EFL Student’s Perception of MALL for Pronunciation Proficiency

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Abstract
Mobile Assisted Language Learning (MALL) greatly influences the success of pronunciation proficiency. Several previous studies have been conducted on the positive effect of MALL on increasing pronunciation proficiency; however, the students’ perceptions of MALL in increasing pronunciation proficiency are rare. Therefore, it is necessary to investigate the perception of using the teaching technological tool. This study used a survey research design. Sixty-nine English students at one Islamic higher education institution in Jambi, Indonesia voluntarily participated in this study. Data from participants were collected using questionnaires and then analyzed using SPSS 26. The research results showed that there was a statistically significant difference in perception of the usefulness of MALL, but no statistically significant difference in perception of the ease of MALL regarding gender. This means that the results indicated that the students positively perceive MALL in the process of teaching and learning.

Keywords: Mobile Assisted-Language Learning, Perception, Pronunciation Proficiency.

Introduction
Mobile Assisted Language Learning (MALL) refers to the incursion of mobile technologies into the field of language teaching. The portability, availability, and mobility of this technological tool make it an important element that can generate students’ learning orientation in the classroom,1 and it’s also pursues learning opportunities, and flexible to be used anywhere when students are interested to study.2

https://www.ceeol.com/search/article-detail?id=737375
Specifically, this type of teaching technology tool enables to help students in learning English.\(^3\) MALL also enables to make students more engaged in the process of teaching and learning.\(^4\)\(^5\) According to Kukulska-Hulme and Shield, 2008\(^6\) MALL provides students with rich, practical, real-time, and contextual learning possibilities wherever they are, inside or outside the classroom.

Regarding pronunciation, there was software called the "Oxford Dictionary of English" which can help the pronunciation proficiency needs. This app offers phonetic transcriptions, sounds, meanings, definitions, and example sentences. The Oxford Dictionary of English is globally accepted as the appropriate technology tool. This device has been downloaded more than 50 million times from the Google Play Store. It is strong evidence that this software can be used as a medium for learning pronunciation. figure 1 below shows how the apps are used:

First, click on the Oxford Dictionary of English app. Second, the icon in the red line, type the desired word then click search. Finally, choose the British or American English pronunciation.

Several studies have been conducted concerning MALL. Rosell-Aguilar, 2018\(^7\) conducted a 4095 students' perception of MALL through a survey research design. The findings indicated that the devices trusted tools that help them improve their language skills.

Accordingly, a study conducted by Kwangsawad (2019).\(^8\) Accordingly, a study carried out using a qualitative approach to 103 EFL students enrolled in TEFL 1-2 at Mahasarakham University Faculty of Education, Thailand

The findings show that MALL is used in EFL instruction by all students. Smartphones and iPads are the MALL types used in Kwangsawad's study, and study participants said these devices were useful, fun, and productive.

Furthermore, a study conducted by Arashnia & Shahrokhi 2016\(^9\) investigated the potential effects of mobile-assisted learning on students' English pronunciation. The research was conducted at the Poyandegan Language Institute in Shiraz, Iran involving 60 male students who speak Persian natively by creating an experimental design. Data was collected through a pronunciation test and analyzed using the Independent Samples t-test. The results showed that there was a significant difference in the mean


8 Thooppong Kwangsawad, ‘University Students’ Perceptions of MALL in EFL Classes’, *Studies in English Language Teaching*, 7.1 (2019), 75-82. DOI:10.22158/sel.t.v7n1p75

between the experimental and control groups (t=7.186, Sig.= .000).

Fraser and Perth, 1999 assert that improper pronunciation may prevent learners from achieving the level of social, academic, and professional advancement they deserve. Therefore, proper pronunciation is important for the learners of English. Although it is complex and challenging, it is crucial to learn proper pronunciation. According to recent studies on pronunciation, incorporating technology into the classroom can help students learn how to pronounce words correctly. MALL, which has been popular among students as a new form of technology, could be a useful tool for teaching and learning pronunciation.

