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Investigating the Usability of Duolingo Application in Fostering autonomous speaking skill proficiency

Case study: Third- Year Economics Students - Ibn Khaldoun University, Tairt

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the requirements Degree for Master's in Didactics**

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*D*edication

All praise and sincere gratitude are directed to Allah, for
giving us the strength to complete this work.

We dedicate this work to the people we cherish the most in life

To our parents who have always been an inspiration to our efforts and
accomplishments

And because they encouraged, supported us, and believed in us

To our beloved siblings

To all our teachers Mr Khaled Belarbi, Mr Moulai Hacene Yacine, Ms Fatima

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To all our university friends, and colleagues who
made this journey unforgettable.

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Abstract

This study is mainly concerned with the field of mobile-assisted language learning. The objective of this investigation is to highlight the relevance of developing independent abilities and autonomy in language learning among students, especially considering the emergence of different technological devices. Thus, the current study seeks to investigate the usability of the Duolingo application in promoting speaking skill proficiency autonomously. To examine the usability and measure the efficiency of the Duolingo application, we used a mixed-method approach, combining quantitative and qualitative data. A questionnaire to third-year LMD students enrolled in the Department of Economic, Commercial, and Management Sciences at the University of Tiaret, and a semi-structured interview with teachers within the same department. The research findings support the effectiveness of the Duolingo application based on participants' motivation and effort to develop their English language proficiency. Additionally, even though language-based applications have emerged considerably, teachers still face difficulties in using them effectively.

Keywords: Autonomy, Duolingo, English Language Learning, Mobile Assisted Language Learning, Speaking proficiency.

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List of Acronyms and abbreviations

CALL	Computer-Assisted Language Learning
CRAPEL	Centre de Recherche et D'Applications Pédagogiques En Langue
E-Learning	Electronic-Learning
4IR	Fourth Industrial Revolution
ICT	Information and Communication Technology
M-Learning	Mobile-Learning
MALL	Mobile Assisted Language Learning
PBL	Project-Based Learning
PC	Portable Computer
PDA	Personal and Digital Assistant
TELL	Technology Enhancing Language Learning

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General Introduction

In the present globalized world, English has gained the status of an international language and emerged as a significant tool for effective communication and accessing information. In Algeria, the increasing demand for English language proficiency has been progressively growing across various educational specialties. Consequently, this indicates that proficiency in English has been necessary for anyone to advance in their career. As far as the growing interest of non-English learners rises in correlation with the tendency to enhance their English language proficiency and communication. However, due to various limitations like affordability and practicality, not everyone may have access to traditional language learning methods like attending classes or having tutors.

To address this issue, the current research highlights the increasing demand for English language proficiency and the emergence of mobile-assisted language learning (MALL) as a reaction. With the advancement of information and communication technologies (ICT), individuals can now take advantage of mobile devices such as smart phones and other digital gadgets to learn English as a foreign language. This includes the use of language learning apps such as Duolingo designed specifically to cater to independent learners, making language learning convenient and accessible.

Duolingo is one of the most popular apps among non-English language learners to develop their English proficiency especially speaking skills. Naturally, this application is full of features and benefits that improve the learning process.

The overall objective of this study is to find out the impact of Duolingo apps on economics students at Ibn Khaldoun University. By shedding light on the increasing demand for English language proficiency and its correlation with effective communication across the globalized world and autonomous learning, In addition, the current study attempts to explore the challenges faced by non-English language learners when using Duolingo and how this

mobile-assisted language learning application contributes to the development of autonomous learning.

The following objectives provide the foundation for our empirical investigation: to investigate the connection between speaking and successful communication in English and the growing need for English language skills. To find out the challenges non-English learners deal with though attempting to use the Duolingo app. To evaluate the Duolingo app's efficiency in supporting autonomous learning and promoting English language proficiency. Three research questions are developed in light of the aforementioned information to examine the role that Duoling plays as a language-learning tool in assisting non-English speakers in improving their ability to speak the English language. They are outlined as follows:

- 1- How do Economics students perceive the Duolingo application?
- 2- What is the effectiveness of the Duolingo application in promoting language learning autonomy?
- 3- How does the usability of the Duolingo application contribute to the development of English language proficiency?

To answer these questions, three hypotheses are suggested:

- 1- The use of Duolingo leads to the improvement of fluency in spoken English.
- 2- The Duolingo app can have a positive impact on its users by providing personalized learning experiences.
- 3-Duolingo's speaking interaction features can facilitate self-directed learning and independent practice of spoken English.

To answer these research questions, the study employs two data collection methods: A questionnaire and a semi-structured interview. The participants of this study are 3rd year students from the Department of Economic, Commercial, and Management Sciences in Tiaret.

The current study is divided into three main chapters. The first chapter represents an introduction to this study which gives the reader an overview of the concept of Autonomy in language learning and the second chapter describes concepts and theories of digital learning applications in the other hand the third chapter describes the methodological framework and the analysis of data obtained.

Chapter One

Autonomy in Language Learning: Literature Review

1.1 Introduction

Learning a language is a lifelong process that doesn't end in the classroom. With the development of the current era that we are witnessing, learners have to put in an effort both inside and outside the school to enhance their language abilities. It's high time to transform and get rid of the old teaching method that focuses on the teacher's authority and moves into an area where learners can direct their learning. This shift allows the learner to study independently and become more productive and efficient in their learning process. So undoubtedly, autonomy among learners, especially EFL students, has an impact on promoting learning language skills.

The current chapter will provide an overview of the terms autonomy by outlining their definitions, the origins of autonomy, characteristics of autonomous learning, autonomy with relation to speaking skills proficiency, the basic strategies of fostering autonomy, and finally technology and language learning autonomy.

