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| RESEARCH ARTICLE

An Analytical Study of Using English Pronunciation Applications to Improve Student's Pronunciation

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ABSTRACT

In the current day, which is marked by the widespread integration of technology in education, good communication is vital, and the English language has evolved to be the common language that brings together people from many backgrounds. One's ability to pronounce words correctly—a fundamental component of language competence—directly correlates with effective communication. The aim of this study is to look at the possible consequences of including a creative pronunciation application in students' educational process. Using a quantitative approach and gathering information using a structured questionnaire procedure. The aim of this paper is to assess the practical consequences of adopting an English Pronunciation Application as a supportive medium in the process of enhancing students's pronunciation skills as well as their efficacy. The results suggest that the English Pronunciation Application has been successful in its function as a supporting tool, which has led to a notable development in the pronunciation skills of students.

KEYWORDS

Technology; undergraduates; Pronunciation; English Pronunciation Application.

ARTICLE INFORMATION

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1. Introduction

The value of good communication is one of the most crucial features of modern globalization; English has evolved into the lingua franca that ties people from all backgrounds.

Language proficiency has been acknowledged for a long time as an essential talent in today's globalized society. According to Runde and Nealer (2017), English is the third most spoken language. Additionally, it is the language that is taught the most frequently. Not only does the ability to communicate effectively in English depend on vocabulary and grammar, but it also depends on the ability to pronounce words correctly and clearly. When it comes to effectively transmitting meaning, it is not enough to simply be familiar with the rules of syntax and language; pronunciation is also an extremely important factor. (2018) According to Prashant. It is important to note that learning pronunciation can be a difficult task, particularly for individuals who are not native English speakers (Vancova, 2019). Correct pronunciation is extremely important in English communication since, as was demonstrated above, English is the language that our society relies on the most.

In recent years, there has been a rise in the popularity of the incorporation of technology into educational settings, which has opened up new opportunities for language acquisition (Smith & Johnson, 2021). Mobile phone technology has reached a point where it is widely used. Android-based smartphones are utilized by students in their day-to-day activities. Students are able to apply and practice whenever they need to, regardless of location or time constraints, thanks to technology Almuselhy (2024).. Additionally, pupils have the ability to find their own individual learning route. Because of the quick development of technology and the ease with which it may be utilized, a great number of applications that are designed to be user-friendly have been rapidly produced (Rifqiyah, Ardini, & Prabowo KA, 2021). There have been significant changes brought about in education

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in a variety of contexts, including language learning, as a result of the widespread use of mobile phones. Rather than departing from traditional educational techniques that rely on paper, boards, and approaches that are centered on the teacher, Mobile Assisted Language Learning (MALL) made it possible for students to learn by utilizing technology (Nafa, 2020). There are many aspects of language learning that can be made easier by the broad availability of mobile connectivity. These aspects include reading, writing, listening, and speaking. According to Gael and Elmiana (2021), the utilization of mobile applications for the aim of learning English speaking skills has the potential to assist students in enhancing their speaking skills. As a result, as a result of the widespread usage of mobile phones, MALL has become the path of new learning activities, particularly in the area of pronunciation skill.

