The Usage of Smartphone in Improving English Language Pronunciation at University Level

Shahida Naz [*]

Mamuna Ghani [†]

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Abstract *Learning correct pronunciation is a challenging job for second language learners. Learning correct pronunciation is possible only by the continuous effort in listening and practicing the Received Pronunciation, the most prestigious and standards accents of British English. Smartphones help the learners to speak English with pronunciation. The current research study was an effort to explore the usage of smartphones in improving English language pronunciation at the university level. Descriptive and quantitative research method was used in this study. Data were collected through a questionnaire that had close-ended items. Questionnaires were distributed among 383 learners 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 frequency percentage, mean sore and standard deviation by applying the independent sample t-test. The results of the study demonstrated that using smartphones actually helps in improving students' pronunciation due to continuous listening to authentic online audio videos materials. Eventually, students learn to pronounce English words individually and in connected speech like that of native speakers of English.*

Introduction

Pronunciation, as part of spoken skills, has been overlooked and considered unnecessary in the teaching of English (Benzies, 2017; Jones, 1997; Derwing & Munro, 2005). This belief might be the justification of why many teachers, English trainers, and English lecturers deny its importance as part of English mastery.

[*]PhD Scholar, Department of English, The Islamia University of Bahawalpur, Punjab, Pakistan.
Email: naz_shahida@ymail.com
[†]Professor, Department of English, The Islamia University of Bahawalpur, Punjab, Pakistan.

There is one true thing about this despairing assumption that it is contagious to students. In other words, it brings an adverse effect on students' participation and learning.

According to West (2012), the ability of Smartphones and tablets to provide students access to digital content whenever they need it is another reason for learners to love such technologies and use them on a daily basis. In addition, such mobile learning technologies not only serve to provide access to digital content from various locations, but they rather enable students to communicate, collaborate, create and share with each other helpful digital materials.

As humans sometimes encounter different educational problems, it seems that mobile learning technologies are quite promising in addressing a number of issues. West (2012) technologies of mobile learning have the potential to transform the educational field in favor of learners as the ability of students to have access to the internet using their smartphones, tablets, or laptops create great learning opportunities for them in different respects. Such technologies enable easy access to relevant information, provide engagement opportunities for both learners and teachers, fosters learning and transforms the way learning takes place. As Kurtz (2012) states, smartphones and other mobile learning technologies not only provide opportunities for learners to learn interactively through different platforms, but they also provide a number of ways and tools for learners to learn on their own and teach themselves in their way.

Jacobs (2013), mobile learning technologies enable access to digital content and online communities days and nights, which make learning different from the classroom environment, and help teachers and learners, organize their time and use it more effectively. Further, he claims that when students get access to such digital content, they take advantage of their learning as they can adapt to their pace, method and style. On the other hand, teachers who are able to use digital dashboards can track their students" progress of certain content in a timely manner and take advantage of the time to use it more effectively when in schools settings.

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 practiced through mobile phones when we communicate verbally and read materials on a smartphone.

Darko-Adjei (2018) 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).

The most difficult skill for the new learners of the English language is pronunciation (Chan, Chang & Yen, 2012). Munro and Derwing (2015) have reported that the skill of pronunciation has received a lot of interest because it is a salient feature of any language. Much research done in the past indicate that correct pronunciation is the key factor in expressing yourself to others intelligibly (Seyedabadi, Fatemi & Pishghadam, 2015). Thus, it is apparent that it is required to carry out more research on learning and teaching the correct pronunciation skills (Munro & Derwing, 2015). It is apparent that any person with correct pronunciation cannot express themselves correctly and efficiently, and there is the added risk that they may not be understood by others (Gilakjani, 2012). Poor pronunciation leads to poor communication power (Cavus & Ibrahim, 2016). So that, it is important to learn correct pronunciation; however, it is complex and difficult (Lear, Carey & Couper, 2015). The use of speech recognition technology in teaching a language subject to new learners is a very new concept (Liaw, 2014), and it can be seen in the literature that more studies are being carried out in this field. The study described in this paper is such a new study that concentrates on using a speech recognition engine in an intelligent mobile application in order to teach the English language words to new learners of English as a foreign language.

Statement of the Problem

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, Han, Soni, McManus & Chon, 2018). 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 Objective

The research objective of this study was to find out the usage of smartphones in improving English language pronunciation at the university level.

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 in learning pronunciation. The researcher used a self-developed questionnaire based on participants' ideas about improving English language pronunciation through a smartphone. Data were collected in approximately 8 months for this study. The researcher developed a research instrument; therefore, a pilot study was conducted to test the accuracy of this research tool. Quantitative data were analyzed in the form of frequency, percentage and mean score and independent sample t-test. Consideration was also given to comparing students' opinions on the basis of their gender. In the current study, the sample consisted of 383 (male and female) BS learners studying at 6 public universities in Punjab, Pakistan. Data were collected through a questionnaire about the role of smartphones in improving students' English pronunciation. 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.

Result of Study

Descriptive data analysis was used by using Statistical Package for Social Sciences (SPSS).