1.2 Autonomy in Language Learning

The arrival of the 21st century reshaped language education and learner autonomy has emerged largely as a key pedagogical theme. This concept, however, evokes diverse reactions. Critics denounce it as an ideological goal, hindering effective language instruction. Conversely, proponents argue that Autonomy is essential for successful learning, fostering not only language proficiency but also the responsibility of learners (Benson, 2013) Nowadays, learners are very interested in autonomy, especially regarding education. Autonomy allows learners to take control of their learning process by offering them numerous mechanisms for self-expression and developing their skills in learning so that learners who possess this capacity are motivated and well-rounded. Autonomous learners take an active role in

establishing goals, selecting resources, and making decisions in the classroom that result in excellent learning outcomes. Another important variable that supports the value of autonomy is the usage of ICTs because learners who are conversant with the technologies are automatically engaged and informed learners. (Little, 1991)if learners can take responsibility for their learning process, it is important to let them know about their learning style. Involvement in learners' present autonomy is thought to be a crucial component of their ongoing success(Wang, 2011)In both theory and practice, both teachers and learners have the chance to be involved in the teaching and learning process. This is the basis for the effective importance of autonomy. (Little, 1991)

1.2.1 Definition of the Concept of Autonomy

The concept of self-learning gained interest from researchers providing different perspectives and definitions.(Paiva, 2006)argues that autonomy is more than a matter of one's responsibility for learning; it is neither provided by the approach nor encouraged by the teacher, and it is a complex phenomenon, In Holec's seminal report, he defined autonomy as the ability of someone to take charge of his learning (Holec, 1981). To support his definition, he said that learners are supposed to have the ability to determine their objectives, define the content, select the used strategies, and asses what has been acquired. According to him, learners can be autonomous if they're responsible for their learning by being involved in the different aspects of the learning process. Similarly, (Kata, Ágnes , & Katalin, 2021)reveal that autonomy correlates with active learning, whereby learners construct their learning essentially as a matter of becoming actively engaged in the learning process. Consequently, learners actively relate their learning with the world outside the classroom thus becoming lifelong learners. This means teachers should act more as helpers and guides (facilitators) instead of just giving orders and providing learners feedback and encouragement. Following the same

line of thought,(Suardana, 2012) asserts that owning your learning involves deciding everything about it means what to learn, and how to learn it by including first setting objectives then outlining the learning path and content, selecting the appropriate learning approaches, evaluating the acquisition process, and finally analyzing the information obtained. Furthermore, the concept of autonomy is grounded in the natural tendency for learners to take charge of their learning process; however, the degree and manner in which this autonomy is demonstrated will differ based on the unique attributes of each learner and each learning situation. In addition,(Benson, 2001)believes that learners who lack autonomy are still able to promote this process if placed in suitable settings, in this respect he stated

To me autonomy is about people taking more control over their lives - individually and collectively. Autonomy in learning is about people taking more control over their learning in classrooms and outside them and autonomy in language learning about people taking more control over the purposes for which they learn languages and the ways in which they learn them(Benson, 2001, p. 6)

This quote claims that autonomy is taking charge of your own life and education, and the way to learn different languages in or beyond the classroom. In short, it is about being the leader of your learning process. In this regard,(Dickinson, 1987)describes autonomy as the position in which the learner is responsible for all decisions concerned with his learning and implementing those decisions. Additionally, (Allwright, 1988)demonstrated a fundamental restructuring of learning languages in his 1988 document. He evoked a change in education from a teacher-centered to a student-driven approach, and this shift focused on learner autonomy. the 1990s witnessed the development of self-access learning centers and the explosive rise of computer-assisted language learning, which gave the options to establish a learner-centered approach more simply. These innovations reinforced learner autonomy as an

essential aspect of contemporary language instruction by enabling students to pursue autonomous study and individualized learning experiences.

1.3 Origins of Autonomy

Autonomy arose in ancient Greece when cities fought for their sovereignty and freedom against foreign intrusion. Therefore, autonomy conveys self-rule, self-determination, and self-ownership. The word "autonomy" refers to self-rule and is derived from the Greek words "autonomos" (self) and "nomia" (rule). The modern concept of autonomy relates to an individual's capacity to decide whether or not to follow prescribed standards, norms, or regulations, which may have neutral or value-laden implications.

Autonomy refers to an agent's ability to invent, articulate, and carry out their ideas and activities.(Motloba, 2018)

The concept of autonomy has seen the light in language teaching through the Council of Europe's Modern Languages project, established in 1971. The widespread of this latter led to the foundation of the Middle de Recherche et d'application en langues (CRAPEL) at the College of Nancy, France, with Yves Châlon as its originator. Also known and considered by many as the father of autonomy learning, passed away in 1972, and the administration of CRAPEL was then entrusted to Henri Holec, who remains a prominent figure in the field of autonomy today. In December 1976, a course on self-directed learning and autonomy at the College of Cambridge, featuring contributions from Philip Riley and Caroline Stanchina, was another significant event in the field(Esch, 1977). Holec's project report to the Committee of Europe stands as a key early document on autonomy in language learning. Moreover, the journal has played a crucial role in disseminating research on autonomy from 1970 to the present day.(Holec, 1981)

1.4 Characteristics of Autonomous Learning

In the realm of education and technology, the concept of autonomy and personalized learning experience appears. It implies that learners become active in the learning process. The appearance of technological devices enables learners to cater to their needs and preferences, as opposed to the traditional methods of learning, where the teacher is seen as a model and the authoritative source of knowledge. Accordingly, several studies have been conducted to explore the main features of autonomous learners. Dickenson stated in (Koçak, 2003) view that autonomous learners can be characterized in four points, to begin with, between new information and the already existing knowledge, ensuring the consolidation of information in learners' minds they will also have the ability to redesign their learning goals alone or with the guidance of teachers this will lead them to the readiness to be responsible of their own learning process. with that they will be guaranteed to follow up strengthen their knowledge even outside classrooms. the appropriate selection and implementation of strategies autonomous learners will have the ability to engage in their learning process and monitor them to make necessary changes, They go beyond simply reading and writing, taking a critical approach to analyze the task at hand. so that will take them away from blaming teachers and the educational system if they have low marks and encourage them to develop new ways of studying in the same context. Autonomous learners have a high degree of self-awareness about their styles and strategies used during their learning process, where they are going to be actively engaged in addition learners are willing to communicate with the target language without giving any attention to the risks arising from that (making errors while communicating). learners' autonomy is also characterized by giving value to these important elements: form, content, accuracy, and appropriacy.

the development of the target language into separate referenced systems, because autonomous learners are considered good guessers.(Alice, 1978) learners will have the

freedom of selecting their condition of learning to achieve goals and plan far from any force of others in addition to that autonomous learners, can progress in their reflective side, moreover, learners build a base to complete the road in their learning process and also Learners will have the will to implement without hesitation what they planned without depending on others for the sake of encouragement and reassurance (Candy, 1991)

According to (Ushioda, 1996)and(Dickinson, 1995) Autonomous learners are characterized by intrinsic motivation, fueled by a natural desire to learn and internal goals rather than external pressures. This self-determination is key, as they take charge of their learning journey by making independent decisions about the content, pace, and methods of acquiring knowledge. This intrinsic motivation and autonomy are interconnected; genuine interest fosters a sense of ownership over learning, which in turn deepens motivation, creating a cyclical process that promotes deeper engagement. Furthermore, autonomous learners actively participate in the learning process, bringing their unique perspectives and approaches to enrich the experience and foster deeper understanding.

