

**Investigate the Effect of Smartphone Usage on English Language Learning Among
Secondary School Students**

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Abstract



The primary objective of this study was to investigate the effect of smartphone usage on English language learning among secondary school students. It specifically aimed to explore students' perspectives regarding the role and effect of smartphones in the process of learning English. A survey research design was employed, utilizing a questionnaire consisting of 30 closed-ended items measured on a five-point Likert-type scale. The reliability coefficient of the instrument was calculated to be .904. A convenience sampling method was adopted to select a sample of 400 students, comprising both male and female participants from the Lahore district. Data were analysed using both descriptive and inferential statistical techniques. An independent t-test was applied to determine gender-based differences in the responses. The findings revealed that smartphones significantly contribute to the improvement of English language learning. They act as effective tools that engage, assist, and enhance students' language acquisition. Based on the results, it can be concluded that smartphones hold a crucial and beneficial role in the English language learning process and also have strong effect on English language learners.

Keywords: Effect, Role, Smartphone, Learning, Language, Students.

Introduction

Language serves as a powerful tool for communication and creative expression, allowing individuals to convey emotions, thoughts and share ideas. It enables us to transform and articulate our perspectives while connecting and interacting with others. Since English is essential to social, political, economic, and environmental growth, its importance cannot be understated. English serves as a vital communication tool as well as a medium of contact (Buraimoh et al., 2023). English plays an important role in Pakistan's educational system and socioeconomic structure, especially at the secondary school level. Being the official language and the medium of instruction in numerous schools, English acts as a bridge to advanced education, academic achievement, and international opportunities. For secondary school students, proficiency in English is essential not only for excelling in board examinations but also for accessing a wider range of academic resources, both online and in print (ÇALIŞIR et al., 2022). Moreover, English is the dominant language in science, technology, and international communication, making it crucial for students who aspire to pursue careers in medicine, engineering, business, or information technology. In the context of Pakistan's multilingual society, learning English also enhances students' cognitive flexibility and communication skills, allowing them to interact confidently in diverse social and academic settings (Belousova et al., 2022). Furthermore, since English is a key criterion in university admissions and professional job markets, its acquisition empowers students with the linguistic capital necessary for upward mobility. Therefore, English language education at the secondary level plays a pivotal role in shaping students' academic trajectories and future success (Begum & Hussain, 2023). English has become a global necessity in today's world. Effective communication in the modern international environment is essential, making English language acquisition increasingly important for everyone (Belda et al., 2022). To support this, various English language teaching initiatives and programs are funded. In recent times, smartphones

have proven to be highly effective tools in promoting English language learning among secondary school students especially in developing nations like Pakistan, where digital connectivity is growing rapidly. These handheld devices offer learners immediate access to a wide range of English learning materials, such as mobile apps, electronic dictionaries, audiobooks, podcasts, grammar tutorials, vocabulary games, and online classes. Applications such as Duo lingo, BBC Learning English, and educational YouTube channels enable students to engage in interactive, self-directed learning that enhances their listening, speaking, reading, and writing abilities (Abbasi et al., 2022). The multimedia capabilities of smartphones—including audio and video playback, voice recording, and text messaging—create rich and engaging language learning experiences that are often beyond the scope of conventional classroom settings. Moreover, social media platforms like Whats app, Facebook, and Instagram can also foster informal English communication, encouraging students to practice the language in real-life contexts (Sabron et al., 2020). In blended and remote learning environments, smartphones serve as critical links between students and their teachers, enabling the sharing of assignments, feedback, and language activities via apps like Google Classroom or Zoom. However, the educational use of smartphones depends heavily on students’ digital literacy, internet connectivity, and the guidance they receive from teachers and parents (Ifeanyi & Chukwuere, 2018). Although smartphones may present certain challenges such as distractions, inappropriate use, or limited educational content when utilized appropriately, they can greatly enhance the English language learning experience. They make learning more accessible, personalized, and engaging for secondary school students (Ali et al., 2020). Smartphones have a significant and revolutionary impact on language instruction in the current digital age. They encourage group learning in addition to providing individualized learning opportunities. With the help of websites like Facebook and educational forums, students now have more opportunity to participate in online debates. Additionally, by viewing English language learning videos on YouTube, people can improve their language and pronunciation. According to Abduljawad and Ahmad (2023), these social elements help ESL (English as a Second Language) students learn collaboratively. Students learning English as a foreign language in Pakistan frequently suffer with a lack of fundamental language skills and a lack of instructional time, which prevents them from becoming proficient (Ali et al., 2022). With the increasing integration of technology into education, both educators and researchers are now leveraging digital tools to enhance language instruction and learning. Mobile devices—particularly smartphones—are gaining popularity as accessible tools for language acquisition. Today’s students are highly engaged with mobile applications and have begun utilizing a variety of educational apps on their smartphones to support their learning process (Abbasi et al., 2022). Due to the availability of internet-based English learning apps, researchers have shown a growing interest in exploring how smartphones can support language development, especially at the higher secondary level (Elaish et al., 2023). Given that smartphones possess many of the features found in computers, they are now widely used not just for communication, but also as effective tools for learning.

