



Perception towards the use of Duolingo Application for learning English language skills The students in the foundation year program University of Gezira

BY

Dr. Halima H. A. Mohamed

**Qassim University - College of Languages & Humanities
Department of English Language & Literature**

Doi: 10.21608/jasep.2025.423394

استلام البحث: ٢٠٢٥/٢/٢٢

قبول النشر: ٢٠٢٥/٣/١٤

Mohamed, Halima Hassab Elrasol Abd Elgadir (2025). Perception towards the use of Duolingo Application for learning English language skills The students in the foundation year program University of Gezira. *The Arab Journal of Educational and Psychological Sciences*, Arab Institute for Education, Science and Arts, Egypt, 9(48), 817-834.

<http://jasep.journals.ekb.eg>

Perception towards the use of Duolingo Application for learning English language skills The students in the foundation year program University of Gezira

Abstract

Duolingo application could help students in the learning process. could make learning process much more interesting and. the researcher will investigate student's perception towards the perceive of usefulness and ease of use of Duolingo Application assisted English language learning. Furthermore, the researcher uses descriptive qualitative Duolingo as a method of the study. The participants (50) students in the foundation year program University of Gezira Data were collected through questionnaire .After collecting the data, the researcher analyzes the data by (spss). The findings of this study reveal that most of the respondents had positive perceptions toward the usage of mobile assisted language learning (Duolingo) in regard to both const ructs perceived usefulness (PU) and perceived ease of use The findings of the study suggest that Duolingo is effective at teaching speaking in addition to listening and reading applicationThe paper concludes by offering a number of recommendations which may further contribute to the improvement of teaching methods by advancing the widespread application of modern technology.

Keywords : Duolingo -University of Gezira – Application-Mobile Apps

1:1 Introduction

At present days, the industrialized world has demonstrated remarkable progress across various domains, particularly in science and technology, where innovative methods have supplanted traditional approaches. The pervasive influence of the

Internet and other contemporary technologies has precipitated significant transformations in the educational sphere, reflecting the broader societal advancements driven by human endeavor mobile phones are the most commonly used devices for learning The ubiquity of mobile devices has redefined the boundaries of education, enabling learning to transcend physical constraints and occur irrespective of the presence of an instructor. This recent methodology of their use is called mobile learning (m-learning). Therefore, the key term, “mobile learning”, is a language-teaching platform that offers free onlinecourses available on mobile apps and the web as being available “anywhere, anytime (Klimova,, 20019)

Apps are becoming an indispensable part of learning, including foreign language learning is(Sura,2017) .One of the Duolingo Application apps witch has been found to promote constructive English language learning experiences in various language skills, including vocabulary learning, reading skills, writing skills, and speaking skills Duolingo is the most popular educational app in the world. Over 10 million people have a Duolingo streak longer than a year(Ortiz,2022). In total, learners on Duolingo complete more than 13 billion exercises per week Previous researchhas shown that the beginning portion of the Spanish and French courses (the first five units) are effective in teaching listening,reading, and speaking skills (Jiang et al., 2021; Jiang, Rollinson,Plonsky, & Pajak, 2020). Specifically, Jiang et al. (2020) showed that Duolingo learners who completed the first five units of Spanish or French on Duolingo achieved proficiency levels in reading and listening comparable to US-based university students who took four semesters of English or French language classes. Due all of the reason, the researcher is interested in investigating the students’ perception towards the use of Duolingo Application

1.2 Research Question:

The current study seeks to answer following research questions:

1. What are the perceptions towards the perceive ease of use of Duolingo Application for English language learning among The students in the foundation year program University of Gezira?
2. What are the perceptions towards the perceive usefulness_of Duolingo Application for English language learning among the students in the foundation year program University of Gezira?

1.3 Objectives:

This study aims to:

1. investigate the perception towards the perceive of usefulness of Duolingo Application for English language among the students in the foundation year program University of Gezira
2. investigate the perception towards the perceive ease of use of Duolingo Application for English language among the students in the foundation year program University of Gezira

1.4 Significance of the Research:

This research lies in its potential to inform educators, researchers, and policy makers about the perception towards perceive ease and usefulness of Duolingo Application for English language learning. It is hoped that the findings of this study could provide some insights to the linguists and educators on the information on language planning and policy related to. Moreover, by having better understanding on the usage of Duolingo Application, students would have increased opportunities for learning English outside the formal setting. It will also provide teachers with some knowledge in which this

will help to promote better learning process. Lastly, the study also becomes a useful launching platform for further studies in the area of the use of technology or devices in education field

1.5 Study Limits:

The current study is limited by the following set of limitations:

(1) Objectivity Limits: The current study was limited perception Toward sthe use of Duolingo Application for English language among The students in the foundation year program University of Gezira

(2) Human Limits: The students in the foundation year program University of Gezira

(3) Spatial Limits: Gezira Governorate.

