



Research Article

The Effectiveness of Language Learning Applications for Malay Native Speakers Learning German

Alexander Stark^{1,*}, Khairul Hisyam Baharuddin², and Nazatul Syima Mohd Nasir³

¹ Universiti Malaysia Kelantan; alexander.s@umk.edu.my;  ORCID ID: 0000-0002-9260-3129

² Universiti Malaysia Kelantan; khairulhisyam@umk.edu.my;  ORCID ID: 0000-0003-1903-6460

³ Universiti Malaysia Kelantan; syima.mn@umk.edu.my;  ORCID ID: 0000-0001-6238-022X

* Correspondence: alexander.s@umk.edu.my; 0172189704

Abstract: This research delves into how effective language learning apps for Malay native speakers who are learning German. The study used a combination of surveys, interviews and analysis of app usage data involving 50 participants. The survey results showed that participants were generally satisfied (rated at 4.2 out of 5) and experienced improvements in vocabulary (rated at 4.5 out of 5) and grammar (rated at 4.0 out of 5). However, there were lesser improvements in pronunciation skills (rated at 3.6 out of 5). Gamification and spaced repetition techniques proved to be successful in enhancing engagement and retention. During interviews participants mentioned facing difficulties with phonetics, complex grammar rules and the need for contextual and cultural integration in their learning process. They appreciated features such as feedback and real-life scenarios for contextual learning. Analysis of app usage data indicated a relationship between the time spent using the app and proficiency gains underscoring the importance of regular practice. The study findings indicate that language learning apps can be tools for Malay speakers studying German especially in expanding vocabulary and enhancing grammar skills. However, improvements in pronunciation support and integration of contexts could further enhance the overall learning experience. These insights can be valuable for educators and app developers to facilitate discussions, on utilizing technology for language learning purposes.

Keywords: Language learning apps; Malay native speakers; German language; Vocabulary and grammar; Pronunciation assistance



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1. INTRODUCTION

In today's interconnected world learning languages has become increasingly important offering valuable opportunities in both personal and professional realms. Among the array of languages available German stands out for its rich cultural heritage and significant contributions to various fields such as economics and science. However mastering German can be quite challenging for those who are not native speakers, particularly individuals fluent in Malay which has distinct phonetic, grammatical, and syntactic structures.

The rise of technology has revolutionized language learning through the introduction of interactive language learning apps. These apps provide an approach to surmounting language barriers with features like engaging interfaces gamified learning experiences and adaptive algorithms that promise a more efficient path to acquiring new languages compared to traditional methods. Despite

their increasing popularity there is a lack of research focusing on the effectiveness of these apps for Malay speakers trying to learn German.

This research endeavor aims to fill this gap by investigating how language learning apps support Malay speakers in their journey to master the language. It seeks to assess the impact of these tools on learning outcomes, pinpoint the key features that enhance learning experiences significantly and shed light on the specific obstacles encountered by this demographic group. The core research inquiries guiding this investigation include to what extent do language learning apps benefit Malay speakers studying German? What are the advantages of these apps? What challenges do Malay speakers face in this situation?

The importance of this research is seen in how it can benefit both technology and language learning. By understanding the requirements and encounters of Malay speakers the results could influence the creation of better suited and efficient language learning tools. As a result, this study has implications for teachers, app creators and decision makers aiming to improve language education in a multilingual society.

2. METHOD & MATERIAL

This research study utilizes a mixed methods approach to investigate how effective language learning apps are for Malay individuals learning German. By combining qualitative methods, the study aims to offer a comprehensive analysis of the learners' experiences and results.

2.1 Participants

The participants in this study will be Malay speakers who are using language learning apps to learn German. 50 participants will be included in the sample recruited from two introductory German language classes.

2.2 Data Collection Methods

Data will be gathered through surveys, interviews, and analytics on app usage.

2.3 Surveys/Questionnaires

Participants will complete a survey that collects quantitative data on their usage habits progress in learning and self-assessed proficiency, in German. The survey will use Likert scale questions to evaluate user satisfaction and perceived effectiveness of app features.

2.4 Interviews

Semi structured interviews will be conducted with 15 participants to delve deeper into their experiences qualitatively. The interviews will explore challenges faced strategies used to overcome difficulties and perceptions of how the app has influenced their language learning journey.

2.5 Data Collection

Upon receiving participants' approval, we will gather usage data directly from the language learning apps. This information will encompass metrics, such as time spent using the app, how frequently it is used levels completed and progress made in specific language skills like vocabulary, grammar, and pronunciation.

2.6 Data Analysis

The team will examine data obtained from surveys and app usage analytics through descriptive and inferential statistical analyses to uncover trends and correlations. User experiences will be summarized using measures of tendency and variability while correlation analysis will delve into the connections between usage patterns and learning achievements.

