



Improving English Language Proficiency of Graduate Students by Online Learning Apps available on Smartphone

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Abstract

The field of digital literacy is developing rapidly; consequently, the interest of researchers has also shifted now. The current research study was to explore the role of online learning Apps available on smartphones in improving graduate students' English language proficiency. Quantitative and qualitative research methods were used in this study. Data were collected through a questionnaire that had close-ended and open-ended questions. Questionnaires were distributed among 480 graduate-level students studying in 6 universities of Punjab, Pakistan. Data were analyzed by using Statistical Package for Social Sciences (SPSS 22.0) to find out results in the form of Percentage, Mean Score, Standard Deviation by applying the Independent Sample T-Test. The results of the study demonstrated the potential of Mobile Assisted Language Learning (MALL) as an anticipatory approach to improving English language skills. Results showed that students were pleased to use smartphones to improve their English language proficiency. They responded positively about the role of smartphones in improving English language skills. On the basis of findings, the researcher concluded that smartphone plays an important role in improving students' English language proficiency.

Key Words: Perception, Online Learning, Smart Learning, Portable Learning, Learning Apps

Introduction

Students being digital natives, are used to using new apps on their smartphone extensively. Smartphones are present in many ways in today's youth (Shamim, 2017). There are many smartphone Apps that facilitate learning English. In addition to being used for texting, doing audio/video calls, listening to music and performing other basic tasks, smartphones are a great way to learning English. Winters (2007)

classified the definition of mobile phone knowledge into four types, i.e. (a) techno-centric, (b) advanced formal education, (c) relationships to e-learning and (d) learning centre. Traxler (2009) defines m-learning as focusing on the technical aspects of learning, including 1) learner mobility, 2) content mobility, 3) contextual formal or informal.

Keegan (2005) offered a definition of m-learning that it is providing education and training to learners through smartphones/mobile phones, handheld devices and PDAs. This refers to the portable devices available in women's purses or in men's pockets. Keegan (2005) described some of the features of a technical device for understanding it as a mobile device he stated that people might carry it everywhere being user-friendly and stress-free and flexible to use, general settings in everyday use for various tasks and all spheres of life including education (Keegan, 2005).

Due to the availability of smartphones these days and the constant presence of students, mobile is one of the most popular mobile devices used in the study Burston (2014), Cui and Wang (2008), Cavus and Ibrahim (2009), Pollara and Broussard (2011), Traxler and Kukulaska-Hulme, (2007) and Viberg and Gronlund (2013). Smartphones weren't designed primarily for educational purposes, but state-of-the-art smartphone models are helping to learn and teach the language (KuKukulaska–Helme, & Trexler, 2005; Cheung & Hew, 2009).

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According to [Ferreira, Klein, Freitas, and Schlemmer \(2013\)](#), the latest models of smartphones are different from the previous models because of the added new features that make them more versatile and useful.

It is not an easy task to master a foreign language due to being less used in society. [Kumaravadivelu \(2003\)](#) states that language consists of 4 skills. These skills are used in daily interaction; a different method is used for teaching them. [Kumaravadivelu \(2012\)](#) further argued that there are really few days when we just listen, or just speak or just read, or just write. These four abilities are practised through mobile phones when we communicate verbally and read materials on a smartphone.

[Darko-Adjei \(2019\)](#) stated that mobile technologies are now becoming popular for their easy use and usefulness for language learning. [Kukulska-Hulme and Shield \(2008\)](#), people use smartphones to master language skills on and off-campus. Smartphone technologies are extensively used for learning and teaching for teachers is also researching to use them more effectively. Previous studies on MALL between 1994, 2012 expressions that over the past twenty years, about five hundred and seventy-five (575) works on MALL have been published, most of which studies consumer attitudes, pedagogical design and motivation ([Burston, 2013](#)).