Klopfer et al. 2002 that mobile apps enable to take make learning effective to be done anywhere and anytime. Therefore, This teaching technology is very important to support pronunciation teaching and learning. Accurate pronunciation is one of the basic of learning English. Good pronunciation leads to successful learning, while poor pronunciation causes great difficulties in language learning.

Although several studies have found a relationship between MALL and English learning, research examining the perception of the teaching technology in pronunciation is limited. Therefore, this study is carried out to know the students' perceptions. To determine student perceptions, the research questions are formulated as follows: (1) What is the student's perception of the usefulness of MALL and the MALL? (2) Is there a statistically significant difference in perception of MALL concerning gender?

Method

This study adopted a survey design to answer research questions. Using a series of questionnaires as an instrument to investigate the students' perceptions of MALL in increasing pronunciation proficiency. By using a questionnaire, this research design describes the attitudes, opinions, behaviours, or characteristics

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of a population. Therefore, based on the responses in the questionnaire used to collect data.

The population of this study were third and fifth-semester students majoring in English from the faculty of education and teacher training at an Islamic higher education in Jambi, Indonesia. Total 69 students with 26 male and 43 female. Their ages ranged from 19 to 23 years. selected as a sample for the research survey based on the convenience sampling technique. They voluntarily responded to the provided Google form questionnaire. The reason for the sampling criterion was that the participants had studied English major pronunciation courses for three and five semesters, so they could use their knowledge to answer the questionnaire well.

Table 1. The participants based on Semester Level

<table>
<thead>
<tr>
<th>Semester</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third</td>
<td>33</td>
</tr>
<tr>
<td>Fifth</td>
<td>36</td>
</tr>
<tr>
<td>TOTAL</td>
<td>69</td>
</tr>
</tbody>
</table>

Table 2. The participants are based on Gender and Age

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>26</td>
<td>19-23</td>
</tr>
<tr>
<td>Female</td>
<td>43</td>
<td>19-23</td>
</tr>
<tr>
<td>TOTAL</td>
<td>69</td>
<td></td>
</tr>
</tbody>
</table>

For this research instrument, it was decided to choose an adopted questionnaire for data collection. The questionnaire consists of two indicators. First, focusing on the perceptions of MALL usefulness which consists of 12 items (1,2,3,4,5,6,7,8,9,10,11, and 12). second, focuses on the perceived ease of use of MALL (EOU) consisting of 9 items (13,14,15,16,17,18,19,20 and 21). The items were adopted from Davis' 1993 User Acceptance of Information Technology (UAIT), which was carefully developed and translated into Indonesian as the participants' first language. Translated items are then assessed by an expert who has a doctoral degree in English. Then the 21 items statements developed were piloted to 69 students who had the same semester with the research samples. The questionnaire used a Likert scale with 5 answer points starting from 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), and 5 (Strongly Agree). Then tested using the analysis of the validity coefficient correlation ≥ 0.24 and reliability ≥ 0.50 through SPSS 26 as a measurement standard. based on the results of the analysis all 21 items have a correlation coefficient higher than 0.23 for validity and higher than 0.50 for reliability. Thus, this Questionnaire is suitable for measuring Student Perceptions of MALL in Increasing Pronunciation Proficiency and can be understood by respondents.

The data collection for this research was carried out in November 2022. Before collecting data, the researcher first asked permission from the head of the department and each person in charge for semesters three and five to conduct research. Contacting the head of the department and the person in charge of the class is the legality of the available statements as their response. After obtaining approval, the Google form link was first sent to targeted students’ WhatsApp groups to obtain research data. Scale scores range from 1.00 to 5.00, with neutral 3.00 and low and very low less than 3.00.