Objectives of the Study

1. To explore the role of smartphones in learning English language among secondary school students.
2. To find out the effect of smartphones on English language learners.
3. To investigate the learners' attitude and perceptions regarding learning English language via smartphones.

Research Questions

1. What is the role of smartphones in learning English language among secondary school students?
2. What is the effect of smartphones on English language learners?
3. What are the learners’ attitudes and perceptions regarding learning English language via smartphones?

Literature Review

Due to their easy access to a wide range of educational tools and materials, smartphones are essential for helping secondary school pupils learn English. Learners can explore mobile applications created especially to improve their vocabulary, grammar, pronunciation, and listening skills with a few clicks (Kosnik & Dharamshi, 2016). The ability of smartphones to provide real-time, pertinent, and varied content that supports language development accounts for their effectiveness in helping people learn

English. By giving students direct access to a vast array of English language resources, including dictionaries, blogs, e-books, news articles, podcasts, and instructional videos, these gadgets significantly improve their ability to interact with real English in relevant contexts. This continuous exposure helps students improve their vocabulary, comprehension, and awareness of grammatical structures in real-world contexts (Ko, 2019). Students can select subjects of interest and learn at their own pace with the help of educational applications and platforms, which provide individualized learning experiences. Moreover, smartphones enable instant translation and explanation of unfamiliar words or phrases, which strengthens independent learning and reduces reliance on teachers. Notifications from language learning apps also serve as constant reminders, keeping students actively engaged in the learning process. Through search engines and voice-assisted tools like Google Assistant or Siri, learners can quickly find answers to language-related queries, promoting critical thinking and curiosity. Overall, the informative power of smartphones transforms them into digital libraries and language tutors that provide rich, flexible, and self-directed learning opportunities, making English language acquisition more meaningful and accessible for secondary school students (Gangaiamaran & Pasupathi, 2017). Smartphones have shown themselves to be useful resources for improving secondary school pupils' English language proficiency in the four main domains of speaking, listening, reading, and writing. Learners can participate in structured and interactive classes that focus on vocabulary development, grammatical precision, and sentence construction thanks to educational applications like Duolingo, BBC Learning English, Busuu, and Hello English. Moreover, smartphones offer access to a variety of English-language content including audiobooks, podcasts, and educational YouTube videos, which facilitate listening and pronunciation improvement by exposing learners to authentic, fluent speech (Anshari et al., 2017). Reading proficiency can be improved through platforms like Kindle, online newspapers, blogs, and storytelling apps that present a range of texts tailored to different proficiency levels. Writing skills are supported by tools such as note-taking apps, grammar checkers like grammatically and digital forums or social media platforms, where students can practice composing texts in English. Additionally, voice recording and speech recognition features allow students to rehearse spoken English and receive feedback on their pronunciation and fluency. Translation tools and digital dictionaries further support self-guided learning by offering immediate access to word meanings and contextual usage. Learners can also set personal goals and monitor their progress by organizing their study schedules through calendar and reminder apps. In this way, smartphones contribute to a flexible, personalized and interactive language learning environment that promotes continuous improvement (Sabron et al., 2020). Secondary school students, often referred to as digital natives, tend to view smartphone-based learning positively due to their familiarity with mobile technology. Most students perceive smartphones as efficient and user-friendly educational tools, giving them access to a broad array of learning resources such as educational apps, online dictionaries, video tutorials, and interactive activities that make the learning experience engaging and enjoyable (Muhammad et al., 2018). Students also appreciate the convenience of learning anytime and anywhere, independent of the classroom setting. They report increased confidence in language production, especially in listening, speaking, and pronunciation, thanks to repeated exposure to native speakers through multimedia content like videos and audio clips. However, some students also express concerns regarding distractions caused by non-educational features, including social media and games, which may hinder their focus. Despite these challenges, the consensus is that when used appropriately, smartphones foster independent learning and contribute positively to students' English language proficiency. Many learners consider smartphones to be not only a source of entertainment but also a valuable supplement to traditional classroom instruction (Hameed et al., 2022).