1.5 Autonomy in Speaking Skill Proficiency

Learner autonomy is a crucial concept and an intended objective in the present history of language teaching and learning. In the field of language learning, learners are always struggling with the relevant ways to reinforce the idea of autonomy to master the four fundamental skills: reading, listening, writing, and speaking. However, speaking remains the most difficult to master. (Thornbury, 2005)states that speaking is a real-life activity carried out by a speaker to express his/ her ideas and interact with listeners where these activities happen spontaneously, and their continuity is based on situations. Speaking requires collaboration between two or more persons in a specific period and context to communicate or exchange opinions, information, or emotions. (Douglas, 2003)shares the same idea that speaking is an

interacting process of providing meaning that includes information production, reception, and processing. In other words, speaking is based on producing verbal language to convey a particular meaning accurately and precisely. However, when speakers communicate, they can influence their audience. It is evident to discuss the interrelationship between autonomy and speaking proficiency.

Speaking proficiency is a multifaceted skill that encompasses various aspects of communication. It is not just speaking grammatically correct sentences delivering speech or engaging in conversations it is about using language properly to achieve communicative goals in a variety of contexts. In this regard,(Brown, 2000)stated that speaking proficiency is a reciprocal process where communication style accommodated to the situation and the audience. This includes things like using formal or casual language, depending on the context.

To achieve autonomy in speaking skill proficiency, the following steps can be appropriate to improve speaking proficiency:

Listening:

Improving one's listening abilities is the first step towards increasing one's speaking skills. One of the various advantages of listening to spoken English aloud is the opportunity to pick up new vocabulary, expressions, and interaction techniques. Achieving proper pronunciation, perfecting the skip and join method for building a coherent speech, and employing language sounds, rhythm, and intonation are all outcomes of improving listening skills.

Reflection:

Regular reflection is essential for independent language learners to assess their progress. It's the process of examining what you have learned and what you may have achieved differently in your previous approaches. Looking back on what you've accomplished is an

excellent way to figure out how you are doing without the instructor's guidance and interference to provide you with feedback.

Imitation:

Engaging in spoken English imitation helps learners pick up natural speech patterns that can boost fluency and accuracy. The example that proves the merit of this strategy can be found widespread among children who are influenced by what older people say, so they use it to save it and try to mimic their speech. Imitation raises accuracy without needing adherence to grammatical rules, allowing people to retain previous expressions with considerable repetition and create coherent sentences.

Prepare:

Limited participation in social situations may originate from a lack of confidence in speaking English. It comes from the fear of failing to provide a significant contribution, which highlights anxiety associated with speaking. Through strategic preparation, this communication apprehension can be effectively reduced. For example, imagine scenarios where English is the main focus, such as restaurant scenarios, or imagine giving a lecture in the department. In these ways, the student gains self-confidence and accustoms himself to practicing until mastery.

Speaking:

While there is not a specific strategy to enhance speech, there are, in fact, several techniques that can be applied to improve effective communication. One of these methods is to surround yourself with circumstances in which the English language is dominant. In

addition, selecting a non-native speaker to share ideas and thoughts pushes you to speak the language anytime, anywhere.

Practice:

The key to learning any language, especially English, is consistency and daily maintenance. For this very reason, the trainer calls for investing only 10 minutes a day in one or two tasks, which is enough to accustom the student to practice. Moreover, watching short videos in everyday routines even for short-time efforts can demonstrate a very big change in proficiency in the English Language. This consistent effort builds one's confidence and prepares humans for more complex challenges ahead. One has to find conversation partners and seek out opportunities to engage the English language in daily situations.

Reading:

Regardless of what you read or the amount of time you spend reading, reading is a great tool for increasing your vocabulary. This technique guarantees that you will become accustomed to new terms and their implications through reading. This exposure may ultimately help with word retention and acquisition.

1.6 Strategies for Fostering Autonomy

A profound sense of autonomy is promoted by strategies that enable individuals to manage problems on their own and make their own decisions. The key technique of creating an autonomous thinker and learner is project-based learning, its introduction brings out several advantages for both teachers and learners. (Cocco, 2006) views that Project-based learning is a student-centered form of instruction that is based on the constructivist approach and puts the learning process in a specific context where Learners are actively involved in the learning process, and achieve their goals through social interactions. In addition, (Thu Thi

Kim Le, 2018)states that PBL projects allow students to take responsibility for their individual learning and actively participate. They are in a position to solve issues in the real world. In this regard, numerous experts believe that project-based learning (PBL) is a successful strategy for students who want to learn languages independently, which eventually evolve into autonomous learners while enhancing the quality of their language skills. Studies done by Solomon (2003) and Simpson (2011), indicate that PBL drives learners, and keeps them involved, helping them become more confident and self-directed learners, while simultaneously improving their language skills. The purpose behind the execution of PBL in education is to prepare the learner to face the 21st century with sufficient subject matter and solid content knowledge. (Thu Thi Kim Le, 2018)According to(Benson, 2013)learner autonomy functions in two paths outside the classroom, through computer-assisted language learning (CALL), and inside the classroom where students engage in selecting materials and formulating learning goals. Both these two sides of learning cannot be absorbed unless EFL teachers have awareness of such modes of instruction, and how to motivate students to learn inside and outside the classroom, especially in a virtual language-learning environment as teachers are not accessible to students all the time.

Promoting learners' autonomy empowers learners to develop their self-reliance learning abilities effectively, as a result, they will have full responsibility to govern and monitor their language learning process. (Dickinson, 1992)listed six ways that teachers can adopt to foster greater learner independence.

Empowering Student Ownership:

This involves teachers approving learners who brought the idea of taking charge of their learning by building a supportive environment to encourage them to foster independence in their learning process

Building self-efficacy:

student will gain confidence in their ability to learn independently by giving credit to their successes. Show their progress, acknowledge their effort, and provide opportunities for them to experience the satisfaction of self-directed learning.

Selection of tools:

Equipping learners with appropriate helping tools of learning that empower them to become self-directed learners.