The students’ scores were analyzed using descriptive statistics. The data from the Google form was firstly coded numerically on a Likert scale from 1 to 5 and then the file was stored in an Excel sheet for importing data with the help of SPSS 23 computer software. Descriptive statistics were used to display the percentage of perceived usefulness of MALL and perceived ease of use of Behavioral Impacts. International journal of man-machine studies, 38.3 (1993), 475-487.

https://doi.org/10.1006/imms.1993.1022

MALL to test different perceptions between males and females.

Finding and Discussion

Finding

This section presents the results of adopting questionnaire analysis through Davis' 1993\textsuperscript{24} user acceptance of information technology, which includes the Usefulness and Ease of use of MALL in increasing Pronunciation Proficiency. To answer the research questions, each questionnaire scale percentage was calculated.

**Table 3. Students’ Perception of the Usefulness using MALL**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The mobile device dictionary can improve the quality of my pronunciation.</td>
<td>28.98</td>
<td>55.07</td>
<td>11.59</td>
<td>0.289</td>
<td>0.144</td>
</tr>
<tr>
<td>The mobile device dictionary facilitates self-study of my pronunciation.</td>
<td>27.53</td>
<td>60.86</td>
<td>10.14</td>
<td>0.44</td>
<td>0</td>
</tr>
<tr>
<td>A mobile device dictionary helps me to make good use of my study time.</td>
<td>21.73</td>
<td>47.82</td>
<td>24.63</td>
<td>0.579</td>
<td>0</td>
</tr>
<tr>
<td>Learning pronunciation through a mobile device dictionary is more practical to use.</td>
<td>37.68</td>
<td>53.62</td>
<td>08.69</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A mobile device dictionary increases my pronunciation ability level.</td>
<td>13.04</td>
<td>63.76</td>
<td>18.84</td>
<td>0.434</td>
<td>0</td>
</tr>
<tr>
<td>The mobile dictionary makes me more active and enthusiastic about learning pronunciation</td>
<td>17.39</td>
<td>28.98</td>
<td>44.92</td>
<td>0.869</td>
<td>0</td>
</tr>
<tr>
<td>Mobile device dictionaries can facilitate pronunciation learning anywhere.</td>
<td>27.53</td>
<td>55.07</td>
<td>10.14</td>
<td>0.579</td>
<td>0.144</td>
</tr>
<tr>
<td>The mobile device dictionary improves the effectiveness of my pronunciation learning.</td>
<td>10.14</td>
<td>62.31</td>
<td>26.08</td>
<td>0.44</td>
<td>0</td>
</tr>
<tr>
<td>The mobile dictionary makes learning my pronunciation easier.</td>
<td>14.49</td>
<td>68.11</td>
<td>15.94</td>
<td>0.44</td>
<td>0</td>
</tr>
<tr>
<td>The mobile device dictionary helps me be more confident in my pronunciation skills when speaking</td>
<td>13.04</td>
<td>47.82</td>
<td>36.23</td>
<td>0.829</td>
<td>0</td>
</tr>
<tr>
<td>I am more motivated when I practice pronunciation using a mobile device dictionary</td>
<td>10.14</td>
<td>31.88</td>
<td>50.72</td>
<td>0.724</td>
<td>0</td>
</tr>
<tr>
<td>I believe mobile device dictionaries are very useful in my pronunciation learning.</td>
<td>23.18</td>
<td>52.17</td>
<td>20.28</td>
<td>0.434</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 3 shows that the majority of students have positive perceptions about the use of MALLs. Student responses were in the "agree" and "neutral" scale categories. More than 50% of students chose the "agree" category on 8 of the 12 items. Responses to the other four items were; Mobile dictionary makes learning my pronunciation easier (68.11%), Mobile dictionary increases my pronunciation level (63.76%), Mobile dictionary improves the effectiveness of my pronunciation learning (50.72%), I am more motivated when I practice pronunciation using a mobile device dictionary (31.88%), Mobile device dictionaries can facilitate pronunciation learning anywhere (55.07%).

pronunciation learning (62.31%), Mobile dictionary facilitates learning independent of my pronunciation (60.86%), Mobile device dictionary can improve the quality of my pronunciation (55.07%), Mobile device dictionary can facilitate pronunciation learning anywhere (55.07%), Learning pronunciation through mobile device dictionary is more practical to use (53.62%) and I believe the mobile device dictionary is very useful in learning my pronunciation (52.17%). However, only 1 item received responses in the “neutral” category, specifically, I am more motivated when I practice pronunciation using a mobile device dictionary (50.72%). As much as 20% chose some of the items "strongly agree".

