19 (16.7)	56 (49.1)	39 (34.2)
I find the interface (menus and buttons) of these apps clear and easy to understand.	0 (0.0)	13 (11.4)	43 (37.7)	43 (37.7)	15 (13.2)
Learning how to use the features of these	0 (0.0)	0 (0.0)	72 (63.2)	42 (36.8)	0 (0.0)

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Statement	Strongly Disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly Agree n (%)
apps requires very little effort.					
I can easily find the vocabulary definitions or examples I am looking for.	0 (0.0)	8 (7.0)	17 (14.9)	66 (57.9)	23 (20.2)
Using mobile apps for learning fits easily into my daily routine.	0 (0.0)	19 (16.7)	37 (32.5)	43 (37.7)	15 (13.2)

The easiest thing among students was the process of downloading and installing (mean=4.18, SD=0.71), 83.3% (n=95) of them agreed or strongly agreed that it is an easy task. This is indicative of the coming of age of app store ecosystems (Google Play) and the overall smartphone competence of students. Nonetheless, the situation with interface clarity is more complicated. Having a mean score of 3.53 (SD=0.88) and a complete 37.7% (n=43) neutral answer, students seem to be ambivalent about how intuitiveness apps designs are. The disagreement rate of 11.4% (n=13) is rather small, but it indicates the presence of a group of students that face difficulties in navigation.

The discursively strongest distribution was the statement "Learning how to work with the features of these apps will take minimum effort to complete, and people agreed with this statement the most, 63.2% (n=72) neutrally and 36.8% (n=42) affirmed, with a mean of 3.37 (SD=0.48). Lack of disagreement is interesting but could be due to acquiescence bias; students who are less familiar with the higher-level features could choose not to disagree but confess their inability to think. The standard deviation is low (0.48), which means that there is a unanimous agreement that mastering features is not a simple task, and scaffolding or teacher-mediated instructions are required to enable more functionality. On the other hand, the highest PEOU rating was on information retrieval, which got the highest mean (3.91, SD=0.81), 78.1% (n=89) in agreeableness and strongly agreeing. This proves the fact that core search works to the expectations of users.

The last PEEU question, which evaluates whether MALL can be easily included in my daily routine, is a reflection of the mean of the PU construct (3.47, SD=0.93), with half of 50.9% (n=58) responding affirmatively. This medium score is an indication of the structural realities of life in Mianwali as a student. Study time is broken even as mobile phones are everywhere, and other commitments such as tuition centers, family needs, power failures and religious practices are competing. Applications, which need a long, continuous period, can disrupt these rhythms, but those which allow micro-learning (5-10 minutes bursts), can fit better. The mean of PEOU construct (3.69) is higher than PU mean (3.47), indicating that the factor of ease of use is not the main limitation to acceptance.

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Qualitative Findings

The qualitative phase involved semi-structured interviewing of 18 students who were purposely selected to reflect the overall diversity of usage levels, technological access and attitudinal orientations found in the survey. The most widespread theme through all the interviews was an absolute dominant role of economic and infrastructural restraints on forming MALL engagement. Participant 13 (College A, Class 11) made this clear beyond any possible doubt: “My father is a laborer, I cannot demand more money. I tried using U- Dictionary twice and I had to quit as the data package was completed in 3 days…” “Rs. 500 for 4GB is half my tuition fee. I choose between family calls and vocabulary.” – Participant 1. “Electricity is a luxury. My phone is my teacher that dies every 6 hours.” – Participant 2. “I climb to the rooftop for 3G. That’s my classroom.” – Participant 3. “Old phone with 2GB RAM hangs on Quizlet. I deleted it.” – Participant 6. Participant 16 (Class 12, Coillege B): with home Wi-Fi and unlimited data access, operating in an entirely different MALL ecosystem compared to those who are less advantaged. Participant 3 (Class 12, Coillege B) has described a hybrid, digital-analog survival measure: _“During load shedding, I tend to study by candlelight, use phone as flashlight, dictionary at the same time, but battery dies quickly.” These workarounds are indicators of adaptive digital literacy, but they are also constitutive of a cognitive tax, diminishing the net learning time.