(4) Temporal Limits: 2022-2023

2: Literature Review:

This section of the paper reviews literature :

2.1 The Rise of Mobile Apps in Education

Mobile apps continue to reshape the educational landscape, they are empowering students and educators alike, opening doors to new opportunities, and creating a future where learning is both personalized and limitless. Mobile apps have grown rapidly in the education sector because they offer several benefits that traditional methods often can't provide. Here are some key reasons why mobile learning is becoming so popular

1. Accessibility

One of the biggest advantages of educational apps is that they make learning accessible to everyone.

2. Personalized Learning Unlike traditional classrooms, where one teaching method may not suit all students, mobile apps allow for personalized learning experiences. Students can learn at their own pace, revisit difficult concepts, and skip what they already understand. This enhances the learning experience, making it both more effective and enjoyable.

3. Interactive Learning: Learning through mobile apps can be much more engaging than reading textbooks. Many apps use games, quizzes, videos, and animations to make complex subjects easier to understand. This interactive approach not only makes learning fun but also improves retention and understanding.

4. Cost-Effectiveness: Traditional education often involves expenses like textbooks, transportation, and tuition fees. Mobile apps offer a cost-effective alternative by providing access to a wide range of educational materials, often at a lower cost or even for free. This helps make education more affordable for everyone (Hao, 2014)

2.2: Duolingo Application:

2.2.1: Idea of Duolingo

The project was originally financed by von Ahn's MacArthur fellowship and a National Science Foundation grant. The idea of Duolingo was formulated in 2009 by Carnegie Mellon University professor Luis von Ahn and his Swiss-born post-graduate student Severin Hacker. Von Ahn had sold his second company, reCaptcha, to Google and, with Hacker, wanted to work on an education-related project. Von Ahn stated that he saw how expensive it was for people in his community in Guatemala to learn English. Hacker (co-founder and current CTO of Duolingo) believed that "free education will really change the world" and wanted to provide an accessible means for doing so. He was recognized by the National Inventors Hall of Fame for his contributions to language learning and technological development.

2.2.2: Duolingo apps

Duolingo is a commercial language-teaching platform that offers free courses on mobile apps and on the web. It is an

American educational technology company that produces learning apps and provides language certification. Duolingo offers courses on languages, ranging from English, French, and Spanish to less commonly studied languages such as Welsh, Irish, and Navajo, and even constructed languages such as Klingon. It also offers courses on music and math. The learning method

incorporates gamification to motivate users with points, rewards and interactive lessons featuring spaced repetition. The app promotes short, daily lessons for consistent-phased practice and also offers the English Test, an online language assessment, and Duolingo ABC, a literacy app designed for children. The company follows a freemium model, with optional premium services like Super Duolingo and Duolingo Max, which are ad-free and provide additional features. Additionally,

Features and media (Robertson, 2016)

In 2024, Duolingo made several changes: it replaced some contractor tasks with AI in January, launched the widget feature on Android in March, acquired Detroit-based design studio Hobbes, introduced Friend Streak in August, allowing students to share a streak together with their friends, and released math and music courses for Android in September. Duolingo introduced various new features, including Video Call and mini games called Adventures. In October Duolingo introduced Duolingo Score. (Ortiz, 2022)

2.2.3 Duolingo Course

The Duolingo course is aligned with the CEFR (Council of Europe, 2017), and includes lessons from A1.0 level (targeted to real beginner/basic user) to B1 level (intermediate/independent user). which covers general functional and grammatical topics A1 level content (section A1.2), which covers general functional

and grammatical topics, Lessons are built around communicative topics such as family, food, and travel; each topic introduces some grammar and cultural concepts, although with limited explanations, but the main focus is teaching new words and sentence structures through various exercise types (e.g., gap-filling, translations, listen and repeat). Typical exercises include translation the main focus is teaching new words and sentence structures through various exercise types (e.g., gap-filling, translations, listen and repeat). Typical exercises include translation Duolingo also possesses gamified elements, such as challenging tasks, reward incentives, systematic levels, and user rankings based on achievement (Shortt et al., 2023).

