

## MOBILE SMARTPHONE IN FOREIGN LANGUAGE TEACHING: APPS FOR TEACHING STUDENTS' VOCABULARY

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### ABSTRACT

This study focuses on determining whether or not students at MTs As'adiyah Putra 1 Sengkang's first year can expand their vocabulary through the use of mobile smartphones. The pre-experimental design was used by the researcher. First-year students at MTs As'adiyah Putra 1 Sengkang during the academic year 2020–2021 made up the population of this study. The class of 34 students served as the sample for the purposive sampling technique. The pretest and posttest were used to collect the data. The results of the students' test scores were determined by utilizing SPSS 24 to evaluate the test's data. According to the researcher's findings, the pre-test mean score was bad (49.00), but the post-test mean score was extremely high (79.24), with a standard deviation of 15.47 and 10.95, respectively. Therefore, the researcher came to the conclusion that employing a mobile smartphone was efficient for increasing vocabulary in first-year MTs Putra 1 As'adiyah Sengkang.

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## 1. INTRODUCTION

Studying vocabulary is an integral part of learning a language and cannot be isolated from it. The secret to mastering English skills is vocabulary. The components must be learned by students who desire to acquire a target language. Vocabulary is a fundamental linguistic element that students can utilize to explore their emotions and thoughts while learning English (Broughton et al., 2002; Walqui, 2006; Siregar et al., 2021; Satriani et al., 2022; Hasbi et al., 2022). Learning new vocabulary can help students improve their ability to learn English. In addition, pupils will be proficient in linguistic abilities like reading, listening, speaking, and writing (Hamer & Rohimajaya, 2018; Hao et al., 2019; Amiruddin & Razaq, 2022; Munawir et al., 2022).

The foundation of language proficiency is vocabulary, which plays a crucial role in language learning. One of the biggest issues students in English language programs face is vocabulary (August et al., 2005; Blachowicz et al., 2006; Elhamdi & Hezam, 2020; Hashim et al., 2022). Because of their restricted language, individuals are unable to communicate their views. The students become too indolent to learn English as a result. The truth is that without language development, kids cannot express their thoughts, sentiments, and emotions. It should be obvious to everyone that students learning

English as a second language are encouraged to expand their vocabulary in order to develop their language abilities.

Students must study vocabulary because they understand how important vocabulary building is. However, students actually encounter certain difficulties when learning it. Despite the fact that they have extensively examined it. Building a vocabulary is therefore challenging. To increase students' vocabulary, teachers need to create innovative teaching strategies (Dean & Hubbell, 2012; Klimova & Polakova, 2020; Ruzmetova et al., 2020). As a teaching tool, some teachers have employed computers, video players, and tape players. However, it is unable to engage students in learning. The instructor ought to employ a teaching aid. Computers, tablets, smartphones, personal digital assistants (PDAs), and other new technology tools were developed to aid students in learning English (Chen & Chung, 2008; Shadiev et al., 2017). Applications for facilitating vocabulary learning were included on these devices. The current researchers have found that using smartphone apps to produce and recognize vocabulary is an efficient way to learn new words (Lu, 2008; Heil et al., 2016).

### **Literature Review**

Smartphones are pieces of mobile technology that enable the use of software applications, or "apps," as they are more popularly called (Christensen & Prax, 2012; Mosa et al., 2012). Users can run software applications on smartphones thanks to their mobile operating systems. It has changed how education is delivered as a result of technological advancement. These gadgets could be useful for implementing technology in the sphere of education (Gurung & Rutledge, 2014; Gabor & Péter, 2015; Tokareva et al., 2019). The best opportunity for vocabulary learning is provided by it.