Qualitative data gathered from interviews will be transcribed and analysed using analysis techniques. By coding recurring themes and patterns, we aim to gain insights into participants experiences and challenges within a rich contextual framework.

By employing these mixed methods approach, the team ensure an exploration of the research inquiries. This method allows the team to delve deeply into understanding the effectiveness of language learning apps, for Malay speakers embarking on German language acquisition.

3. FINDINGS

The study's results are divided into three parts: survey outcomes, interview findings and usage data of language learning apps. These sections give an insight into how effective language learning apps are for Malay native speakers studying German.

3.1 Survey Outcomes

Based on responses from 50 participants the survey uncovered trends. Participants rated their satisfaction on a scale from 1 to 5 with a score of 4.2 indicating high overall satisfaction. The survey highlighted improvements in vocabulary (average score; 4.5) and grammar (average score; 4.0). However, pronunciation enhancement received an average score of 3.6 suggesting that it may need more attention. The use of elements and spaced repetition techniques was highly effective based on average scores of 4.7 and 4.6 respectively.

3.2 Interview Findings

In depth interviews with 15 participants yielded qualitative insights. Common challenges included struggles with phonetics and complex grammatical structures specifically verb conjugations and noun cases. Participants valued the nature of the apps praising features like instant feedback and contextual learning scenarios as highly beneficial. Some noted that the apps lacked context at times, which they believed was crucial, for deeper linguistic and cultural understanding. To tackle challenges people used resources like watching German language videos and practicing conversations with native speakers.

3.3 App Usage Data Analysis

An examination of usage data from the app revealed a link between the time spent using it and reported progress in proficiency. Those who devoted at 30 minutes daily to the app for three months displayed better vocabulary retention and grammatical accuracy. On average users spent 25 minutes per session engaging with the app five times a week. Users frequently made use of features like spaced repetition and gamified challenges, which aligned with satisfaction and effectiveness ratings. In summary, the findings suggest that language learning apps are aids for Malay speakers studying German especially in terms of expanding vocabulary and improving grammar. Nonetheless enhancements, in pronunciation assistance and integration of context could further enrich the learning journey.

4. DISCUSSION

The study findings shed light on how effective language learning apps for helping Malay native speakers acquire German while also pointing out areas that could be improved. The high satisfaction ratings and noticeable enhancements in vocabulary and grammar emphasize the effectiveness of these tools. These results are in line with research that highlights the advantages of incorporating gamification and spaced repetition into language learning methods (Deterding et al., 2011).

However, the lower scores for improvements in pronunciation indicate an area where apps could use some fine tuning. This corresponds with studies that have identified pronunciation as a significant challenge for language learners using digital platforms (Kukulska Hulme & Shield, 2008). Improving pronunciation features by integrating speech recognition technology and offering more specific feedback could help bridge this gap.

Insights from interviews suggest that while the apps are engaging and beneficial the absence of context may limit the depth of language acquisition. This observation aligns with Vygotsky's Social Interaction Theory, which underscores how crucial cultural immersion is in language learning (Vygotsky, 1978). To address this issue developers could incorporate culturally diverse content and interactive scenarios that mirror real world German speaking settings.

The positive link, between app usage duration and proficiency improvements underscores the significance of maintaining engagement. Those who stuck to a practice routine made significant improvements supporting Krashen's Input Hypothesis, which emphasizes the importance of regular exposure to the language (Krashen, 1985).

However, it's important to note some limitations in the study. Relying on self-reported data and having a small sample size could impact how broadly the results can be applied. Future studies might want to consider increasing the sample size and incorporating an aspect to look at how well language skills are retained over time.

To sum up while language learning apps are beneficial for Malay speakers studying German enhancing them with pronunciation assistance and cultural content could make them even more effective. These findings provide suggestions for educators and app developers contributing to ongoing discussions, about using technology to improve language learning.

5. CONCLUSION

This research delved into how language learning apps work for Malay individuals learning German showing notable progress in vocabulary and grammar skills. The apps elements like gamification and spaced repetition proved to boost user engagement and learning results effectively. However, the study also pointed out areas that could use improvement in supporting pronunciation and integrating cultural context.

The strong link between app use and skill enhancement highlights the significance of consistent practice in mastering a language. Participants who used the apps frequently noted language retention supporting Krashen's Input Hypothesis and emphasizing the importance of continuous exposure to the target language.

While these positive outcomes are promising the study's constraints, such as relying on self-reported data and a small sample size indicate the need for investigation. Future research should

involve more varied samples, along with longitudinal approaches to gain deeper insights into long term learning results and retention.

In conclusion although language learning apps prove effective in aiding Malay speakers in acquiring skills improvements in pronunciation tools and cultural immersion are recommended. These discoveries offer guidance, for educators and developers contributing to enhancing technology driven language learning methods.

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