Purpose of the Study

Smartphones have become popular in recent times, and they cover almost every aspect of human life. The use of smartphones for entertainment is replaced by communication games, Apps, websites and educational equipment. Mobile phones have replaced computers due to all their features being available in smartphones. There is a great deal of English language learning via smartphones. Numerous research studies are already investigating this issue but, research in this field in Pakistan is very scarce. The current research study is to analyze the perceptions of students about the role of smartphones in developing their English language proficiency. It is important to take their feedback as our actions are the production of our attitudes towards something.

[Bogardus \(1931\)](#) also described this attitude as the tendency to appreciate or hate using something (as presented in [Bashar, 2012](#)). The use of smartphones for learning depends on the attitude of teachers towards 'students and students. Student-centred classrooms are now more in practice than teacher-centred. Many studies relate to teachers' practice of controlling classes by text messages to students, as [Stockwell \(2007\)](#) studied it. [Conole, De Laat, Dillon and Darby \(2008\)](#), [Song and Fox \(2008\)](#) and [Ros I Sole, Calic, and Neijmann \(2010\)](#) analyzed the way learners use the smartphone for language learning as educational tools.

In the 21st century, the roles of teachers and students are changed due to their independence of learning via smartphones. The role of teachers and students is changing over time. Teachers are now facilitators rather than being authoritative. Smartphones are learning tool that gives access to online learning materials, which is why this topic is worth exploring. For analyzing its effectiveness in learning the English language, we first need to explore learners' practice of using it for learning as well as students' perspective about it.

Research Questions

The following research questions have been formulated for this research project to achieve the objectives of the study and student review on the role of the smartphone in improving English language proficiency.

1. To what extent do students realize that online learning Apps available on smartphones help in improving English language proficiency?
2. What is the difference between male and female students' feedback about using online learning Apps on smartphones for improving their English language proficiency?

Literature Review

[Al-Tameemy \(2017\)](#) explored teachers' knowledge and the attitude towards using a smartphone for learning purpose. He said that students have a positive attitude towards learning via mobile phones. He investigated the learning objectives and the ability of teachers and students to learn through mobile phones. Teachers and learners had positive perceptions towards using smartphones for study purposes.

[Ishaq \(2018\)](#) researched 100 students of the English BS program at the University of Gujrat to explore the effectiveness of using an electronic dictionary for learning English. The results were positive because most of the

students liked to use the e-dictionary on their smartphones to learn new words and their meanings; consequently, their vocabulary was increased.

[Kanchana and Saha \(2015\)](#) wrote a research paper on the integration of smartphones in learning language skills in India. They stated that Smartphones help teachers in teaching English to students. Smart devices have built-in technology that helps teachers reshape language instruction. This helps students to manage their learning independently. [Khalid \(2018\)](#) researched the use of Mobile learning for enhancing students' writing skills. The data were collected through a survey of intermediate level students in Pakistan. Students showed a positive perspective towards improving writing skills through mobile learning.

Research Methodology

[Morse \(2016\)](#) described research design as a process of collecting, analyzing, and reporting information quantitatively. The purpose of the current study is to discover whether smartphones help students who are proficient in the English language. The researcher used a self-developed questionnaire based on participants' ideas about improving English language proficiency through a smartphone. The purpose of this study was to study the current use of smartphones for learning English and to guide them properly in this regard for a better learning experience. Data were collected in approximately nine months (March to November 2017) for this study. The researcher developed research instruments; therefore, a pilot study was conducted to test the accuracy of these instruments. Quantitative data were analyzed in the form of frequency, percentage, mean score, standard deviation, and t-test. In the second phase, the qualitative data of the student questionnaire, open-end questions were analyzed. Consideration was also given to comparing students' opinions on gender, age and location.

Population and Sample

In the current study, the population consisted of all the final year BS students (male and female) level, in the field of English studying at public universities in Punjab, Pakistan. Data were calm from 6 universities. The sample of this study included 383 male and female students of BS English final year at six public universities in Pakistan.