Fostering of Language Awareness:

By fostering language awareness, learners will have the ability to create a new learning technique and master enough grammar to navigate basic reference materials

Charting the Course:**Insights for Effective Language Learning:**

Equipping learners with insights into language learning empowers them to navigate challenges and anticipate the learning journey.

Providing learners with opportunities for self-directed:

This emphasizes the learner's manage their learning process.

1.7 Technology and Language Learning Autonomy

Technology has been a crucial aspect of the debate about the autonomy of learners Since its inception in language education in the early 1970s. The association between technology and autonomy is both directional and dynamic, with autonomy affecting how learners perceive and employ technology in their language learning tasks and technology influencing the growth and exercise of learner autonomy. Dialectical debates regarding the effects of

technology on autonomy concentrate on the "tension state amid accessibility and limit" (Reinders & Hubbard, 2013)(Hayo & White, 2011)On the one hand, technology has been seen as an enhancer and amplifier of learner autonomy (David & Thorn, 2017)(Murray, 1999)It increases access to target language settings, providing learners with the freedom and choice necessary for autonomous learning (Mirinda, 2013)The incorporation of such revolutionary technologies into English didactic and learning processes possesses the possibility to promote a sense of autonomous language learning. This approach to shift offers learners remarkable access to an extensive variety of educational resources, methods, and scenarios that go beyond the traditional classroom environment (Benson, 2001)(Motteram, 2013)Furthermore, the implementation of technology into English language learning besides the classroom environment is the reason behind the improvement of motivation, metacognitive skills, self-confidence, and social development (Warni , Tian, & Dimas , 2018)Examples, such as the "digital video project" "(Hafner & Miller, 2011)3D virtual learning" (Yeh & Karey, 2017)"Kahoot apps(Yürük, 2019), "learning English from YouTubers" (Hung & Chen, 2019)and the "flipped EFL instructional model in this respect (Tsai, 2019) offered apparent evidence regarding how these efforts empower individuals to get involved in independently guided learning and customize their educational experiences

1.8 Conclusion

Promoting autonomy allows learners the power to control their learning by selecting strategies, setting goals, and monitoring their progress. With the nurturing of these skills, learners become self-directed, fluent speakers and prepared for lifelong language learning. The final section of this chapter presents a framework for understanding the concept of learner autonomy in language learning as well this chapter aims to clarify the message that educators can empower their students to become not just competent users of the language but

also autonomous and self-motivated learners, so, this chapter set the stage for the next chapter, which represents a variety of technology tools that help students in becoming more independent learners.

Chapter Two

Historical Background of Technology and Duolingo
as a Language Learning Application

2.1 Introduction

Technology advancements have revolutionized the educational context and changed language learning approaches. This chapter examines the evolution from technology-assisted language learning (CALL) to technology-enhanced language learning (TELL) and mobile-assisted language learning (MALL). In addition, we will delve into the popular mobile language learning app, Duolingo examining its features and functions while considering the advantages and disadvantages of using it for language learning

This chapter aims to help readers understand how technology has influenced the process of language learning empowering learners to become more independent in their language learning journey.

2.2 Historical Background of Computer-Assisted Language Learning (CALL):

Computer-assisted language learning (CALL) is a common term used by instructors and learners to refer to using computers in the language learning process (Hardsity & Windeatt, 1989) Even though there are several definitions of call it can be defined as an approach to foreign language teaching and learning in which technological equipment such as computers is employed as an aid to the presentation, reinforcement, and assessment of material to be learned, usually including a significant interactive element” (The development of Computer Assisted Language Learning has gradually progressed over the last 30 years, this development can be categorized in terms of three distinct phases which are behavioristic computer-assisted-language learning, communicative CALL, and integrative CALL (Barson & Debski, 1996).

2.2.1 Structural/Behavioristic CALL

In this respect, Introducing a new phase does not necessarily entail rejecting the programs and methods of a previous phase but, like all innovations, gains acceptance slowly and unevenly. The first phase is the structural/behavioristic CALL, which was conceptualized in the 1950s but wasn't used until two decades later (the 1960s and 1970s) when the audio-

lingual method was widely used. Based on the behaviorist-learning model, computer-assisted language learning implies repetitive language drills and practice. The best-known tutorial system is Project Plato. It ran on its special hardware consisting of central computers and terminals and featured extensive drills, grammatical explanations, and translation tests at various intervals (Ahmad, Corbett, Margaret , & Roland, 1985). Two important factors undermined the behavioristic CALL in the late 1970s and early 1980s. First, the rejection of the theoretical and pedagogical levels of behavioristic approaches to language learning. Secondly, the introduction of the microcomputer resulted in the appearance of a new phase of CALL.(Warschauer, Computer-Assisted Language Learning, 1996)

2.2.2 Communicative CALL

By the end of the 20th century, the use of computers was not only confined to language learning; but also for communication, information processing, and display. Nowadays, due to the internet, language learners can communicate with native speakers from different parts of the world. (Gündüz, 2005). Though communicative CALL was considered an advance over behavioristic CALL, it also came under criticism. By the late 1980s and early 1990s, critics pointed out that the computer was still being used in an ad hoc and disconnected fashion and thus found itself making a greater contribution to marginal rather than central elements of the language learning process. (Kenning M.M & Kenning J,M, 1990), on the other hand(Warschauer & Deborah , 1998) argues that communicative CALL corresponds to cognitive theories that emphasize that learning is a process of discovery, expression, and development. Popular CALL software which was developed in this period included text reconstruction programs (which allowed students working alone or in groups to rearrange words and texts to discover patterns of language and meaning) and stimulation (which stimulated discussion and discovery among students working in pairs or groups). Many of the Proponents of this approach appeared in 1984 like John Underwood, felt that the drill and

practice programs of the previous decade did not allow enough authentic communication to be of much value. In his perspective, communicative CALL focuses more on using forms rather than on the forms themselves.

2.2.3 Integrative CALL

By the 1990s communicative CALL began to be criticized. New second language acquisition theories and socio-cognitive views influenced many teachers and led them to use more social and learner-centered methods. This time, emphasis was put on language use in authentic social contexts. Task-based, project-based, and content-based approaches all sought to integrate learners in authentic environments and to integrate the various skills of language learning and use. In integrative approaches, students use a variety of technological tools as an ongoing process of language learning rather than visiting the computer lab once a week for isolated exercises. (Gündüz, 2005).