In addition, there were five of the twelve items that received the "neutral" category were chosen by more than 20% of the participants; The mobile dictionary makes me more active and enthusiastic in learning pronunciation (44.92%), the mobile dictionary helps me be more confident with my pronunciation skills when speaking (36.23%), the mobile dictionary increases the effectiveness of my pronunciation learning (26.08%), Mobile device dictionaries help me make good use of my study time (24.63%), and I believe mobile device dictionaries are very useful in learning my pronunciation (20.28%). Other 20% on four items in the "agree" category and six items in the "strongly agree" category.

It may be noted that more students chose “agree” and “strongly agree” compared to “neutral” on the following items: The mobile device dictionary facilitates self-study of my pronunciation (60.86% 'agree' and 27.53% 'strongly agree'), mobile device dictionaries can improve the quality of my pronunciation (55.07% 'agree' and 28.98% 'strongly agree'), mobile device dictionaries can facilitate pronunciation learning anywhere (55.07% 'agree' and 27.53% 'strongly agree'), Learning pronunciation through a mobile device dictionary is more practical to use (53.62% 'agree' and 37.68% 'strongly agree'), and I believe a mobile device dictionary is very useful in learning pronunciation me (52.17% 'agree' and 23.18% 'strongly agree').

The Ease of Using MALL

For this section, the respondents’ perceptions of the Ease of Use (MALL) for 9 items were analyzed. Their perceptions on Ease of Use were obtained using a five-point Likert scale with “strongly disagree”, “disagree”, “Neutral”, “agree”, “strongly agree”.

Appendix 2

Table 4. Students’ Perception of Ease Using MALL

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree %</th>
<th>Agree %</th>
<th>Neutral %</th>
<th>Disagree %</th>
<th>Strongly Disagree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find the dictionary system of mobile devices cumbersome to use.</td>
<td>04.34</td>
<td>18.84</td>
<td>13.04</td>
<td>55.07</td>
<td>08.69</td>
</tr>
<tr>
<td>Mobile device dictionaries are easy to access and use</td>
<td>21.73</td>
<td>63.76</td>
<td>11.59</td>
<td>01.44</td>
<td>01.44</td>
</tr>
<tr>
<td>Studying via a mobile device dictionary is boring to me</td>
<td>01.44</td>
<td>10.14</td>
<td>40.57</td>
<td>39.13</td>
<td>08.69</td>
</tr>
<tr>
<td>Studying using a mobile device dictionary is burdensome for me.</td>
<td>02.82</td>
<td>04.34</td>
<td>21.73</td>
<td>60.86</td>
<td>10.14</td>
</tr>
<tr>
<td>The mobile device dictionary does not improve my pronunciation much.</td>
<td>04.34</td>
<td>10.14</td>
<td>24.63</td>
<td>49.27</td>
<td>15.94</td>
</tr>
<tr>
<td>Mobile device dictionaries require a large enough phone memory</td>
<td>01.44</td>
<td>14.49</td>
<td>42.02</td>
<td>33.33</td>
<td>08.69</td>
</tr>
<tr>
<td>Mobile device dictionary provides clearer voice feature</td>
<td>13.04</td>
<td>50.72</td>
<td>31.88</td>
<td>04.34</td>
<td>0</td>
</tr>
<tr>
<td>Mobile device dictionaries provide many opportunities to improve my pronunciation.</td>
<td>10.14</td>
<td>55.07</td>
<td>27.53</td>
<td>05.79</td>
<td>01.44</td>
</tr>
</tbody>
</table>
Overall, the mobile device dictionary contributed greatly to my learning of pronunciation.