Table 1. Smartphone Provides Quick Access to English Learning Materials

Option	Agree	Neutral	Disagree	Mean Score
Frequency	321	51	11	4.17
Percentage	83.8	13.3	2.9	

Table 1 shows results as 83.8% of students agreed that the use of smartphones helps students to have quick access to English learning materials; therefore, 2.9% of students disagreed, and 13.3% were neutral about the statement. The mean score is (M=4.17) that gives a positive opinion about the statement that the use of smartphones helps students to have quick access to English learning material.

Table 2. Smartphone has Increased my Motivation to Learn English Language in and Outside the Classroom

Option	Agree	Neutral	Disagree	Mean Score
Frequency	281	86	16	3.98
Percentage	73.4	22.5	4.2	

Table 2 shows results as 73.4% of students agreed that the use of smartphones had increased their motivation to learn the English language in and outside the classroom; therefore, 4.2% of students disagreed, and 22.5% were neutral about the statement. The mean score is (M=3.98) that gives a positive opinion about the statement that the use of smartphones has increased their motivation to learn the English language in and outside the classroom.

Table 3. Pronunciation App/Software on Smartphone helps me in Learning the Correct Pronunciation of Individual Words

Option	Agree	Neutral	Disagree	Mean Score
Frequency	332	39	12	4.16
Percentage	86.7	10.2	3.1	

Table 3 shows results as 86.7% of students agreed that pronunciation App/Software on smartphone helps them in learning the correct pronunciation of individual words; therefore, 3.1% of students disagreed, and 22.5% were neutral about the statement. The mean score is (M=4.16) that gives a positive opinion about the statement that pronunciation App/Software on smartphone helps them in learning the correct pronunciation of individual words.

Table 4. I Listen to Native Speakers in Public Places (e.g. Shops, Restaurants, Buses) and Try to Understand what they say in Podcasts or Audios/Videos

Option	Agree	Neutral	Disagree	Mean Score
Frequency	258	91	34	3.72
Percentage	67.4	23.8	8.9	

Table 4 shows results as 67.4% of students agreed that they listen to native speakers in public places (e.g. shops, restaurants, buses) and try to understand what they say in podcasts or audios/videos; therefore, 8.9% of students disagreed and 23.8% were neutral about the statement. The mean score is (M=3.72) that gives a positive opinion about the statement that they listen to native speakers in public places (e.g. shops, restaurants, buses) and try to understand what they say in podcasts or audios/videos.

Table 5. Smartphone makes it Easier for me to Learn English Language with the help of Videos and Audios

Option	Agree	Neutral	Disagree	Mean Score
Frequency	309	60	14	3.93
Percentage	80.7	15.7	3.7	

Table 5 shows results as 80.7% of students agreed that smartphone makes it easier for me to learn the English language with the help of videos and audios; therefore 3.7% of students disagreed, and 15.7% were neutral about the statement. The mean score is (M=3.93) that gives a positive opinion about the statement that smartphone makes it easier for me to learn the English language with the help of videos and audio.

Table 6. Online Material on Mobile Devices is more Suitable Material due to its all-time availability than Printed Material

Option	Agree	Neutral	Disagree	Mean Score
Frequency	274	70	39	3.90
Percentage	71.5	18.3	10.2	

Table 6 shows results as 71.5% of students agreed that online materials on mobile devices were more suitable materials due to their all-time availability than printed materials; therefore, 10.2% of students disagreed, and 18.3% were neutral about the statement. The mean score is (M=3.90) that gives a positive opinion about the statement that online materials on mobile devices were more suitable materials due to their all-time availability than printed materials.

Table 7. Mobile Devices can be used as a Supplementary (Extra) to Printed Material

Option	Agree	Neutral	Disagree	Mean Score
Frequency	279	76	28	3.81
Percentage	72.8	19.8	7.3	

Table 1 shows results as 72.8% of students agreed that mobile devices could be used as a supplementary (extra) to printed material; therefore, 7.3% of students disagreed, and 19.8% were neutral about the statement. The mean score is (*M*=3.81) that gives a positive opinion about the statement that mobile devices can be used as supplementary (extra) to printed material.

Table 8. Students should be able to easily view English Language Course Materials (Syllabus, Notes, and Assignments) on their Mobile Device

Option	Agree	Neutral	Disagree	Mean Score
Frequency	316	54	13	3.81
Percentage	82.5	14.1	3.4	

Table 1 shows results as 82.5% of students agreed that students should be able to easily view English language course materials (syllabus, notes, and assignments) on their mobile device; therefore, 3.4% of students disagreed, and 14.1% were neutral about the statement. The mean score is (*M*=3.81) that gives a positive opinion about the statement that students should be able to easily view English language course materials (syllabus, notes, and assignments) on their mobile devices.

Table 9. Smartphone helps me to Understand Pronunciation of Connected Speech in English by Listening to Audio

Option	Agree	Neutral	Disagree	Mean Score
Frequency	350	10	23	3.79
Percentage	91.9	2.6	6.0	

Table 1 shows results as 91.9% of students agreed that smartphone helps them to understand the pronunciation of connected speech in English by listening to the audio; therefore 6% of students disagreed, and 2.6% were neutral about the statement. The mean score is (*M*=3.79) that gives a positive opinion about the statement that smartphone helps them to understand the pronunciation of connected speech in English by listening to audio.