These three phases of CALL were criticized due to several circumstances, this led to an apparent shift with the introduction of a whole new broader concept to the educational context named TELL (Technology Enhancing Language Learning).

2.3 Technology Enhancing Language Learning (TELL):

Integrating technology into the education system has become increasingly essential. Accordingly(Shadieff & Yang, 2020)considers utilizing technological innovation or methods to reach a learning attempt or instructional goal. The field of technology-enhanced language learning has contributed to the progress of the educational system. In other perspectives, (Kirkwood & Linda , 2014)demonstrated that information and communication technologies are associated with enhancing learning processes. Additionally,(Dewi, Rusilowati, & Fianti , 2019), highlight the application based on TELL and mention that the application is hardware, software, and the internet this tool helps the learner to improve language learning by accessing online dictionaries, and online chat in this regard (Teh,2021) shared the same idea

that tells gathers all the innovative technological tools and approaches such as CALL. Since these computers became weaker compared to their first appearance, TELL inaugurated a new concept called MALL.

2.4 Historical background of M.A.L.L(mobile assisted language learning)

The great development witnessed in the world of technology in the current era and with the ever-increasing use of portable and wireless devices in the digital age. Learners can now access educational resources with the ability to break down geographical and time constraints. Mobile devices have undergone a remarkable transformation since the first phone in 1973. They have become more affordable, compact, and powerful, boasting significant improvements in speed, memory, and functionality. Thanks to these features, mobile devices offer unique possibilities for student-centered approaches to teaching(Arvanitis & Penelope, 2001), In this respect, Mobile devices have generated a new field of study called Mobile-Assisted Language Learning (MALL) related to language learning and mobile technologies. MALL is a new learning strategy that improves language learning by utilizing handheld and portable gadgets such as smartphones, tablets, MP3/MP4 players, and personal digital assistants (Kukulska-Hulme & Lesley, 2008).

the predominant theory in education was Discovery Learning in the 1970s. However, the adherence to behaviouristic computer-assisted learning programs and the school's lack of Equipment did not support its pedagogical methods. Two years later, the first handheld learning device was conceptualized by Kay in 1972. However, never got the funding needed and never saw the lights. Nevertheless, Kay and Goldberg later developed a prototype desktop computer, in addition to that they delivered a new programming language called '**Smalltalk**'. This was the predecessor of Graphical User Interface, which was crucial for computers and mobile devices. In the 1973s the first mobile phone was developed. However, it was not available to everyone due to its high price tag and limited availability of cellular at that time.

That's why it was not until 10 years later that it was launched in the market. In this regard, the wave of development kept rising through time when in the 8th decade of the 20th century there were two main leading learning theories Constructivism and Constructionism that emphasized active learning and building knowledge through experience had the chance to benefit from the evolution of multimedia personal computers during that decade. Found ideal partners in the interactive capabilities and accessibility of personal computers. This permitted the creation of engaging and personalized learning experiences that directly synchronized with their principles. In short, the computer revolution provided a powerful new platform for putting these innovative teaching philosophies into practice. Ten years later, Problem-based learning commanded the mobility of technologies because learners were obliged to perform tasks in authentic environments and not only in the class. The 1990s witnessed the creation of the first multipurpose handheld devices that could be used for instructional purposes. Personal Digital Assistant is a term for a small, mobile, handheld device that provides computing and information storage and retrieval capabilities for personal or business use, often for keeping schedules, calendars and address book information handy (Steele, 2021)

The wheel kept its track at the beginning 21st century, mobile phones and tablets with Web functionalities outplaced PDAs, Tablet computers with rotating screens, and touch screen features, such as the Microsoft Tablet PC launched in 2001, supported the mobility of learners. Four years later in 2005 m-learning finally became a recognized term all over the world and its widely used practices envisaged the core characteristics of learner-centered pedagogies. According to the endless benefits of mobile phones, the shift to learner-centered pedagogies can now be fully supported and realized (Crompton, 2013)

2.4.1 Definition of M.A.L.L (mobile assisted language learning)

Several researchers and scholars have extensively defined the term "mobile-assisted language." First of all, research and publications related to the use of mobile devices in teaching and learning foreign languages have been recorded since 1994 (Baurston, 2013). Additionally, (Chinnery, 2006) introduced the term MALL to demonstrate that mobile devices could be used as pedagogical tools for language learning. According to (Norbert, John, & Ben Bachmair, 2009), M.A.L.L. is the process of knowing and being able to operate successfully in and across new and ever-changing contexts and learning spaces, with an emphasis on understanding and knowing how to utilize our everyday life worlds as learning spaces. In addition to that, mobile learning, also known as an extension of learning through mobile computational devices such as personal digital assistants (PDAs) and mobile phones, was included with e-learning as a subset of distant learning (Tsvetozar, Evgenia, & Smikarov, 2004).

In her study, (Valarmathi, 2011) defined Mobile-assisted Language Learning (MALL) as a language learning approach that utilizes handheld mobile devices to enhance learning. This method falls under the umbrella of both Mobile Learning (m-learning) and Computer-assisted Language Learning (CALL). MALL encompasses learning through various mobile devices such as cell phones, smartphones (including iPhones and iPads), portable media players (e.g., MP3 players), and Personal Digital Assistants (PDAs). Accordingly, Mobile-assisted Language Learning (MALL) branches out from mobile learning and focuses on the use of portable devices for language acquisition. Unlike traditional methods, MALL allows learners to access materials and get help anytime, anywhere, eliminating the constraints of classrooms and computers. This flexibility makes MALL a valuable tool for overcoming time and location limitations in language learning. Pioneering the field in the 1980s, Twarog and Pereszlenyi employed telephones to offer remote language learners feedback and support in

this respect (Odeh, 2014) defined M-learning (mobile-assisted language learning) as the use of mobile and handheld technology devices, such as smartphones, in the teaching and learning of languages. MALL (Mobile Assisted Language Learning) applications and tools help students maintain and utilize their recently acquired linguistic skills. This approach provides a source of language practice where students can hone their speaking abilities and reduce the risk of forgetting valuable knowledge and skills. M-learning activities typically involve short exercises and tasks completed on mobile devices