the new Duolingo Version 2 requires all learners to progress through the same path, going through the different difficulty levels in each section in a logical and linear manner (Figure 1). This new version aligns more directly with traditional classroom instruction, where the teacher typically follows a syllabus and learners are exposed to the content in the same order and manner. Version 2 provides more comparability between classroom and app-based learners in the present study (Matt, 2023).

Lessons and learning features

At Duolingo, we make learning fun, but we're also serious about effective teaching! Duolingo learners improve their language skills after just three months, and learners who complete five sections score as well as students who took five semesters of university language classes. Each Duolingo course is made up of units that focus on communication goals, and each unit covers the vocabulary and grammar needed to achieve that goal. Right from the start, you'll interact with the language by completing lessons on speaking, writing, reading,

and listening to build up your proficiency. In each unit, you'll study just a few vocabulary and grammar topics in bite-sized lessons that make learning fun and accessible. Units begin with easier exercise types, and they get a bit more challenging as you progress—for example, in earlier exercises, you might learn to recognize a new word, and eventually you'll be typing it out yourself. Each unit also includes personalized practice lessons that are unique to each learner: The exercises in your practice lessons focus on content that it's time to review and specific mistakes you've made. (Hao, Y.; 2019)

With Duolingo, you don't need to decide what to study next or the best way to review—our expert-designed courses integrate speaking, writing, reading, listening, and personalized practice into every unit. There are also short dialogues called Stories for reading and listening practice (represented by the book icon) and DuoRadio episodes for entertaining listening practice with our quirky characters (headphones icon). Intermediate learners can also use our award-winning Duolingo Podcast (available for Spanish and French learners) for listening practice on the go. In each episode, you'll learn something new about the regions and people who use the language, and brief explanations from a narrator will help you understand the language. You can also read along with transcripts online. Learners studying languages with a different writing system, like Japanese, Korean, or Greek, will also find special lessons dedicated to reading practice. You'll learn to associate the characters or letters used in the language with the sounds they represent. (Robertson 2016)

2.2.4: Duolingo Math

Duolingo Math is an app course for learning elementary mathematics. It was announced on YouTube on August 27, 2022, at the Duocon 2022 event. Duolingo Math covers math

topics through an interactive and gradual approach. It starts with basic arithmetic—addition, subtraction, multiplication, and division. The app also teaches fractions and decimals, focusing on comparing, converting, and calculating. Geometry lessons include understanding shapes, calculating area and volume. Measurement is another focus, with exercises on using and converting different units like length and time. Duolingo also allows its users to play math games. (Ortiz, 2022)

2.2.6: Duolingo for Schools

Duolingo for Schools is designed to help teachers use Duolingo in their classrooms. It allows teachers to create classrooms, assign lessons, track student progress, and personalize learning. (Ortiz, 2022)

2.2.9 : Duolingo English Test

The Duolingo English Test (DET) is an online English proficiency test that measures proficiency in reading, writing, speaking, and listening in English. It is a computer-based test scored on a scale of 10–160, with scores above 120 considered English proficiency. The test's questions algorithmically adjust to the test-takers' ability level. The test's certificate is reportedly accepted by over 5,500 programs internationally, albeit with exceptions.

2.2.10: Gamification

Duolingo provides a competitive space, such as in leagues, where people can compete with randomly selected worldwide player groupings of up to 30 users. Leagues: Bronze, Silver, Gold, Sapphire, Ruby, Emerald, Amethyst, Pearl, Obsidian, Diamond. Rankings in leagues are determined by the number of experience points earned in a week. Badges in Duolingo represent achievements earned from completing

specific objectives. Users can also create their own avatars. Duolingo has a widget feature on iOS and Android. The widget feature initially started as Duolingo's annual hackathon project. The iOS widget has 39 illustrations designed by Kyle Ruane that were intended to be another daily reminder to complete lessons. On the top part of the widgets is the user's daily streak. On the Duolingo Blog, they wrote that they "decided to come up with a series of illustrations that would show Duo's mood at different parts of the day".