Smartphones are becoming more and more acknowledged as useful teaching aids, particularly when it comes to online and remote learning. Students can interact with learning platforms, access course materials, and take part in virtual communication because to their portability and adaptability. Smartphones now have a unique function in the process of teaching and learning. For example, students can use their mobile devices to access lecture materials, conduct fast web searches, access academic databases and utilize learning management systems (Masiu & Chukwuere, 2018). The ability to access E-learning and m-learning platforms has greatly facilitated educational access for higher secondary students. Despite these advantages, some drawbacks remain. One concern is the potential negative impact on academic performance due to distractions or misuse (Khan et al., 2023).

Nevertheless, smartphones are highly beneficial both inside and outside the classroom for educational purposes. Weng (2015) highlights the effectiveness of smartphones in language learning, particularly for vocabulary acquisition, spelling, grammar, pronunciation and both listening and reading comprehension. With continuous practice, students can improve fluency by expanding vocabulary, enhancing pronunciation and reinforcing grammar and reading skills. Talan (2020) notes that technological advancements have made digital content more accessible, providing students and teachers with round-the-clock access to online materials and communities. This enables learners to study at their own pace and according to their preferred methods. Due to their user-friendly design, portability, and extensive functionality, smartphones support speaking and listening practice through specialized apps. Mobile technologies, including smartphones, are increasingly used for high-quality instructional purposes. Educators acknowledge that such technologies offer valuable and effective opportunities for language acquisition, regardless of the learning environment (Saal, 2020). Smartphones are particularly helpful in improving key areas such as vocabulary, grammar, pronunciation, listening, and reading skills. Learners require guidance in expanding their word bank, listening for accurate pronunciation, and strengthening their understanding of grammar and reading strategies (Reid, 2018). According to Ifeanyi and Chukwuere (2018) the educational impact of smartphones depends on how they are used. While they can be beneficial, they also pose risks by potentially distracting students during lessons or drawing attention away from academic tasks. Usman and Bukar (2022) define smartphones as advanced mobile devices equipped with multiple features that go beyond basic communication, making them versatile tools in modern education.

Materials and Methods

This study adopted a descriptive research design and employed a quantitative methodology, utilizing a survey as the primary tool for data collection. The main objective of the survey was to obtain pertinent information from the participants. The study population comprised all male and female students enrolled in government secondary schools within the Lahore district. A total of 400 students from public secondary schools were selected as the sample, ensuring representation of both genders. To assess the effect of smartphone usage on English language learning among secondary-level students, the researchers designed a structured questionnaire. This instrument consisted of two sections: the first gathered demographic information such as school name and student particulars, while the second included questions specifically targeting the effect of smartphones in learning English language. Before conducting the main survey, a pilot test involving 50 students was carried out to evaluate the reliability of the tool. The 30-item scale achieved a Cronbach’s Alpha value of .904, indicating excellent internal consistency. To validate the content, the questionnaire was reviewed and endorsed by relevant subject matter experts. The researchers used a convenience sampling technique and visited various government secondary schools across Lahore to collect the data. For analysis, descriptive statistics, including means and standard deviations, were calculated for all variables. Furthermore, an independent samples t-test was conducted to explore potential gender-based differences in responses. All data collected were strictly used for academic research, with careful attention given to preserving participants’ confidentiality and privacy.