English Pronunciation Applications (EPA) are among the creative educational methods teachers are turning to more and more as supporting aids to improve student pronunciation. This is a response to the problem of progressively challenging mastery of pronunciation by means of mobile phones. Many past studies have shown that using English Pronunciation Applications (EPA) helps pupils to pronounce themselves better. Rifqiyah, Ardini, and Prabowo KA (2021) claim that EPA—which offers a wide spectrum of software and mobile apps—has become helpful resources for students, helping to improve their English language pronunciation. Relaying research from Wu (2015), Haryadi and Aprianoto (2020) in their study on Integrating EPA into Pronunciation Teaching Wu showed that in language learning, those taught via application far outperformed those taught under control. Research by Haryadi and Aprianoto is derived from Wu's work. The results of the study also show that using English pronunciation applications can help English as a Foreign Language (EFL) students—especially those in the English department become more involved in the process of learning pronunciation and show good attitudes and behaviors. Part of Mobile Assisted Language Learning (MALL), the application also motivates students to study outside of the classroom at their own pace and at their own leisure (Haryadi & Aprianoto, 2020). Using technology-based pronunciation learning tools like software or other apps allows students to practice pronunciation for as long as they like and have the freedom to modify at their own speed. Not only as a teaching tool in the classroom but also as an alternative media to correct pronunciation like a native speaker, MALL—more especially, how English Pronunciation Application enhances students's pronunciation—is not well studied. This is true notwithstanding the fact that several research have looked at how MALL affects learning environments. English Pronunciation Applications (EPA) is the name given to a broad range of mobile and digital tools meant to help students improve their English pronunciation. Based on 2020 research by Jones and Lee, this program offers a complete approach combining interactive exercises, multimedia tools, and real-time feedback systems AlMuselhy, & AlJumaily, (2024) These components taken together are meant to raise students' level of pronunciation accuracy. The aim of this experiment is to evaluate whether or not the English Pronunciation Application (EPA) can be applied to help English Education students have better pronunciation. Whether it matches the results of past research or whether it deviates in any manner from previous results as also. Moreover, this study aims to offer important new perspectives on the probable advantages of using technology in language instruction by investigating the effect that EPA has on pronunciation improvement.

2. Literature review

2.1 Mobile Assisted Language Learning (MALL)

One cannot dispute the effect over this period of time the fast advancement of technology in this age of globalization has had on the field of education. One of those technologies that is often used in the course of running educational events is the cell phone. Mobile Assisted Language Learning (MALL) (Putri, 2021) is one of the most important among the several ways in which mobile phones might be used as educational aids since it greatly enhances the teaching and learning process. Mobile Assisted Language Learning (MALL) is the term used to describe learning a language using mobile devices, such as tablets and smartphones; it is meant to help and simplify language acquisition. Using mobile apps, online resources, and tools can help to improve language acquisition and practice in a way that is both flexible and pleasant (Kukulska-Hulme, 2018). Putri (2021) conducted research on the use of mobile phones in the course of English instruction and learning. The statistics clearly show that mobile phones are important and provide benefits in a range of applications, including Google Translate, English Thesaurus, U-Dictionary, and others.

2.2 English Pronunciation Application (EPA)

The 2020 research by Haryadi and Aprianoto looks at how the English Pronunciation Application (EPA) affects students' involvement and learning process. The results of the study show that adding the (EPA) n raised student involvement and had a positive effect on students' capacity for self-directed learning's development. Rifqiyah and colleagues (2021) conducted more studies in which the writers evaluate the effectiveness of the EPA) as a medium in many pronunciation classes. The results of the author's study revealed several noteworthy points from which it was concluded that the students' pronunciation skills had developed between the period before and after they used EPA. Furthermore, the authors claim that using the EPA) is better than the previous instruction given before using the application. According to the literature review presented before, the studies on ESA as supporting media, not only as a learning tool but also as an alternative source of native-like pronunciation values in the process of strengthening students' pronunciation skills have never been conducted previously.

2.3 English Pronunciation

In the field of language, pronunciation is the articulation of words. Proficiency in pronunciation improves a person's self-confidence in their capacity to converse in English and their capacity to correctly say English words. One should not underestimate the significance of pronunciation and should make it their top focus when learning English, according to Prashant's (2018) research on the topic. Since second language pronunciation is not necessarily associated with general ability, it differs from other aspects of second language acquisition, according to research on the effectiveness of teaching L2 pronunciation by Thomson and Derwing (2014). Although someone who speaks a second language with great command of syntax and vocabulary may find it challenging to communicate clearly, even unskilled speakers can show excellent pronunciation. The range of pronunciation that youngsters show could cause problems for teachers in classrooms typical of language education.