Table 10. Smartphone helps me to Pronounce English in Correct way in Connected Speech by Listening to Audio

Option	Agree	Neutral	Disagree	Mean Score
Frequency	330	20	33	3.82
Percentage	86.2	5.2	8.6	

Table 1 shows results as 86.2% of students agreed that smartphone helps them to pronounce English incorrect way in a connected speech by listening to the audio; therefore 8.6% of students disagreed, and 5.2% were neutral about the statement. The mean score is (*M*=3.82) that gives a positive opinion about the statement that smartphone helps them to pronounce English in the correct way in a connected speech by listening to audio.

Findings of the Study

The following findings were drawn on the basis of quantitative data analysis. The objectives of the study were to find out the usage of smartphones in improving English language pronunciation at the university level; findings related to the said objective indicated that:

- The majority of 83.8% of students agreed, and 2.9% disagreed that the use of smartphone helps students to have quick access to English learning materials.
- More than seventy-three percent (73.4%) of students agreed, and 4.2% disagreed that the use of smartphones has increased their motivation to learn the English language in and outside the classroom.
- The majority of 86.7% of students agreed, and 3.1% disagreed that pronunciation App/Software on smartphones helps them in learning the correct pronunciation of individual words.
- More than sixty-seven percent (67.4%) of students agreed, and 8.9% disagreed that they listen to native speakers in public places (e.g. shops, restaurants, buses) and try to understand what they say in podcasts or audios/videos.
- Majority of 80.7% students agreed, and 3.7% disagreed that smartphone makes it easier for me to learn the English language with the help of videos and audios.

- More than seventy-one percent (71.5%) of students agreed, and 10.2% disagreed that online materials on mobile devices were more suitable materials due to their all-time availability than printed materials.
- More than seventy-two percent (72.8%) of students agreed, and 19.8% that mobile devices can be used as supplementary (extra) to printed material.
- The majority of 82.5% of students agreed, and 3.4% disagreed that students should be able to easily view English language course materials (syllabus, notes, and assignments) on their mobile devices.
- The majority of 91.9% of students agreed, and 6% disagreed that smartphone helps them to understand the pronunciation of connected speech in English by listening to audio.
- The majority of 86.2% of students agreed, and 8.6% disagreed that smartphone helps them to pronounce English in the correct way in a connected speech by listening to audio.

Discussion

Based on the findings of the questionnaire, it became clear that Smartphone use in education can have a positive impact on English pronunciation. However, if they are not used adequately and in a controlled way, they can have a negative impact not only in education but also on health related issues. Thus, according to the findings of the questionnaire 91.9% students agreed smartphone helps them to understand the pronunciation of connected speech in English by listening to audio. These findings are also supported by other researchers such as Chiu (2015) who claimed, that Smartphone use in language learning can be of great benefits, especially in vocabulary acquisition, spelling, pronunciation, grammar, listening and reading skills. The students expressed their opinion through the distributed questionnaire that showed that all of them enjoyed learning using the Online Applications related to pronunciation learning. They also mentioned that the Apps are very useful in assisting them in learning how to pronounce words. Multiple online dictionaries teach pronunciation, and YouTube Channels are specially designed to teach native-like pronunciation of English words as well as connected speech. The free multimedia website to learn and practice authentic English has fun. The website contains videos and songs with transcripts, comments and explanations, jokes, multimedia activities, phonetics, video lessons, beautiful slideshows, chats and more. It also gives them a new way of learning and optimizes the use of their gadgets. Learners are interested in learning English in any way. We can use these files in our mobile SD cards by download from the website and using some CDs. This will help the learners at any time. The emergence of multimedia reduces classroom hours. Mobile phones act as a guide in learning Standard

English pronunciation. The use of the internet also brings advantages for language learning through mobile phones. It corresponds positively with findings of studies conducted by GhouNane (2017); Saidouni and Bahloul (2016); Thomas and Munoz (2016); and White and Mills (2014) that students showed positive attitudes towards the introduction and integration of mobile technology in language learning and any classroom activities.

Conclusion

As findings of the research suggest using smartphones and other mobile learning technologies, one can benefit a lot, as they offer language learning opportunities everywhere, and this is due to their portability and connectivity. Findings show that online learning Apps on smartphones help a great deal in improving second language pronunciation skills at the university level. The utilization of the English pronunciation Apps can help ESL students, students of the English department especially, to be more engaged, have a positive attitude and conduct towards pronunciation learning. However, if they are used out of control or outside of standards and not in compliance with learning objectives, they can do more harm than good to our educational purpose. Teachers or lecturers are expected to adjust the level of learners or strategies implemented in their teaching. Although, there is no guarantee if learners at this level are capable of pronouncing most if not all of the words correctly. These apps are highly recommended for English lecturers teaching pronunciation to freshmen or beginners learning pronunciation.

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