Results and Discussion

Table 1: Mean Score of the Role of Smartphones in Learning English language.

Sr. No	Statements	<i>M</i>	<i>SD</i>
1.	Learning becomes more effective and engaging when mobile phones are utilized.	3.81	.555
2.	Smartphones have supported and enhanced my learning experience throughout this year.	3.98	.678
3.	Using a smartphone can improve pronunciation of newly learned English words.	4.01	.567
4.	Smartphones serve as innovative tools for mastering the correct pronunciation of new English words.	4.24	.987
5.	Smartphones make it easy to keep class notes and academic resources organized in one place.	4.29	1.380
6.	It helps in quick access to information online.	4.36	1.336
7.	Smartphones supply a wide range of multimedia resources that aid in improving English proficiency.	4.27	1.208
8.	A smartphone can improve the quality of English language learning.	4.28	1.152
9.	Smartphones are effective tools in learning English.	4.11	1.288
10.	Smartphones offer direct access to educational materials.	3.92	1.190

N=400

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Table 1 presents the descriptive statistics related to the role of smartphones in English language learning. This section of the research included 10 statements, out of which seven received responses in the "strongly agree" category. The findings indicate that the statement ranked highest in mean score ($M = 4.36$) was Statement 6, which stated that "It helps in quick access to information online." This suggests that a large number of students strongly agreed with this view. Overall, the results highlight that smartphones play a highly effective role in supporting English language learning.

Table 2: Descriptive Scores about the effect of smartphones on English language learners.

Sr. No	Statements	<i>M</i>	<i>SD</i>
1.	The use of smartphones during academic tasks can promote multitasking and distraction, potentially lowering students' academic achievement.	3.93	1.016
2.	I spend more time on my smartphone than on my studies.	3.63	1.231
3.	There are no particular computer literacy skills needed to use a smartphone for learning.	4.04	1.172
4.	It's quite effective to use a smartphone to improve your English language skills.	3.88	1.344
5.	I have been able to acquire new abilities and experiences outside of the classroom by using my smartphone for learning.	4.11	.789
6.	Smartphones help to increase the vocabulary of the English language.	4.16	1.032
7.	Learning how to spell new words in English correctly is aided by a smartphone.	4.02	1.208
8.	Smartphones enhance the quality of English education and instruction.	4.12	.876
9.	Smartphones increase motivation for learning English among students.	4.11	.675
10.	Using my mobile phone is effective to enhance oral interaction skills..	3.77	1.090

N=400

Table 2 presents the descriptive statistics regarding the impact of smartphones on English language learners. Out of ten statements, six received responses in the "strongly agree" category. The highest mean score ($M = 4.16$) was observed for Statement 6, which noted that "Smartphones help to increase the vocabulary of the English language." These findings indicate that smartphones have a significantly positive influence on English language learners.

Table 3: Descriptive Scores of Learners' Attitudes and perceptions regarding English learning via Smartphones.

Sr. No	Statements	<i>M</i>	<i>SD</i>
1.	Using a smartphone to read is simple for me.	3.74	1.014
2.	I use my smartphone to jot down notes for my English language studies.	4.01	.876
3.	I enhance my pronunciation skills using smartphone apps like Google Translate.	3.87	1.141
4.	Through smartphone I send emails and submit academic assignments.	4.10	1.321
5.	I use my smartphone to translate words through English dictionary features.	3.85	.656
6.	I use smartphones to share lecture materials with my classmates.	4.06	.999
7.	I use my mobile phone to access dictionary websites that provide English word translations.	4.01	1.111
8.	Using a smartphone to learn English creates a relaxed and comfortable learning atmosphere.	4.04	.876
9.	I have improved my English speaking skills with my smartphone.	4.01	1.098
10.	Mobile Apps help develop English language proficiency.	4.16	1.042

N=400

Table 3 presents the descriptive statistics related to learners' attitudes and perceptions toward learning English through smartphones. This section included ten statements, out of which seven received responses in the "strongly agree" category. The highest mean score ($M = 4.16$) was recorded for Statement 10, which stated that "Mobile Apps help develop English language proficiency." These results suggest that students consider smartphones to be highly beneficial and supportive tools in their academic learning.