Research Instrument

Data were collected through a questionnaire about the role of smartphones in improving students' English proficiency.

1. Part 1 was about students' age, gender and residence.
2. Part 2 consisted of fourteen close-ended items designed on a five-point Likert scale ranging from strongly disagree to strongly agree.
3. Part3 consisted of two open-ended questions to get the views of students about how online learning Apps available on smartphones helps them in improving their language proficiency and how is their experience of using them.

The questionnaire was prepared with slight modifications on the basis of the reviewed literature and was adapted in accordance with the Pakistani context. [Johnson \(2014\)](#) justified this adaptation of the research tool by stating that the construction of quality questionnaires depends on already conducted research as it improves the quality of research tools and also helps to share research results in continuation.

Validity and Reliability of Tool

The main part of any study is the accuracy of the data. It is useless if the data did not meet to achieve the goals of the challenging problem. Designing and validating a tool is a long and tedious task for an investigator, but it is better for a researcher to develop and validate his / her own information rather than rearranging or manipulating bogus data. For this study, four university professors of the English department checked the questionnaire to see if it is completely suitable to get the study objectives. The questionnaire was prepared using a standard procedure. Experimental evaluation showed that the tool was reliable as the alpha value was .864, and its size ranged from .86 to .73. This value proved that the tool was reliable to be used.

Data Collection

The researcher visited the research site after getting permission from the Chairperson and the concerned faculty to collect data as per the availability and convenience of the participants. She personally remained present to remove unexpected events or ambiguities faced by the participants during the data collection process. A total of 480 questionnaires were distributed among participants, and 383 questionnaires were found appropriately filled.

Result of Study

Data analysis was used in the Statistics Package for Social Sciences (SPSS). Average score, percentage, std. Deviation and t-test were applied for data analysis. The percentage is used to describe the details of the respondents (male and female), and the demographic data are described by descriptive statistical analysis and the numerical description of the respondent.

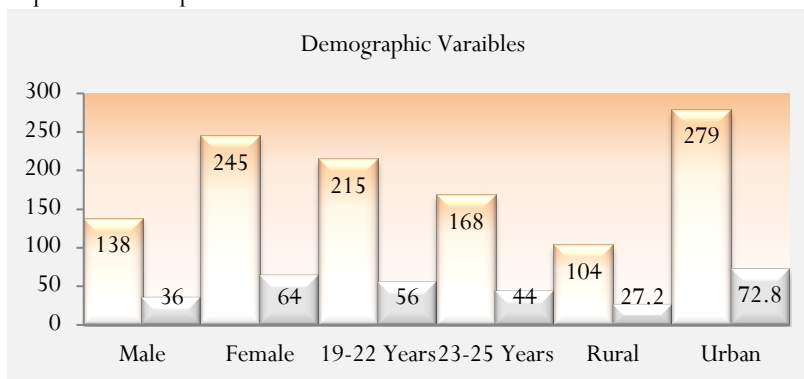


Figure 1: Demographic Variables of Graduate Students

Figure 1 shows the frequency and percentage of the demographic variables: a total of 245 female participants that are 64%, and 138 males, which is 36.0%. The age of 215 participants ranged between 19-22 years which was 56.0% out of a total of 383 participants, and the age of 44 participants was 23-25 years which was 44%. Urban area residents were 279 that is 72.8% of the total 383 participants, and rural area residents were 104, which is 27.2% of the sample.