A smartphone is a cell phone with cutting-edge features and capabilities (Mosa et al., 2012). With built-in cameras, playback and recording of audio and video, sending and receiving e-mail, built-in programs for social websites, web browsing, wireless Internet, and much more, smartphones are capable of displaying images, playing games, watching films, and much more (Christensen & Prax, 2012). The greatest way to acquire new vocabulary is when the student is paying close attention to the message and smartphone-based digital flashcards, like when reading and interpreting an image (Lin & Lin, 2019; Li & Hafner, 2022). The student would gain more linguistic knowledge in this manner, which would be more beneficial for actual language use.

Students were able to manage their learning thanks to smartphones. It facilitates their access to information and resources (Poláková & Klímová, 2019). It had the greatest potential as a tool for learning English outside of the classroom. Recent research has motivated the potential of smartphones as learning aids to support the study of English (Davie & Hilber, 2015; Poláková & Klímová, 2019; Metruk, 2020; Şad et al., 2020). For instance, English language learners use their smartphones to access pertinent terminology and expressions while opening an account at a bank, to seek up movie reviews while at the theater, or to chat with an English-speaking buddy about their weekend plans (Şad et al., 2020). Smartphones reduce the distance between the classroom and the outside world because they are a common part of students' daily lives.

Any smartphone app that helps students expand their vocabulary will significantly advance them (Metruk, 2020). Furthermore, the focus of this research is vocabulary.

The general definition of vocabulary is the understanding of words and their meanings (Siregar et al., 2021; Satriani et al., 2022). Another definition of vocabulary offered by Walqui (2006) is that it consists of all the words a person knows or employs, all the words in a given language, and all the words individuals use when discussing a particular topic. The words that a specific person knows and uses, as well as all the words that are used in a particular language or subject, are two of Broughton et al. (2002) definitions of vocabulary. Additionally, Elhamdi & Hezam (2020) noted that different vocabulary is receptive vocabulary is the capacity for comprehending words as they are heard or seen.

The ability to create a word when writing or speaking is referred to as having a productive vocabulary. Because every person expresses themselves differently, we can infer from the explanation above that every expert in every book has a distinct method for categorizing the many types of vocabulary. It implies that there are two categories of words in vocabulary: content words and words with functions. There are four stages in the evolution of vocabulary: meaning, word use, word creation, and word grammar (Dakhi & Fitria, 2019; Benítez-Burraco & Progovac, 2020).

## 2. METHOD

This research applied quasi-experimental design by using two groups (Rogers & Revesz, 2019; Reichardt, 2019; Miller et al., 2020); they were experimental class and control class. This study focuses on determining whether or not students at MTs As'adiyah Putra 1 Sengkang's first year can expand their vocabulary through the use of mobile smartphones.

First-year students at MTs As'adiyah Putra 1 Sengkang during the academic year 2020–2021 made up the population of this study. The class of 34 students served as the sample for the purposive sampling technique. The pretest and posttest were used to collect the data. The results of the students' test scores were determined by utilizing SPSS 24 to evaluate the test's data.

## 3. RESULTS AND DISCUSSION

The research's conclusion focuses on how the mean test scores for students' pre- and post-tests were categorized. The outcome of the data analysis is explained in full together with the students' score rates, frequency, and pre-test and post-test percentages. It appears in the following Table 1.

**Table 1.** the students' score rates, frequency, and pre-test and post-test percentages

| No. | Classification | Score  | Pretest   |         | Posttest  |         |
|-----|----------------|--------|-----------|---------|-----------|---------|
|     |                |        | Frequency | Percent | Frequency | Percent |
| 1   | Very Good      | 86-100 | 0         | 0%      | 14        | 41%     |
| 2   | Good           | 71-85  | 2         | 6%      | 13        | 38%     |
| 3   | Fair           | 56-70  | 9         | 26%     | 5         | 15%     |

| No. | Classification | Score | Pretest   |             | Posttest  |             |
|-----|----------------|-------|-----------|-------------|-----------|-------------|
|     |                |       | Frequency | Percent     | Frequency | Percent     |
| 4   | Poor           | 41-55 | 11        | 32%         | 2         | 6%          |
| 5   | Very Poor      | 0-40  | 12        | 35%         | 0         | 0%          |
|     | <b>Total</b>   |       | <b>34</b> | <b>100%</b> | <b>34</b> | <b>100%</b> |