Table 4: Independent Samples t-test on Gender Differences

Gender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>T</i>	<i>df</i>	<i>Sig. (2-tailed)</i>
Male	189	3.83	.589	2.268	163	.025
Female	211	4.03	.543			

Table 4 presents evidence of a statistically significant variation in the perceptions of male and female students concerning the use of smartphones in learning the English language ($p < .05$). An

independent samples t-test was applied to investigate this difference. The test compared how male and female students viewed the effectiveness of smartphones in supporting English language acquisition. Findings showed a meaningful difference between the two groups, with female students ($M = 4.03$, $SD = .543$) scoring higher than male students ($M = 3.83$, $SD = .589$), $t(2.268)$, $p = .025$ (two-tailed). These results suggest that gender plays a significant role in shaping students' perspectives on the use of smartphones for English language learning.

Discussion

The present study was conducted to examine the effect of smartphone usage on English language learning among secondary school students. The first objective of the research was to explore the role of smartphones in learning English language among secondary school students. To address this, the research question posed was: *What is the role of smartphones in learning English language among secondary school students?* Descriptive statistical methods were employed to analyse the data, and the results revealed that smartphones serve as effective and highly informative tools in supporting English language acquisition. Weng (2015) highlighted that smartphones can significantly aid in language learning, especially in areas such as vocabulary enhancement, spelling, pronunciation, grammar, as well as listening and reading skills. The second objective aimed to find out the effect of smartphones on English language learners. The research question corresponding to this objective was: *What is the effect of smartphones on English language learners?* The study's findings demonstrated that smartphones have a considerable and positive impact on English learners. Similarly, Khalid (2018) asserted that smartphones positively influence English language learning and contribute effectively to skill development. The third objective was to investigate the learners' attitude and perceptions regarding learning English language via smartphones. The research question for this objective was: *What are learners' attitude and perceptions regarding learning English language via smartphones?* Supporting this view, Darmi and Albion (2014) found that smartphones play a beneficial role in helping learners acquire English as a second language. Their research also investigated students' attitudes toward using mobile devices for educational activities. The findings revealed that learners generally had favourable opinions; they found smartphone-based learning enjoyable and were encouraged by the interactive features of mobile-assisted instruction.

Conclusion

The present study aimed to investigate the effect of smartphone usage on English language learning among secondary school students. The first objective was to explore the role of smartphones in learning English language among secondary school students. The results indicated that smartphones significantly contribute to the development of key language skills such as vocabulary enhancement, grammatical accuracy, and pronunciation improvement. The second objective was to find out the effect of smartphones on English language learners. The analysis demonstrated that smartphone use has a notably positive effect on the overall English learning process. The third objective of the study was to investigate the learners' attitude and perceptions regarding learning English language via smartphones. Findings revealed that students generally possess favourable opinions and view smartphones as interactive and beneficial tools that aid their language learning journey. So, it is concluded, that smartphones play a vital and influential role in enhancing English language learning. They function as powerful educational resources that not only motivate and engage learners but also provide easy access to supportive learning materials. Hence, it is concluded that smartphones are valuable and effective tools in the context of English language education.

Recommendation

- Utilize smartphones as supportive tools in English language classrooms to boost learner engagement and promote independent study habits.
- Offer digital literacy programs for both educators and students to ensure smart and purposeful use of smartphones for learning activities.
- Establish school-wide guidelines that encourage the academic application of smartphones while minimizing distractions from unrelated content and non-educational apps.
- Provide professional development opportunities for English language teachers to help them integrate mobile-assisted language learning strategies into their teaching practices.
- Motivate students to set personal learning goals and use smartphone-based tools to monitor their progress, fostering self-motivation and a sense of responsibility in their learning journey.

- Engage parents in supervising and supporting smartphone use at home, ensuring that it stays aligned with educational goals and language learning outcomes.

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