Table 1. Students' Opinion about using Smartphones for Acquiring English Language Proficiency

S. No	Items	A+SA f(%)	N f(%)	DA+SDA f(%)	Mean Score
1	Using Smartphone for improving English language proficiency is very effective.	330 76.2	44 11.5	9 2.4	4.03
2	Using Smartphone for improving English language proficiency motivates me.	297 77.5	63 16.4	23 6.0	3.98
3	My teachers recommend me to use a smartphone to improve my English.	203 53.0	112 29.2	68 17.8	3.67
4	Learning English via Smartphone provides stress-free learning environment.	273 71.3	76 19.8	34 8.9	3.88
5	In a face- to- face communication I feel stressed speaking foreign language.	244 63.7	89 23.2	50 13.1	3.74
6	I enjoy speaking English on my smartphone more than face-to-face communication.	277 72.3	71 18.5	35 9.1	3.79
7	Mobile Apps are helpful for developing English language proficiency.	304 79.4	65 17.0	14 3.7	3.83
8		243	114	26	3.69

	Teacher's also recommend using Mobile Assisted Language Learning largely.	63.4	29.8	6.8	
9	Smartphone helps in developing English language proficiency inside classroom.	268	75	40	3.71
		70.0	19.6	10.4	
10	Utilizing smartphones for developing English language proficiency should be incorporated in classes.	253	100	30	3.69
		66.1	26.1	7.8	
11	Learning to use mobile applications for developing English language proficiency does not require lots of struggle.	295	63	25	3.97
		77.0	16.4	6.5	
12	I would like to access course content via smartphone that can help me improve English language proficiency.	309	56	18	3.91
		80.7	14.6	4.7	
13	The use of smartphone for learning in the classroom should be permitted.	279	67	37	3.60
		72.8	17.5	9.7	
14	English language learning channels on YouTube help me in developing English language proficiency.	273	76	34	3.88
		71.3	19.8	8.9	
15	I use my smartphone for improving English language proficiency according to my convenience of time/place.	71.3	19.8	8.9	4.09
		77.5	16.4	6.0	
	Average	71.5	19.7	8.8	3.82

In Table 1, overall, 76.2 % of students agreed that using a smartphone for improving English language proficiency is very effective. 77.5% of students consented that motivated when they use their smartphone for improving English language learning. Fifty-three per cent of respondents consented that their teachers motivate them to use a Smartphone for improving English language learning. Seventy-one (71%) respondents established that learning English via Smartphone provides a stress-free learning environment. Data shows that 63.7% of students satisfied that in face-to-face communication, they often feel stressed when they are speaking a foreign language. Seventy-two per cent of respondents satisfied that they feel comfortable communicating in English via their smartphone. 79.4% of students agreed that mobile Apps are helpful for developing English language proficiency. 63.4% of students agreed that teachers also recommend using Mobile Assisted Language Learning largely. 70.0% of students agreed that mobile phones could be used for developing English language proficiency inside the classroom. 66.1% of students agreed that utilizing smartphones for developing English language proficiency should be incorporated in classes. 77.0% of students agreed that learning to use mobile applications for developing English language proficiency does not require lots of struggle. 80.7% of students agreed that they would like to access course content via smartphone that can help me improve English language proficiency. 72.8% of students agreed that using a smartphone for learning in the classroom should be permitted. 71.3% of students agreed that English language learning channels on YouTube help students in developing their English language proficiency. 77.5% of students agreed that they use their smartphone for improving English language proficiency according to their convenience of time and place.

Table 2. The Similarities and Differences of Opinion about the use of Smartphones for Improving Students' English Language Proficiency on the Basis of their Gender

Gender	N	Mean	Std. Deviation	t-value	Sig.	Mean difference
Male	138	3.46	1.035	-2.673	.008	-.299
Female	245	3.76	1.075			

Table 2 shows the comparison of students' opinion, on the basis of their gender, about the role of the smartphone in improving English language proficiency. Results show the Mean of male student ($M = 3.46$, $SD = 1.035$) and females' mean score was ($M = 3.76$, $SD = 1.075$). Female students' mean score was more than males. Therefore, the perception of students' attitudes towards using smartphones to improve their English language proficiency is higher than that of male respondents, and the t-value is -2.673 and P-value is 0.008, which shows that the difference is significant at the level of 0.05 significance. This shows that the gender of the students affects their opinion. The male students' preference and attitude towards using a smartphone for improving English language proficiency are better than females.