3. Methodology of Research

3.1 Framework for Study

Research is a necessary and strong instrument for guiding the development of mankind. Pandey and Pandey (2015) claim that without organized research, the developments that would have been made would have been either modest or nonexistent. For this specific study, the approach of investigation was quantitative. Analyzing events that might be expressed numerically or as numbers is best suited for quantitative research (Bhome et al., 2013). This approach is founded on data or measurement-based quantification. This research project made use of a descriptive approach for design. A descriptive design does not entail any environmental alterations or variable modification for the aim of compiling data about them. Drummond and Murphy-Reyes (2018) claim that the descriptive correlation design is a particular kind of design used to examine the interactions between variables and hence foster a better understanding of patterns. In this specific case, a descriptive correlation design is used with the aim of ascertaining whether or not the variables in issue are correlated to one another, or whether or not there are indications that one variable influences the other.

3.2 Participants

Third and fourth year AlMustanseriya University undergraduate students engaged in this study on the matter would be the participants of this project. Convenience sampling, a technique used in research, will allow participants to be selected depending on their availability and accessibility (Taherdoost, 2016). Given the parameters of this research, this method was chosen since it is both useful and efficient. We will seek for a sample size of at least sixty students to provide a participation group that is adequately varied and representative of the population. The choosing process will take into account several important factors, including the participants' degree of involvement with English Pronunciation Applications and their willingness to participate. Every individual participant will have informed consent gathered to ensure that they are freely engaged in the study in line with ethical standards.

3.3 Data Collection

The researcher used a questionnaire and then gathered and evaluated the replies to the questionnaire in order to investigate the impact that the English Pronunciation Application has on the pronunciation abilities of students. During the process of data collection, the instrument that was utilized was a questionnaires. These questionnaires act as a means to collect information by posing specific inquiries to the respondents. As the principal instrument for data collection, the research will make use of a structured questionnaire. The study questions and objectives will be addressed in the questionnaire that will be prepared. By distributing these surveys to the students, we were able to get their feedback regarding their experiences with the English Pronunciation Application.

3.4 Analysis of Data

The data will be examined through the use of several statistical methods, such as descriptive and inferential statistics. Topics fundamental to descriptive statistics include organizing, analyzing, presenting, and interpreting data. The mean, median, mode, range, standard deviation, and other graphic forms including box plots and histograms, are the most often occurring forms of descriptive statistics. By use of samples, inferential statistics, on the other hand, derive conclusions on the features of the population, interrelationships, or the significance of variances (Elst, 2019). Important statistical tests such t-tests and regression analysis can help one examine the relationships among variables. We will evaluate the data using descriptive and inferential statistics.

3.5 Ethical Considerations

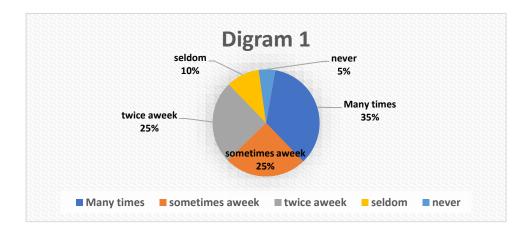
Participants will be briefed succinctly and straightforwardly on the objectives of the research, the procedures that will be followed, as well as the possible risks and benefits of the study, before answering the survey.

The anonymity of participants, informed consent, and data protection will all be protected, and the research will be conducted in accordance with ethical principles. All of the information that is gathered through the survey will be treated with the utmost

discretion. No reports or publications will contain any information that could reveal the identities of the participants. In order to safeguard the participants' privacy, the data will be coded. We will make sure that participants voluntarily agree to take part in the study by obtaining their informed consent after conducting the research. Every piece of information that is gathered will be stored in a safe location, and only the study team will have access to it. The data will be encrypted and preserved on devices that require a password to access, and physical copies of the data will be kept in a safe location.