2.4.2 The Emergence of M.A.L.L

Educational technology has witnessed a swift evolution, which led to the transition from CALL computer-assisted language learning to MALL mobile-assisted language learning. In this regard, MALL has become one of the fundamental concerns of educators and researchers. Accordingly, MALL emerged owing to the combination of education, technology, and methods in the 1980s (Palalas & Debra , 2016) (Jozef, 2004). Additionally, (Winters, 2006) stated that MALL is a form of learning mediated by mobile devices. Furthermore, mobile learning occurs when students are not restricted to a predetermined location or take a place where they gain from learning opportunities provided by mobile technologies (Kukulska-Hulme & Lesley, 2008), Throughout history, advancements in language teaching methods have coincided with the adoption of new technologies. The Audiolingual Method, for example, heavily relied on language labs, which became the prevalent teaching tool (Salaberry, 2001) Behaviorism further influenced the use of drill-based computer programs in the 1960s, which evolved into the more civilized Computer-Assisted Language Learning (CALL) approach in the 1990s. As technology becomes integrated into education, its physical form tends to shrink. Mobile devices demonstrate this trend, offering language learning potential (Zhao, 2005). In this context, Mobile Assisted Language Learning falls under the umbrella of technology-enhanced learning. It can be implemented in various settings;

including face-to-face, online, or blended learning environments. However, scholars emphasize the importance of prioritizing the learner's experience when using MALL in the classroom (Jozef, 2004) highlighting the need to establish a suitable learning environment before introducing mobile technologies. (Salaberry, 2001) warned against a "technology-driven pedagogy," reinforcing that while technology offers advantages, it has not been proven that technology-based teaching methods perform better than traditional teaching methods. Beatty (2003) adds that teachers should carefully consider the investment of time and resources into unproven technologies. Technological tools have to be correlated with the effective methodology to support instructors not act as replacements for them.

2.4.3 MALL Applications in the Educational Context

The educational context has witnessed a significant transformation due to the progress in technology and the Fourth Industrial Revolution 4IR, which denotes the rapid technological advancement in the 21st century. The emergence of digital tools such as tablets, laptops, and smartphones has strengthened education's full structures (Qureshi, M. I., Khan, Gillani, & Raza, 2020).

Some studies have found that mobile phones and tablets, when used appropriately, may assist students in improving academic achievement (Yueh, Yen, & Shu, 2010; Ivić & Tomislav, 2017; Lu & Xianmin, 2018). Nowadays these handheld devices, are being used everywhere to do different activities ranging from voice calling to making short messages, video chat, listening to audio (Mp3, Mp4, Mpeg), web surfing, and shopping. Additionally, mobile devices have increasingly grown toward becoming tools for education and language learning, and all their users from educational staff are accustomed to this newly introduced environment to make education Omnipresent (Tayebeh & Amin, 2012).

The emergence of the internet has provided the opportunity for distance learning as a means of receiving education from all parts of the world. In a short period, the attractiveness

of distance learning led to the realization that various mobile devices have made learning accessible, effective, and convenient. In other words, with the availability of mobiles nestling comfortably in our pockets, the creation of an engaging mobile learning context is no longer a dream but a powerful reality. In this respect, (Palalas & Debra , 2016) highlight that mobile phone applications promote motivation, and interaction, encouraging collaboration, knowledge sharing, and a truly connected learning experience for all.

2.5 Duolingo as a Language Learning Application

Duolingo is a free language-learning website. It is designed to help users progress through the lessons presented. Also, it helps in translating different websites and other documents... Duolingo aims to make language learning accessible to everyone, regardless of financial status, it hopes to break down these barriers and foster a more connected world where Users can learn languages for free while simultaneously translating the web (Jašková, 2014) as for (Munday, 2015) who shares the same idea that Duolingo is a free app created by Luis Von Ahn and Severin Hacker in November 2011. Its slogan is “Free language education for the world.” According to its website, it has more than 30 million registered users. It offers several languages for English speakers as well as others for non-English speakers (Munday, 2015). Additionally, Duolingo is defined as a language learning application designed for platforms such as desktop computers and portable electronic devices, and smartphones. It was Luis von Ahn's original idea and purpose for establishing it in Pittsburgh in late 2009; the United States was attempting to convert the (English-dominated) Web into every major language, utilizing community wisdom to do so. Furthermore, Guaqueta and Angela (2018) think Duolingo is an exceptional instrument for training and facilitating English learning. As an outcome, Duolingo is required for students to learn more about the English language, and it could boost student motivation in comprehension. Duolingo makes utilization of

subconscious learning to strengthen long-term memory and make interacting in a new language smoother.

2.6 Duolingo features

Duolingo is generally seen as an interesting representation of gamification in MALL applications (Huynh, Long, & Hiroyoki, 2018). Also, it is considered one of the most dominant and influential mobile language learning applications in the 21st century. (Duolingo Help Center, 2020). Its popularity among millions of users has been determined, at least in part, by its free-of-charge access model and gamified features (Duolingo Help Center, 2020) Correspondingly, the Duolingo application offers endless services and features that support students in developing their language.

2.6.1 Duolingo Activity Dashboard

The Duolingo Activities Dashboard is a feature within Duolingo for Schools that allows educators to track and monitor their students' language learning progress. It provides a window for teachers to check their students' scores. and to manage their virtual learning classroom in other words The activity log is a sidebar, located on the right of the Duolingo for Schools teacher dashboard, that gives information on current student progress. This feature can be used to track assignment completion and view students' progress, and students' privacy settings. also with the Duolingo Unit, the students are working on Dashboard also offers them some features: Students privacy setting where the teacher can block students from certain features in the app in addition to that there is also Course Progress in where the teacher can Track how many skills a student has completed. moreover, there is a feature called lesson that enables the educator to Track how many Lessons a student has completed during a period and finally, days active features to Check how many days a student has been active(center, What is the Duolingo for Schools activity log?, 2021)

2.6.2 Spaced Repetition Algorithm

one of Duolingo's secret weapons - the spaced repetition algorithm. It's an intelligent learning technique that helps learners to remember and retain what they learned over time.

