

# INTEGRATION OF LANGUAGE LEARNING MOBILE APPLICATION IN UNIVERSITY LANGUAGE PROGRAM

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## ABSTRACT

The integration of mobile technology in language education represents notable progress, providing a versatile tool for learners of different ages to acquire a language. The poster will focus on research evaluating the efficacy of the Duolingo mobile app in augmenting Russian language proficiency for A1 and B1 level students at the University of Warsaw. The study aims to investigate the linguistic perspective and examine how the application enhances language proficiency in reading, writing, speaking, and listening. The research was conducted during the winter term of the academic year 2022/2023 and involved 80 participants. To assess the efficacy of Duolingo's digital solution compared to traditional teaching methods, a mixed-methods approach was employed. This entailed integrating engagement metrics, linguistic proficiency assessments, and user feedback to evaluate the app's efficacy across various age groups. The research indicates that Duolingo is a promising tool for improving learners' motivation and adaptability in educational contexts. The app's functions, such as real-time progress monitoring, prompt feedback, and community engagement, played a key role in creating a stimulating educational setting for students of different ages. The poster will include partial results of the study, which suggest that students at various stages frequently interacted with the Duolingo app. Most respondents confirmed that they used the app daily, with each learning session averaging around 30-40 minutes. Most students would recommend the app to others, noting its effectiveness and enjoyable user experience. Additionally, a correlation was found between the duration of app usage and language proficiency levels, with students who invested more time in the app generally achieving higher outcomes, although exercises aimed at developing speaking and writing skills were perceived as less effective. The data indicates that incorporating mobile applications could significantly transform traditional language education frameworks, potentially resulting in more tailored and efficient learning opportunities.

## KEYWORDS

Mobile Assisted Language Learning, Language Acquisition, Mobile Applications, Duolingo Efficacy

## 1. INTRODUCTION

Over the past decade, the use of mobile technologies in education has significantly increased. This trend is particularly noticeable in foreign language teaching, where mobile apps have become increasingly popular. These apps offer a range of features, including mobility, personalization, interactivity, multimedia, flexibility, and access to online resources (Kukulska-Hulme & Traxler, 2013). Foreign language learning applications provide support for both independent language study and traditional teaching methods, enabling students to engage in practice outside the classroom. Additionally, Burston (2014) noted that these applications assist in the self-regulation of the learning process and offer immediate feedback, which is essential for effective language learning. The use of mobile applications for teaching foreign languages, also known as Mobile Assisted Language Learning (MALL), can be implemented by utilizing established concepts, strategies, and pedagogical models.

## 2. STUDY OBJECTIVE

The pilot study aimed to evaluate participants' opinions regarding the use of mobile applications and test the effectiveness of the Duolingo app. To achieve this objective, the study endeavored to answer the following questions: to what extent do students and course attendees use mobile applications, and to what extent do

mobile applications assist with reading, writing, listening, and speaking? Hypothesizing that mobile tools can enhance foreign language proficiency across different linguistic levels, a preliminary analysis was conducted. The study involved analyzing popular language apps used by university students and attendees, followed by administering surveys, language proficiency tests, and a comprehensive pilot study. The pilot study provides an initial framework for a comprehensive experimental investigation that requires additional work, currently underway. However, this article concentrates on the results and conclusions obtained during the implementation phase of the pilot study.

## 2.1 Popularity of Language Learning

Russian is the fifth most popular language at the University of Warsaw, having ranked fourth in the 2021/2022 academic year. The School of Eastern Languages and the School of Foreign Languages offer Russian language classes, while the Open University of the University of Warsaw provides commercial courses. Lectures and courses catering to all levels of proficiency are available.

Table 1. Number of enrollments in language classes

Year	Russian	English	German	Spanish	French	Italian	Other
2022/2023	524	5222	663	625	608	261	1575
2021/2022	632	5632	742	671	625	280	1462
2020/2021	623	5785	760	712	699	272	1413
2019/2020	674	6003	702	634	677	322	1311

## 2.2 Research Group

In total, 78 individuals participated in the study, with 60 completing the full survey and partially engaging in proficiency test verification. Furthermore, 18 students at the A1 level took part in the entire pilot educational experiment, which consisted of both surveys and proficiency tests.

## 2.3 Method and Research Tool

The study utilized quasi-experimental methods and administered two surveys that were revised based on participant feedback. In the pilot study, a pretest and posttest were administered using two Russian language certification exams, TRKI (Test of Russian as a Foreign Language) at levels A1 and B1.

## 2.4 Analysis of Survey Data

The survey gathered responses from 46 female and 32 male participants, with 45% of these being under the age of 20, 38% aged between 21 to 30, 10% aged between 31 to 40, 5% aged between 41 to 50, and 1% being over the age of 50. The location of the participants revealed that a significant 72% lived in cities with a population of over 1 million people, followed by 11% from cities ranging from 100,000 to 1 million people, and 17% from towns with up to 100,000 people. Out of the 78 individuals examined, only 18 fully participated in the experimental final study.

## 2.5 Proficiency Test Results Compilation

All 18 participants in the certification test successfully passed it. Ten individuals scored above 95%, six scored above 85%, and two scored 75%. There was a noticeable correlation between the amount of time students spent on the Duolingo application and their success rate. The most commonly used types of exercises show that when designing them, the creators of the Duolingo platform aim primarily to develop two language subsystems in users - grammar and vocabulary (Aleksandrowska, Stanulewicz, 2020). This is evident in the test results, as in the blocks related to grammar and vocabulary, students using the Duolingo application achieved results that were 10% better in vocabulary and 8% better in grammar than students in the control group.

### 3. CONCLUSION

The majority of participants enthusiastically used the Duolingo application, accessing it regularly and engaging with it daily for an average of 30-40 minutes. While their primary goal was to expand their vocabulary, they found reading comprehension to be the most effective skill within the application. However, they rated speaking and writing as less effective teaching methods within the application. Most study participants had a positive view of Duolingo and would recommend it to others due to its effectiveness and enjoyable user experience. However, some participants questioned its comprehensiveness as a full-fledged language education resource. All participants passed the A1 level certification exam, with those who spent more time on the app achieving higher scores. To ensure maximum user engagement, regular discussions and instructor support were provided to offer necessary assistance with technical issues and platform modifications. The pilot study's results, presented on the poster, are only a portion of the research. Further details of this pilot study will be described in the article for issue 62/1 (2024) of the journal *Neofilolog*, which is currently under review. Future research on mobile language apps should examine their effectiveness, particularly with regard to the links between the design of the application's exercises, the effectiveness of developing specific language skills, and the implications for mobile learning.

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