4. Discussion of research findings

In order to determine whether or not the use of the EPA) Mobile-based as a supporting medium improved students' pronunciation, the researcher set out to analyze the collected data. The primary goal of this study was to identify and evaluate the application's role in helping students improve their pronunciation. In the following paragraphs, we present extensive descriptions of the findings in accordance with the components of the questionnaire.



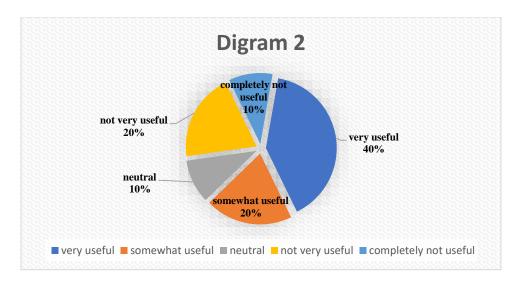
4.1. The frequency with which they improve students' pronunciation using the English Pronunciation Application

For the purpose of determining the extent to which the utilization of the English Pronunciation Application (EPA) can improve students' pronunciation, the researcher conducted a qualitative questionnaire test. The utilization of English Pronunciation Application (EPA) recording according to their opinion is shown below in diagram 1, based on sixty responses that were received from the questionnaires.

A majority of students, specifically 35%, are known to make use of the English Pronunciation Application (EPA), as indicated by the data that was gathered and presented in diagram 1. Twenty-five percent of students use the English Pronunciation Application (EPA) on a weekly basis, twenty-five percent of students use the application twice a week, ten percent of students use the service seldom, and five percent of respondents indicate that they never use the tool. The expansion of time, place, and pace that is made possible by MALL makes it possible for learners to continuously expose themselves to and practice their literacy skills, while also allowing them to maintain control over their own learning process.

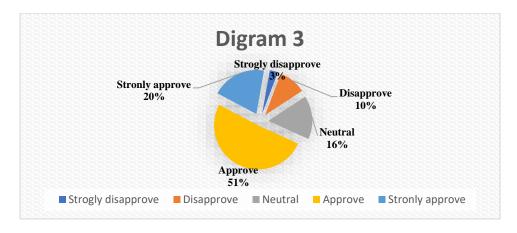
4.2. The usefulness of the English Pronunciation App.

The findings of the study that was conducted among sixty individuals to evaluate the usefulness of an English Pronunciation App revealed that these Applications have a number of advantages at their disposal. Remarkably, forty percent of the participants said the program would be "very useful" for their pronunciation development. Twenty percent of respondents also ranked it as "somewhat useful," suggesting that a good number of them thought the app fulfilled their needs. Participants said they were in a neutral posture, suggesting the app had no effect on their pronunciation either greatly or negatively. Ten percent of the total participants reported this, hence it was rather common. On the other hand, twenty percent of the respondents felt the application was "not quite useful." It's intriguing that 10% of respondents said the app was "not useful at all". To sum up, it is clear that the participants agree the application helps pupils to improve their pronunciation. In spite of the fact that there are students who believe the application is not very efficient in terms of helping them improve their pronunciation. The results of this study indicate that the English Pronunciation App is perceived well by the user base, with varied degrees of utility being stated by the users. Diagram 2 illustrates the percentage of usefulness of the English Pronunciation App.



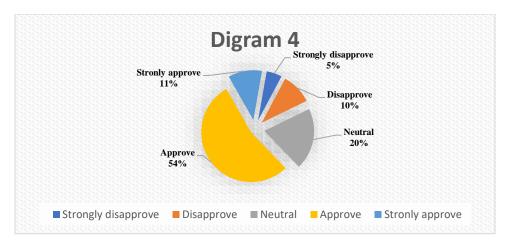
4.3. Using the English Pronunciation App, students can receive precise comments on where they went wrong with their pronunciation.