Duolingo reviews and reinforces words and phrases that learners have learned at the right moment. It doesn't overload them with repetitive exercises but ensures them to revisit and practice the content precisely when they are on the verge of forgetting it. See figure number 2 This method is considered the best way to boost long-term retention and make learning more efficient. Also, early research suggests that 34 hours of Duolingo is equivalent to an entire semester of university-level Spanish instruction.(Patiño, 2023)



Figure 1 Spaced Repetition Algorithm

2.6.3 Progress Tracking and Achievement

One of the joys of learning a new language is keeping an eye on your progress. Duolingo keeps learners in touch with a handy progress tracker. It shows them the percentage of the course they have completed and how close they were to reaching their goals, where small achievements are celebrated with colorful badges that are a symbolic awards that await learners after the completion of levels correctly (Goehle, 2013) adding a sense of gamification to their learning experience. These badges are a fun way to mark milestones and keep learners engaged.(Patiño, 2023)

2.6.4 Duolingo Push Notification

In the free application, Duolingo always sends notifications on the users' phones or emails encouraging them to dedicate at least 15 minutes per day to learning. However, it seemed not enough to encourage learners adequately. Thus, they upgraded the reminding process, which led to the appearance of Duolingo Push. It is a premium feature in which the iconic green owl named Duo will personally meet the users to remind them to continue learning the language. Duolingo pushes its notifications into the real world. It has three (3) types of In-Person Reminders where learners are obliged to pay a \$25 fee to access and benefit from this feature (Perez, 2020)

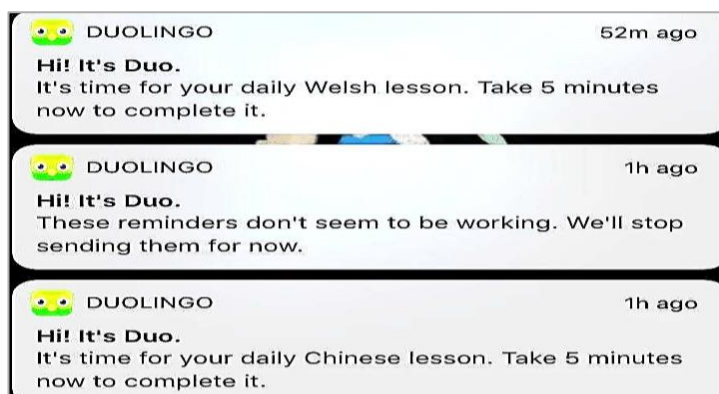


Figure 2Progress Tracking and Achievement

2.6.5 Gamification

Duolingo is different from sports and board games. It uses game elements to create enjoyment points in the learning environment, where the goal of learners is to challenge themselves to complete their tasks and activities to get all badges in the skill tree. (Huynh, Long, & Hiroyuki, 2016). Gamification is a practice that uses game-based strategies and game processes to engage people, motivate action, promote learning, and solve problems the inventor of the Duolingo application decided to apply gamification to their system to engage and motivate their users. The principal game elements in this system are as follows:

Reward: In Duolingo, lingot is a reward and users can easily collect dozens of lingots by completing their lesson or skill.

Leader-board: this element is based on showing users their level compared to their friends, these are great motivators to help the users return and learn.

Level-system: providing a way to track users' daily activity and compete with their friends

Badges: Duolingo has some achievement tokens, which are the skills a user has obtained.

They are published on the user's profile. Badges are a great tool for making people feel exploited in their learning.

2.6.6 Language Course Management

One of the most beneficial features that allow learners to create their accounts they must choose the target language. Duolingo offers more than 40 languages right now such as Spanish, French, German, Italian, Japanese, Chinese, Russian, Korean, and Portuguese with your base language. This feature allows learners to manage their language courses as they like, it gives them the freedom to add and delete language courses freely (Patiño, 2023).



Figure 3. Language Course Management

2.6.7 Duolingo Stories

Duolingo takes language learning a step further with engaging "Stories". Learners immerse themselves in short narratives in their target language. These stories are not just for reading

or listening Duolingo assesses you on the words you come across. The application offers you a range of questions, involving multiple-choice, fill-in-the-blanks, and sentence modifications. These tasks delve above basic memorization, allowing users to fully understand how the words function in real-life situations. Currently, interactive stories are available for Spanish, Italian, English, Portuguese, German, and French learners.

2.7 Advantages and Disadvantages of Duolingo

Duolingo is a game-based platform for learning foreign languages. It is available in all operating systems. Duolingo can be accessed on portable computers and also on Android by downloading it from the Play Store. Duolingo application has several advantages including a mixture of activities where students listen, transcribe, speak, and translate in a simple interface as they work through words and phrases. In addition, it lets teachers easily track students' language learning progress. Students share their language learning progress, which can be tracked through a dedicated dashboard. It also motivates the students to keep going and beat their previous records while competing with friends, (Amalia, 2019) as cited by (Mulya & al, 2016). Similarly, Le (2020), emphasizes that teachers can plan lessons, and use translation, listening, matching, and speaking exercises with Duolingo. Additionally, it is a free language learning app that can be used to help students improve their vocabulary and motivate students to learn English with many amazing topics and vocabulary games. Duolingo also creates exercises for students to help them review and practice the lesson at home. Correspondingly, Duolingo can be accessed anywhere. Therefore, students can learn English anytime and anywhere with Duolingo.

Duolingo offers several strengths for language learners. First, it helps learners to build a broad and varied vocabulary. Students encounter a wide range of words, which will lead them to be prepared for diverse situations. Second, Duolingo does not provide them only vocabulary but it offers instruction in a significant amount of grammar, particularly verbs and

verb tenses. This grammatical foundation allows learners to express themselves accurately. Additionally, it is a well-organized platform due to its manageable units, which makes learning clear and allows students to revisit specific topics for review. Duolingo caters to individual learning styles. Students learn at their own pace, consult translations as needed, and adjust the audio speed for better comprehension. The incorporation of Duolingo as a language learning application provides enormous potential. However, it lacks enough real-life context, it brings forth remarkable challenges that require serious consideration.,(Wilson, 2014) claimed that there are some challenges. Duolingo offers some speaking and listening exercises, its primary focus is on reading and writing, leaving learners struggling to develop fluency in conversation and comprehension. This lack of emphasis on spoken language, combined with limited grammar explanations and a focus on isolated exercises rather than real-life scenarios, can make it difficult for learners to truly grasp the complexities of a language and feel confident using it in everyday situations. Furthermore, the lack of detailed feedback beyond "true" or "false" can demotivate learners who seek a deeper understanding of their mistakes (Samii, 2023). In this regard (Musa & Mohamad, 2017) shared the same ideas about this topic and claimed that Duolingo offers an enjoyable experience to learn languages, but it has some drawbacks that limit and hinder its effectiveness in achieving fluency. The app uses sentences that are irrelevant and might increase ambiguity and learners are not involved in real-life contexts, especially for beginners. Additionally, the reliance on a computer-generated voice means learners will miss out on exposure to natural pronunciation and the correct accents of the language they want to learn. Another limitation is that Duolingo uses it as an auxiliary element, which can hinder progress for users who do not understand the intermediary language. This can lead to a dependence on translation and difficulty in expressing themselves fully in the target language. Furthermore, Duolingo often introduces new vocabulary words without audio pronunciation, so here learners do not know the

appropriate spelling and the right pronunciation of the words. Another aspect is the lack of human interaction and real-life conversation opportunities prevent learners from practicing spoken language and developing fluency.