The frequency and percentage of the students' vocabulary test scores that increased between the pre-test and post-test are shown in Table 1 above. Two students (6%) were characterized as having a good score on the pre-test. 9 students (or 26% of the class) were given a fair grade, followed by 11 students (or 32% of the class) who received a poor grade and 12 students (or 35% of the class) who received a very poor grade. 14 students (41%) were classified as having very good scores on the post-test. Thirteen students, or 38%, were classified as having a good score. There were 5 pupils (15%) who received a fair grade. There were 3 students (2%) who received a low grade.

Evaluating the students' pre- and post-test results. It shows that the pupils' vocabulary was rated as "extremely bad" prior to the treatment and as "excellent" following it. Furthermore, the rate % in the post-test exceeded the rate percentage in the pre-test. It was claimed that vocabulary among students is influenced by mobile phone use. The mean score and standard deviation of the student's pre-test and post-test in Table 2.

**Table 2.** The mean score and standard deviation of the student's pre-test and post-test

| Paired Samples Statistics |          |       |    |                |                 |
|---------------------------|----------|-------|----|----------------|-----------------|
|                           |          | Mean  | N  | Std. Deviation | Std. Error Mean |
| Pair 1                    | Pretest  | 49.00 | 34 | 15.470         | 2.653           |
|                           | Posttest | 79.24 | 34 | 10.955         | 1.879           |

The difference in the mean score and standard deviation of the students' vocabulary using mobile smartphones is shown in Table 2 above. As can be observed, the students' pre-test mean score was 49.00, whereas their post-test mean score was 79.24. It shows that the mean score on the post-test was greater than the mean on the pre-test for the students. The researcher also emphasizes the students' pre-test and post-test standard deviations. Table 4.2 demonstrates that the students' standard deviation reduced from 15.470 to 10.955. It means that students' vocabulary grows as a result of their use of mobile smartphones. Furthermore, students' Probability value and level of significance of the students' pre-test and post-test in Table 3.

**Table 3.** Significance Of The Students' Pre-Test And Post-Test

| Variable             | Probability Value | Level of Significance |
|----------------------|-------------------|-----------------------|
| Pre-test – Post-test | 0.00              | 0.05                  |

The probability value (0.00), as shown in Table 3, was less than the level of significance (0.05). The pre-test and post-test are thus different from one another. It demonstrates that using a mobile smartphone (SM) to increase students' vocabulary is successful.

In light of the aforementioned evidence, the research's H1 hypothesis is accepted, while the H0 null hypothesis is rejected. It indicates that the students' command of vocabulary has improved. Thus, it can be said that using a mobile smartphone to increase students' vocabulary is successful (Basoglu & Akdemir, 2010; Suwantarathip & Orawiwatnakul, 2015; Bensalem, 2018; Lei, 2018; Kohnke, 2020; Katemba, 2021).

#### 4. CONCLUSION

The researcher concluded that mobile smartphone use can increase students' vocabularies based on the findings and discussion. After using the Learn and Play English game on their smartphones, students' vocabulary significantly improved, according to the data analysis results. The increase in students scoring in the very good and good categories on the post-test served as evidence. In addition, the post-test mean score (79.24) was greater than the pre-test mean (49.00). Furthermore, the students' standard deviation fell from 15.470 to 10.955. The first-year students at MTs As'adiyah Putra 1 Sengkang can undoubtedly expand their vocabulary with the use of the gadget mobile smartphone.

The first-year students at MTs As'adiyah Putra 1 Sengkang can effectively expand their vocabulary by using mobile smartphones as a teaching and learning tool. The probability value was lower than the level of significance, demonstrating this (0.05).

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