Based on the input from 60 users, the English Pronunciation Application is a great tool for improving one's pronunciation. Surprisingly, 20 % of users rate the application's ability to accurately evaluate speakers' pronunciations as very high. On the other hand, just 10% of people thought this was inaccurate. When asked about the application's ability to assess, 16% of people took an agnostic attitude. There is cause for optimism, as 51% of users felt that the app does a good job of assessing pronunciation. In addition, 3% of people who took the survey were not very satisfied with how well the app measured students' pronunciation. These encouraging comments highlight how the English Pronunciation App helps students with their pronunciation work and how important it is to keep users engaged and think of ways to improve it. In general, although some users were really impressed, there is useful criticism that might be used to make the app better for more people. As illustrated in Diagram (3).



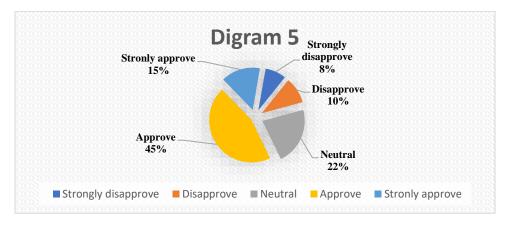
4.4. The English Pronunciation Application can accurately evaluate pronunciations.

According to diagram (4), among the sixty people who participated in the survey, the ability of the Pronunciation Application to appropriately evaluate the pronunciations that students had studied was met with a variety of reactions. There were 5% who strongly disapprove of the assumption that the program effectively assessed pronunciations, and there were also ten percent of participants who disapprove with this assertion. Twenty percent of respondents took a neutral view regarding the application's proficiency in pronunciation assessment. This represents a significant fraction. On the other hand, 54 percent of participants approve that they believe the application accurately analyzes their efforts to pronounce words. In contrast, eleven percent of the participants completely concurred with the statement that the application was effective in this regard. In light of these many points of view, it is clear that the English Pronunciation Application needs to undergo continuous evaluation and improvement in order to resolve problems and improve its overall efficiency in satisfying the various expectations of its user base.



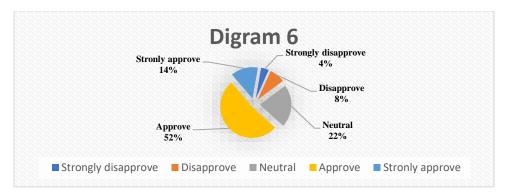
4.5. English Pronunciation helps the students pronounce properly.

The data shows that there is a broad variation of opinions about how well the English Pronunciation Application helps students improve their pronunciation, as shown in diagram (5). A startling 15% of users strongly agreed that the software helps a lot with pronunciation, which caught everyone off guard. Concerns about the app's capacity to foster progress in pronunciation were raised by a tiny percentage of users (only 10%). There seems to be some uncertainty or lack of agreement on the application's effect on pronunciation improvement, since a sizeable portion of participants (22% to be exact) had no opinion. A promising turn of events is that 45% of survey takers think the English Pronunciation App helps students who are serious about perfecting their pronunciation. In addition, 15% of people who took the survey strongly agreed that the app is helpful for students to use in order to perfect their pronunciation. These results suggest that more study is required to determine the program's exact features and methodology, as well as possible improvement areas, so that we can address the different opinions users have about the program's effect on pronunciation improvement.



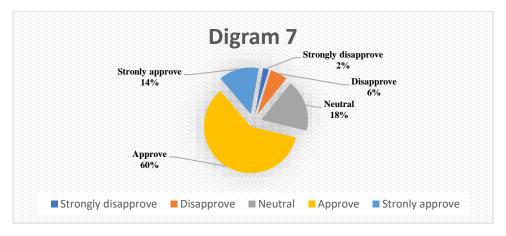
4.6. The English Pronunciation Application can identify particular elements of pronunciation requiring enhancement.