Any lesson completed in Duolingo will count towards the user's daily streak. The daily streak's visual symbol in the app is fire. Duolingo's "Friend Streak" lets users maintain streaks with up to five friends. Streaks encourage consistent daily practice and help build a habit of regular learning.

The app has a personalized bandit algorithm system (later the A/B tested variant recovering difference softmax algorithm) that determines the daily notification that will be sent out to the user.(Klimova,2019)

2.2.12Duolingo Score:

Acordig to Matt (2023). The Duolingo Score is an estimate of users' proficiency in the language they're learning in CEFR-aligned courses. Duolingo Score provides a granular assessment of what a student has learned and they can do with the language. DET is using a similar scoring system. The most developed CEFR-aligned courses (French, English and Spanish) cover Duolingo Score from 0 to 130

| Duolingo Score | CEFR level | Student can... |
|----------------|---------------|---|
| 0–9 | very early A1 | use simple words and phrases in some common scenarios |
| 10–19 | early A1 | talk about themselves and where they live and ask and answer simple questions |

| | | |
|---------|-----------|---|
| 20–29 | high A1 | discuss their daily routine, order food at a restaurant, and chat a little |
| 30–59 | A2 | have basic conversations about familiar topics, including weather, shopping, hobbies, and holiday plans |
| 60–79 | early B1 | handle common situations while traveling, ask for directions, and make reservations |
| 80–99 | high B1 | share their opinion, tell stories, and navigate most daily situations |
| 100–114 | early B2 | have deep discussions about their interests and understand news, movies, and jokes |
| 115–129 | high B2 | express themselves in most situations and uses the language in professional and academic scenarios |
| 130–160 | C1 and C2 | easily understand all that they hear or read and expresses nuanced thoughts in sophisticated language |

3. Research Methodology

3.1 methods :

The methods are based on a literature review of available sources found on the research topic in two acknowledged databases. The research method adopted in this study was Descriptive analytical approach Thus, the researcher will use this kind of method because the researcher focuses on analyzing students' perception, so the data that the researcher used will be presented descriptively

3.2 Participants:

The participants of this study is semester one students of English Education study program in the foundation year program at Gezira University Afterwards, the researcher chooses 50students as a representative sample. They were chosen because they are using Application

3.3. Research Instruments:

A survey questionnaire employed in this study was adapted from study acceptance of information technology:

system characteristics, user perceptions and behavioral impacts and was divided into two sections. Section A consists of 6 items which seek information drawn out from information regarding perceived usefulness (PU) items aimed at extracting students' perceived questionnaire was designed using 6 Likert scale for Section A and Section B. Both sections indicated 6 "strongly agree", 5 "agree", 4 "slightly agree", 3 "slightly disagree", 2 "disagree", and 1 "strongly disagree".

Before the questionnaire was employed in this study, a pilot study was carried out to ensure the validity and the reliability of the instrument

○ **Apparent validity:**

researchers verified its validity and suitability for the individuals in the research sample by presenting it to a group of specialized experts, and they expressed an agreement (80%), and therefore it was approved.

○ **Reliability:**

"The test is considered reliable if it is applied to the same sample members in two different periods and under similar conditions and gives the same results." Therefore, the researchers applied the scales to (15) individuals and then reapplied them to the same sample members after a period of (10) days. The correlation coefficient was found between the first and second applications, and the reliability coefficient for the scale was (0.83)

3.3. Data Collection and Analysis

In order to collect data, the questionnaire was distributed to the respondents the responses in the questionnaires were examined and analyzed computed by SPSS and converted to mean scores in order to obtain perception on the usage and usefulness of Duolingo Application among The students in the foundation year program University of Gezira

4:0Presentation, analysis, and discussion of the results:

****Presentation of the results of the first question :**

What are the perception Towrads the perceive usefulness Duolingo Application assisted English language learning among The students in the foundation year program University of Gezira

Descriptive statistical analysis of Perceived usefulness

| usefulness | Mean | Std. Deviation |
|---|------|----------------|
| Using Duolingo gives me greater control over my task | 5.29 | 0.84 |
| Duolingo enables me to accomplish task more quickly | 4.69 | 0.78 |
| Duolingo supports critical aspects of my task | 5.22 | 0.72 |
| Using Duolingo increases my productivity | 5.15 | 0.78 |
| Using Duolingo improves my task performance | 5.14 | 0.79 |
| Using llow me to accomplish more taskthan would otherwise be possible | 4.90 | 0.79 |
| Using Duolingo enhances my effectivenesson the tasks completion | 4.82 | 0.78 |
| Using Duolingo makes it easier to do my task | 5.29 | 0.84 |
| Overall, I find Duolingo useful in my tasks | 5.15 | 0.78 |

**** Presentation of the results of the second question :**

(1) What are the perception Towrdsthe perceive ease of use of Duolingo Application assistedEnglish language learning among The students in the foundation year program University of Gezira.