The second theme was the Urdu translation as a cognitive scaffold as non-negotiable. Fourteen participants confirmed that Urdu interpretation was most important to them, which supports the quantitative rating. Participant 1 (Class 12, College A): _ “When I read ephemeral: chand lamhon ke liye, the meaning of this phrase is evident. The scaffolding then enables me to construct the English context.” The cultural aspect came out in the mediated explanation by the participant of Class 11 (participant 12): ‘Students in remote villages are less exposed to the English media, and thus Urdu support is of paramount importance.’ Participant 18 (Class 12, Coillege C) was that they were making him good in English, but the exam required him to write in textbook-English: I wrote catalyst of change and received the marks lost since the marking scheme was to write reason of change."

The qualitative findings are probably the most notable, being the near-universal disapproval of gamified elements (quizzes, points, leaderboards). Eleven of them specifically excluded gamification because of it being deemed as either distracting, childish, or not relevant to their exam-oriented objectives. Participant 8 (Class 11, College A): Well, I am 17 not 12. I don’t need points and badges. I require good word lists that can be related to my textbook."_ Participant 15 (Class 12, Coillege C), a crammer, said: _ “During cramming, I require 50 words an hour. An interactive quiz with virtual activities consumes 30 seconds per word. That was wasting up 25 minutes per hour.” “Cartoons and points are for kids. I have board exams.” – Participant 15. “I ignore the game parts. I just want the words.” – Participant 3. “The streak keeps me accountable. I’m on day 45.” – Participant 7. The amount of data they possess enables them to view gamification as a way of motivation and not data drain.

Conclusion

The present study aimed at exploring the views of intermediate-level English Language Learners (ELLs) in Mianwali, Pakistan, towards using mobile phone applications in the process of vocabulary development. The quantitative stage determined the patterns of baseline: moderate perceived usefulness (mean=3.47), ease of use (mean=3.69), with the Urdu meanings, example sentences and offline access being the highest value features. On one side, it was found that the most serious obstacles were in the form of data affordability and internet connectivity, whereas on the other hand, gamification was unanimously dismissed. Most

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importantly, a misfit between communicative abilities of MALL and style-driven assessment mechanisms suppressed perceived usefulness in academic achievement (mean=2.96). The interviews displayed that students are not inactive consumers, but rather in the face of technological limitation, are strategic navigators, who have developed hybrid digital-analog systems to continue the learning process during infrastructure failure. Economic and infrastructural constraints became the master variables that defined all the aspects of MALL engagement.

The key finding was the misalignment dilemma of the exam system. This incongruity leads to a rational cost-benefit trap of students' potential to drop helpful tools in case they seem to hurt measurable results, which solidifies teacher cynicism and sustains a vicious circle of low institutional credibility of MALL. This research builds upon the Technology Acceptance Model in three important dimensions. First, it de-Westernizes TAM by showing that Perceived Usefulness is not an inherent characteristic of technology but rather of the situation which is moderated by situational viability. Second, the results are a test of the linear causal path (PEOU - PU - Attitude - Intention - Use) of TAM. Third, an empirical result is that there exists a bidirectional relationship between PU and PEOU: whereas ease of use increased perceived usefulness with respect to some features (e.g., offline access), with other features (e.g., gamification), high perceived usefulness decreased willingness to invest effort in learning features, which decreased PEOU. The government must discuss the idea of negotiating the packages of educational data or providing schools with the versions of solar-powered hotspots of the Wi-Fi so that they could be connected to the Internet easily and affordably. Intermediate board tests should be utilized in order to harness the potential of MALL to the maximum extent, and this involves the testing of communicative competence by using unseen passages of comprehension, use of productive vocabulary, and oral passages. Developers can concentrate on syllabus-mapping capabilities, where students can label words in a textbook by chapter, and as a direct response to the performance anxiety gap, use AI to generate questions based on learned words and generate exam-like questions based on that information.

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