There are a variety of viewpoints regarding the effectiveness of the English Pronunciation Application to identify particular parts of pronunciation that need to be improved. Interestingly, four percent of those who took part strongly disapproved with the statement that the program is excellent at identifying particular areas for the improvement of pronunciation. 8 % of respondents, which is a very small percentage but nonetheless noteworthy, voiced their disapproval with the application's effectiveness in this area. A significant twenty-two percent of respondents took a neutral approach, which indicates that there is some approval of confusion or a lack of consensus regarding the application's precision in recognizing specific pronunciation deficiencies. On a more positive note, fifty-two percent of those who participated in the survey thought that the English Pronunciation Application did, in fact, perform an admirable job of identifying particular parts of pronunciation that require improvement. In addition, fourteen percent of the participants strongly approved of this evaluation, which indicates that there is a subgroup of users that found the program to be extremely useful in delivering tailored feedback for the purpose of improving pronunciation capabilities. These data provide more evidence that the English Pronunciation Application is effective in enhancing particular aspects of the pronunciation of the pupils.



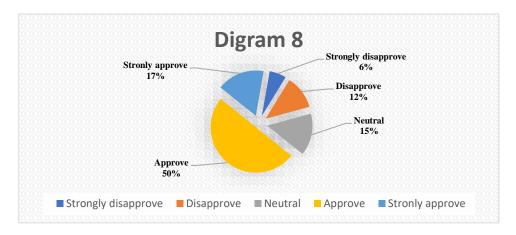
4.7. Daily pronunciation practice is simple with English Pronunciation App.

Diagram 7 shows the results from several angles about how easy it is to utilize the English Pronunciation App for regular practice of pronunciation. The statement that the application features an exceptionally user-friendly design is severely disapproved by a tiny percentage of participants (2%), when considering everyday pronunciation practice. However, 6% of users were unhappy with this impression, which may indicate that some users thought the software was too complicated or not user-friendly for regular usage. In terms of their approval, uncertainty, or divided thoughts about the ease of use for everyday practice, 28% of survey takers had a neutral posture. Sixty percent of users found the application easy to use for regular pronunciation practice, which is a good sign. There was also a 14% approval rating for this remark. Findings show that most people think the software works great with what they already do every day. Nevertheless, there are several areas that might be improved to answer the concerns of users who find the application less user-friendly.



4.8. You can get easy-to-understand directions from the English Pronunciation App.

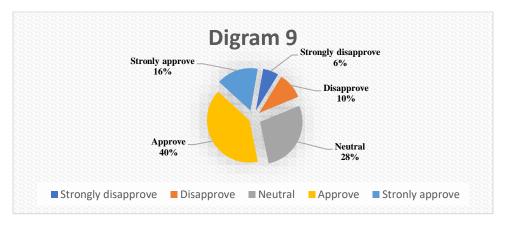
In spite of the fact that the English Pronunciation Application provides instructions that are easy to understand, there are a variety of viewpoints regarding the efficiency of the coaching that is supplied. One percent of the participants, which is a relatively tiny percentage, strongly disagreed with the statement that the instructions offered by the application are very clear. There was a subset of users who found the directions to be unclear, as indicated by the fact that twelve percent of respondents were in disagreement. A sizeable fifteen percent of respondents did not express any opinion on this matter, which indicates that there is a significant amount of doubt or mixed perceptions regarding the clarity of the instructions. A positive development is that fifty percent of the participants concurred that the directions are understandable, indicating that the majority of them regarded the information as understandable. Further, seventeen percent of respondents were in complete agreement, indicating that there was a sizeable population of users who saw the instructions as being especially clear. The findings of this study demonstrate that the English Pronunciation Application is capable of addressing the clarity of the instructions, with just a small percentage of the participants expressing disagreement with this statement.