Descriptive statistical analysis of Perceived Ease of Use

| Ease of Use | Mean | Std. Deviation |
|--|-------------|-----------------------|
| I find the Duolingo cumbersome to use | 5.02 | 0.78 |
| Learning to operate the Duolingo is easy for me | 2.28 | 0.99 |
| Interacting via the Duolingo is often frustrating | 2.39 | 1.07 |
| I find it is easy to get Duolingo to do what I want it to do | 4.74 | 0.88 |
| Duolingo is rigid and inflexible to interact with | 2.69 | 1.00 |
| It is easy for me to remember how to perform my task using | 5.02 | 0.78 |
| Interacting via the Duolingo requires a lot of mental effort | 5.23 | 0.86 |
| My interaction via the Duolingo is clear and understandable | 4.70 | 0.86 |
| I find it takes a lot of effort to become skillful at using Duolingo | 3.03 | 1.17 |
| Overall, I find the Duolingo is easy to use | 5.23 | 0.86 |

The findings of this study reveal that most of the respondents had positive perceptions toward the usage of mobile assisted language learning (Duolingo) in regard to both constructs perceived usefulness and perceived ease of use. Majority of the respondents stated that they agreed with all the statement items of perceived usefulness with the highest percentage for each item. Therefore, the findings explain that the respondents believed using Duolingo brings a lot of benefits for them; this is an indication of the positive perception of the role of Duolingo in enhancing learners' English.

Recommendations:

In light of the findings, the researcher suggests the following

1. Urge English teachers to encourage students to use modern technology as a means to develop their language skills
2. it is suggested that a bigger sample should be included for future study in order for the results to be generalized to bigger population, the suggestion should be taken in consideration by the teachers or educators for further action in order to make learning process become easier and interesting.,
3. Due to the limitation of this research, the researcher recommended for the next
4. researcher who want to do research about Duolingo application that they need to use pre-test and post-test more.

References:

- Andersen I. Mobile Apps for Learning English. Available online: https://skemman.is/bitstream/1946/14524/1/English_BA_the_sis_FINAL_.pdf (accessed on 12 December 2018).
- Autonomy. Int. J. Comput.Assist. Lang. Learn. Teach. (IJCALLT) 2015, 5, 75–88. [CrossRef]
- Parvin, R. H., & Salam, S. F. (2015). The effectiveness of using technology in English language classrooms in government primary schools in Bangladesh. FIRE: Forum for International Research in Education, 2(1), 47-
- Pourhossein Gilakjani, A. (2014). A detailed analysis over some important issues towards using computer technology into the EFL classrooms. Universal Journal of Educational Research, 2(2) 146-153,
- .Sura, M. N. (2017, April). Use of Technology in English Language Teaching and Learning University of Baghdad.
- Hao, Y.; Lee, K.S.; Chen, S.-T.; Sim, S.C. An evaluative study of a mobile application for middle school students struggling with English vocabulary learning. Comput. Hum. Behav. 2019, 95, 208–216. [CrossRef]
- Klimova, B. Impact of mobile learning on students' achievement results. Educ. Sci. 2019, 9, 90. [CrossRef] Leis, A.; Tohei, A.; Cooke, S.D. Smartphone Assisted Language Learning and Robertson, Adi (December 16, 2011). "Duolingo will translate the internet while teaching languages". The Verge. Archived from the original on January 8, 2012. Retrieved February 3, 2016
- Matt (February 20, 2023). "The Complete List Of EVERY Duolingo Language". Duoplanet. Archived from the original on September 21, 2022. Retrieved September 21, 2022 "Duolingo Case Study – DynamoDB". Amazon

Web Services, Inc. 2016. Archived from the original on June 28, 2016. Retrieved December 23, 2019.