Table 4 displays the percentage of ease of use of MALL. As seen in the appendix above, more students answered in the “agree” and “neutral” scale categories: more than 30% of students chose these categories. There were four out of nine items received responses in the "agree" category. The four items are: The mobile device dictionary is easy to access and use (63.76%), The mobile device dictionary provides many opportunities to improve my pronunciation (55.07%), Overall, the mobile device dictionary contributes greatly to my learning pronunciation (55 .07%), mobile device dictionary provides clearer voice features (50.72%). While three out of nine received responses in the “neutral” category: Mobile device dictionary requires a large enough phone memory (42.02%), Learning through a mobile device dictionary is boring for me (40.57%), and Mobile device dictionary provides features clearer sound (31.88%).

It may also be worth noting that, more than 30% also chose “disagree” on the following items: Learning to use a mobile device dictionary is a burden for me (60.86%), I find a mobile device dictionary system cumbersome to use (55.07%), Mobile device dictionary doesn't improve my pronunciation much (49.27%), Studying through mobile device dictionary is boring for me (40.57%) and Mobile device dictionary requires features clearer sound (33.33%).

From Table 4 it can be seen that although more than 30% of students chose "agree" and "neutral". However, items in the “agree” category outnumber those in “neutral”: The mobile dictionary is easy to access and use (63.76% 'agree' and 11.59% 'neutral'), the mobile dictionary provides many opportunities to improve my pronunciation (55.07% 'agree' and 27.53% 'neutral'), Overall, mobile device dictionaries contribute greatly to my learning pronunciation (55.07% 'agree' and 23.18% 'neutral'), The mobile device dictionary provided a clearer voice feature (50.72% 'agreed' and 31.88% 'neutral'), and I found the mobile device dictionary system impractical to use (18.84% 'agreed' and 13.04 % 'neutral'). other than that four items “agree” which are lower than “neutral”: The mobile device dictionary requires a large enough phone memory (14.49% 'agree' and 42.02% 'neutral'), Studying through the mobile device dictionary is boring for me (10.14% 'agree and 40.57% 'neutral'), the mobile dictionary does not improve my pronunciation much (10.14% 'agree and 24.63% 'neutral'), and learning to use a mobile device dictionary is burdensome for me (04.34% 'agree' and 21.73% 'neutral').

RQ 2. Is there a statistically significant difference in perception of MALL concerning gender?

Regarding gender, Table 6 and Table 8 present the results of the independent sample t-test of perceptions of the usefulness of MALL and the convenience of MALL as shown in the following:

<table>
<thead>
<tr>
<th>Table 5. Group Statistics of the usefulness of MALL.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>Perception</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

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This is shown by the results of the independent sample t-test that there is a statistically significant difference in students' perceptions of the usefulness of MALL about gender (t = 736, p = 0.012<0.05) as shown in Table 6. However, there is no difference statistically significant for perceptions of ease using MALL (t = 1.074, p = 0.859>0.05) as shown in Table 8.

**Discussion**

The findings of this study indicate that participants have a positive perception of MALL both in terms of usefulness (USEF) and ease of use (EOU). Similarly, they showed general agreement about the potential for MALL to improve pronunciation skills. These results are similar to the findings of research by Saran et., al.
which examined Mobile Assisted Language Learning: English Pronunciation at Learners' Fingertips at an English-speaking university in Turkey. They found that cell phone use had a positive effect on students' pronunciation learning, and all students gave positive responses about the mobile learning applications they used. Likewise, Ghounane 2019\textsuperscript{26} this study exploring the Attitudes of Second Year EFL Students at Dr Moulay Tahar University towards Learning English Pronunciation through Mobile Assisted Language, also found that teachers and students have positive attitudes towards the introduction of mobile technology in language learning and applications used in experiments demonstrating the usefulness of Mobile Assisted Language in learning English pronunciation.