4.9. English pronunciation facilitates pupils' comfort in practicing articulation.

According to diagram (9), the results can be interpreted in various ways regarding the effect of the English Pronunciation Application on making a conducive environment for practicing pronunciation. Just 6% of people who took the survey strongly disagreed with the statement that the app helps students feel more at ease when they practice their pronunciation. A sizeable minority of users (ten percent) expressed their displeasure, indicating that some did not find the app to be helpful in creating a relaxing setting for practice. A considerable 28% of respondents were ambivalent about the app's ability to promote relaxation during use, suggesting widespread uncertainty or conflicting opinions on the matter. Forty percent of users said that the app helps pupils feel better about themselves when they practice their pronunciation, which is a positive development. In addition, 16% of people who took the survey strongly agreed with this statement, suggesting that a sizeable portion of the users felt comfortable when navigating the site. In light of these results, it is clear that more study is needed to identify the user experience factors that make practice comfortable, and that the program needs to be improved to address the complaints of those who did not find it to be a welcoming place to learn.

A large percentage of students rated the application highly for its efficiency, user-friendliness, and ability to provide clear directions for practicing pronunciation, according to the data given above, which was derived from the replies of sixty participants. The overwhelming tendency for positive responses, especially in the "agree" category, indicates that everyone is satisfied with the program's performance. This remains true regardless of whether there are divergent viewpoints. Nonetheless, we must not forget that even individuals who were neutral or opposed to the cause have their own unique perspectives. These findings highlight the need of ongoing evaluation and potential modifications to address specific problems. This makes sure that the English Pronunciation App meets all of the requirements and exceeds all of the expectations of its intended users.



5. Discussion and conclusion

The poll results align with the broader concept of Mobile Assisted Language Learning (MALL), which underscores the necessity of mobile technology in language teaching. The findings corroborate the hypothesis that MALL provides students with a flexible and engaging learning environment, hence enabling them to exercise control over their educational process. Maryam Ameri's (2020) assertions regarding the transformative impact of current technology on education align with the favorable feedback concerning the efficacy of the English Pronunciation Application in evaluating pronunciation. The current study indicates a positive trend regarding the efficacy of the English Pronunciation Application (EPA), aligning with the hypothesis that mobile learning, facilitated by such applications, enhances language skills. The application's capacity to highlight specific areas for improvement has elicited varied responses, reflecting the intricacies of language acquisition. The positive feedback regarding the

English Pronunciation Application's user-friendliness and clarity of instructions suggests it is well-regarded in these aspects, hence enhancing the learning experience.

The English Pronunciation Application, a component of Mobile Assisted Language Learning (MALL), allows students to engage in autonomous study at their own pace beyond the classroom setting. In addition to serving as a novel educational resource, it provides an alternative for exemplary English pronunciation in English as a Foreign Language (EFL) contexts when native speakers are few. According to the 2020 study by Haryadi and Aprianoto, the application is strongly endorsed for English educators instructing first-year students or beginners in pronunciation. The results of the present study align with the conclusion drawn by Dian Shafwati (2022), who found that students' pronunciation markedly improved with the use of pronunciation programs. Both of the studies recognize the possibilities of such programs to help pupils have better pronunciation.

This study endeavor contributes to the existing literature on mobile-assisted language acquisition. These results support the idea that the education of language learners depends much on technology, especially in terms of programs like English Pronunciation App. The participants' insights provide invaluable information that can be utilized to ensure continuous progress. This comments on the need for constant review and change in order to satisfy the varied needs of students. The results of the study imply that using the English Pronunciation App could help English as a Foreign Language (EFL) students, especially those working in the English department, improve their learning behavior as well as boost involvement and shape good attitudes.

Furthermore shown to be effective as a supportive tool to improve students' speech is the English speech Application. Most of the respondents said that using English Pronunciation Application (EPA) as a supportive tool helps them to improve their own pronunciation. This implies that students trying to improve their pronunciation skills will find great value in the English Pronunciation Application since it resonates with them. The study of the collected data shows a general tendency among students applying the English Pronunciation program: most of the respondents agree with certain features of the program. Moreover, the study emphasizes how widely students embrace the English Pronunciation Application (APA) and its function as a useful tool for language acquisition.

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