Discussion

RQ1: It deals with students' perceptions about the role of online learning Apps available on smartphones for improving their English language proficiency?

In the light of results, it is validated that learning English through online learning Apps available on a smartphone for improving English language proficiency is very effective and motivating. Teachers also encourage students to use a smartphone for improving English language proficiency. Results show that learning English via Smartphone provides a stress-free learning environment to students, which facilitates their learning in a positive way. Students in the classroom feel less comfortable speaking a foreign language in such a situation. They agreed that the learning Apps help them develop their language proficiency inside as well as outside the classroom as autonomous learners. Utilizing smartphones for developing English language proficiency should be incorporated in classes due to their effectiveness. Using mobile applications for developing English language proficiency does not require lots of struggle on the part of students. Students like to access course content via smartphone that can help them improve their English language proficiency, so utilizing a smartphone in the classroom for learning should be permitted. Smartphone helps students improve their English language proficiency according to their convenience of use anytime and anywhere.

In the open-ended questions, students responded that there are language dictionaries, audio, video, websites for learning a language, YouTube channels that help to learn the correct pronunciation and various apps to promote language skills. They access authentic online learning content. The results show that the smartphone is good for improving the English language proficiency of students at the graduate level. The results of previous studies also confirm these findings as [Kress and Pachler \(2007\)](#), [Naismith, Lonsdale, Vavoula, and Sharples \(2004\)](#), [Kiernan and Aizawa \(2004\)](#), [Zahoor, Shah, and Wahid \(2017\)](#) stated that learning by smartphone requires privatization of one's learning activities. Training would enable teachers to take advantages of ever-changing and growing mobile technology to utilize it for language teaching purposes. This will answer the claim of [Kukulka-Hulme \(2009\)](#) that learners will need guidance to make use of the mobile phone in learning.

RQ2: Deals with a comparison of male and females' students' feedback about the role of online learning Apps available on smartphones in improving their English language proficiency.

Males and Females responded positively to the role of learning Apps available on smartphones for improving their English language proficiency. The comparison of students' opinion, on the basis of their gender, about the role of smartphone for improving English language proficiency showed that female students' mean score was higher than that of males; therefore, the perception of female students' attitudes towards using smartphones to improve their English language proficiency was found higher than that of the male respondents. It shows that the gender of the students affects their opinion. [Tough \(1973\)](#) also analyzed the adult learning plans that adults were uncertain about the performance of their education through technology enhances targets that promote autonomous learning among them. The results of this study showed the positive attitude of students towards improving students' English skills through smartphones because they know that smartphones have the ability to facilitate learning vocabulary and language skills. Using smartphones provides access to learning materials online on their smartphones. English language learning channels on YouTube help students in developing their English language proficiency.

Conclusion

Based on the results it is concluded that smartphones play an important part in improving students' English language proficiency as it helps learn English anywhere anytime according to students' convenience. The main objective was to investigate how online learning Apps on smartphones help in developing English language proficiency on the basis of perspectives of students. The study explored the current uses of learning apps on smartphones by learners for learning English, and the researcher, through this study, got insights into how to guide them properly to make it a more effective learning experience. The results show that it helps in learning English as it provides students instant access to online content via the internet available on smartphones. Every student takes advantage of the smartphone being portable and easy to use anywhere, anytime for learning purposes where a computer or printed book is not available; smartphone gives access to online learning materials.

Recommendations

Training learners and teachers to use smartphones effectively to learn English will enable them to use it in a better way and get more advantage of it. Therefore, proper training is needed along with sound pedagogical implications. The use of smartphones in the classroom should also be allowed for a better learning experience. Higher Education Institutions (HEIs) should be instructed to design, plan and develop courses and develop rules for using the smartphone as a helpful learning garget to be used in the classroom for teaching and learning activities. An experimental study may be conducted in future to know the real effectiveness of learning via these smart devices and, a study should be conducted to analyze students' learning achievements through smartphones.

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