Wan Azli et al., 2018\textsuperscript{27} Perception on the Usage of MALL in English as a Second Language (ESL) Learning among Vocational College Students, reported that respondents have a positive perception of the use of MALL, showed overall agreement on both the constructs of perceived usefulness and perceived ease of use of MALL and They believed the use of MALL would improve the teaching and learning process.

Further Findings by Saidouni and Bahloul 2016\textsuperscript{28}Teachers and Students' Attitudes Towards Using Mobile-Assisted Language Learning In Higher Education, which demonstrate the positive attitude and agreement of English teachers and students about the potential of MALL as a promising approach to foreign language teaching and learning that can taught and enhanced by integrating mobile technologies. In addition, Students also show their willingness and motivation to adapt their mobile devices for language learning.

Similarly, Yudhiantara and Saehu 2017\textsuperscript{29} Mobile-Assisted Language Learning (MALL) in Indonesian Islamic Higher Education reports that students can use mobile phones to use EMD applications in learning English (ELL) and they demonstrate skills in operating EMD applications that are embodied in their knowledge. about, pronunciation, grammar and meaning information when searching for certain words as well as many features that students get from mobile phones for learning English.

Results similar to those found by Loewen et al., 2019\textsuperscript{30} Mobile-assisted language learning: A Duolingo case study that tested the Duolingo application for one semester in learning in Turkey showed positive results on the use of the Duolingo application as one of the MALL in learning to increase L2 and positive perceptions regarding the flexibility and gamification aspects of Duolingo in learning.

The most important finding in this study is that overall the majority of respondents strongly agree with the statement about the usefulness of using MALL and agree on the ease of using

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{26} Nadia Ghounane, 'The Attitudes of Second Year EFL Students at Dr Moulay Tahar University towards Learning English Pronunciation through Mobile Assisted Language', Arab World English Journal (AWEJ): Special Issue on CALL, 5 (2019), 1-14. http://dx.doi.org/10.2139/ssrn.3431753
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\item\textsuperscript{30} Shawn Lowen and others, 'Mobile-assisted language learning: A Duolingo case study', The Journal of the European Association for Computer Assisted Language Learning, 31.3 (2019), 293-311. DOI: https://doi.org/10.1017/S0958344019000065
\end{itemize}
\end{footnotesize}
MALL. This is a sign of a positive perception of the position of MALL in improving student pronunciation. Mobile devices are devices that change the language learning process to become more authentic, subjective, and convenient for language learning in the promising future. Moreover, the flexible use of new learning tools such as mobile phones has changed the way traditional language skills are to be learned in the future by proposing a new century calling for greater learner autonomy.

Conclusion

By distributing a questionnaire to English majors at an Islamic university in Jambi, Indonesia, this survey technique was able to explore the usefulness and ease of use of MALL to improve students' pronunciation in higher education settings and more importantly evaluate their perceptions. This study also discussed the relationship between gender and age in the use of MALL to improve students' pronunciation skills. According to this study, students have a positive opinion about the usefulness and ease of use of MALL. In addition, this study demonstrated that there were no gender or age differences in students' evaluations of the usefulness and ease of use of MALLs that were statistically significant.

Based on the research findings, there are several pedagogical implications aimed at English students: (1) analyzing the need to make them pay more attention to the teaching and learning process in increasing their pronunciation proficiency, (2) Students will be able to participate in educational activities regardless of the time or location by using MALL, (3) Numerous mobile applications exist that can readily grab students' attention, make studying more enjoyable, and help them comprehend the lesson.

However, this study also has some limitations; Participants were only selected from two semesters at the English language education faculty at an Islamic university in Jambi, Indonesia. Small sample sizes can influence the overall findings for the indicators or topics studied. Hence, the reader should avoid extrapolating the findings of this study beyond the current setting. It is suggested that more research be carried out with students from various universities.

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**Disertations and Thesis**