2.8 Conclusion

The development of technologies for language learning led to the transition from computer-assisted to mobile-assisted language learning platforms, such as Duolingo, which have reshaped language learning and turned into essential tools for language instruction. For well-rounded language fluency, Duolingo contributes significantly to enhancing speaking abilities.

The goal of the current section is to provide light on the variety of technological tools that the educational system can utilize to develop and educate a generation that is aware of the crucial role that technology plays in enhancing the learning process. this chapter includes a brief description of the historical background of both MALL and CALL, In addition to the functionalities of the Duolingo application.

The future of Mobile Assisted Language Learning looks bright, as continued technological advances will create personalized learning paths and an engaging experience, unlike what a student is accustomed to finding in traditional methods of language learning.

Chapter Three

Research Methodology And Data Analysis

3.1 Introduction

The current chapter is devoted to the practical side of this thesis. It is divided into two parts: the first one explains the details of the research methodology used to do this work. It also includes detailed information about the focus group of this study, reliability, validity, and limitations. The second part discusses and analyzes the data obtained using the tools used. Finally, some recommendations are put forward.

3.2 Description of the study context

This study was conducted at Tiaret. At the University of Ibn Khaldoun, The Department of Economic, Commercial, and Management Sciences was the main focus as 56 third-year students were chosen. Additionally, the period of this Research was 2023-2024

3.3 Research Design and Methodology

Research design According to (Lia , 2010) research design is considered as a scaffolding that enables the gathering and arrangement of the data more easily. To ensure the collection of reliable data and carefully address the research problem. This study opts for a mixed-method approach, a correlation between qualitative and quantitative research methods. On the one hand, the quantitative components involved the administration of a semi-structured interview for teachers from the Department of Economy and Commerce. This approach allows for the analysis of the transcribed interviews and identify significant insights from the participants. On the other hand, the quantitative component involves the administration of both in-person and online questionnaires to ensure flexibility and convenience for the participants. The questionnaire aims to capture participants' perceptions, and experiences using the Duolingo application. In this regard, the combination of qualitative and quantitative allows for capturing numerical data as well as in depth-insights from the participants.

3.3.1 Choice of the Research Method

To gather and analyze more reliable data that will contribute to resolving the issues raised previously. This dissertation opted to use quantitative research tools a questionnaire as well as interviews for qualitative data. In the Department of Economic, Commercial, and Management Sciences Ibn Khaldoun University-Tiaret, ninety-one (56) third-year voluntary students completed an online questionnaire, and seven teachers were interviewed

3.3.2 Participants and Sampling Process

According to (Sim & Wright, 2000)the term population refers to the collection of cases in which the researcher is ultimately interested and in which he or she wishes to make generalizations. Our research targeted third-year LMD students within the Department of Economic, Commercial, and Management Sciences at the University of Tiaret in the 2023-2024 academic year. We had chosen this year mainly because this academic year had a total of 123 students registered in the third year and has many friends studying this year, friends who are fans of language learning applications and love learning the English language. We have based our sampling on a random technique, which is important for being representative of the student population. In this procedure, every student had an equal opportunity to be chosen to take part in the research. From there, 56 participants of both sexes—males and females—have been included.

3.4 Data Collection Methods

The selection of appropriate tools for data collection is essential for effective research. Tools can be defined as different methods and procedures through which data relating to a research question is collected. In general, it can be in the form of quantitative tools, to gather data in numbers, or qualitative toolsto capture descriptive data such as experiences or opinions. Bhandari 2022 Selecting the appropriate tool is crucial for researchers to achieve their goals efficiently.

To conduct this study we used mixed methods a questionnaire to third-year LMD students enrolled in the Department of Economic, Commercial, and Management Sciences at the University of Tiaret, and a semi-structured interview with teachers. All the aforementioned tools were adopted to reach research validity through the convergence of information from different sources.

3.4.1 Questionnaire

A questionnaire is an instrument used to present the respondents with a series of questions or statements to which they are going to react by answering them by writing or selecting from existing answers according to (James , 2001) to obtain a significant amount of data on the subject of the study and covering a huge number of respondents, in this respect the questionnaire was used as the major research method, the purpose of this questionnaire is also to ascertain how Duolingo can contribute in enhancing learners' autonomy in English language learning.

3.4.2 Semi-structured interviews

Questionnaires are never meant to be used alone so semi-structured interviews are used alongside them, According to (Gillham, 2000) to ensure a better understanding and avoid and prevent misunderstandings about what the numerical replies represent, Methodologically speaking qualitative research employs semi-structured interviews as a typical method for the sake of collecting new data and measure participants' perspectives on a certain subject. these semi-structured interviews are a combination of open-ended and close-ended questions that sometimes include follow-up "why" and "how" questions. The "SSIs" generally take a one-hour duration that is mathematically enough to be a reasonable duration to reduce the interviewer and respondents' fatigue

3.5.1 Description of the Questionnaire

An online questionnaire was delivered to assess the effectiveness of the Duolingo application among third-year students in the Department of Economic, Commercial, and Management Sciences. The questionnaire specifically investigates whether Duolingo promotes autonomous learning and speaking skills proficiency. It employs a variety of question formats, including closed-ended, open-ended, and multiple-choice options, and is divided into three distinct sections

Section One Contains three questions Q1-Q3 that are meant to be asked to gather some specific information about participants like gender, age, and academic level.

Section Two Addresses the usability of Duolingo (Q1–Q4) This section aims to gather general data about the Familiarity of third-year students in the Department of Economic, Commercial, and Management Sciences with language learning applications in general. Use of Duolingo specifically Frequency of Using Duolingo, Perception of the effectiveness of Duolingo as a language learning tool.

Section Three: This section is intended to address the participants' experience with Duolingo application, to comment on how Duolingo has impacted their English language proficiency.

3.6 Analysis and Interpretation of the Findings

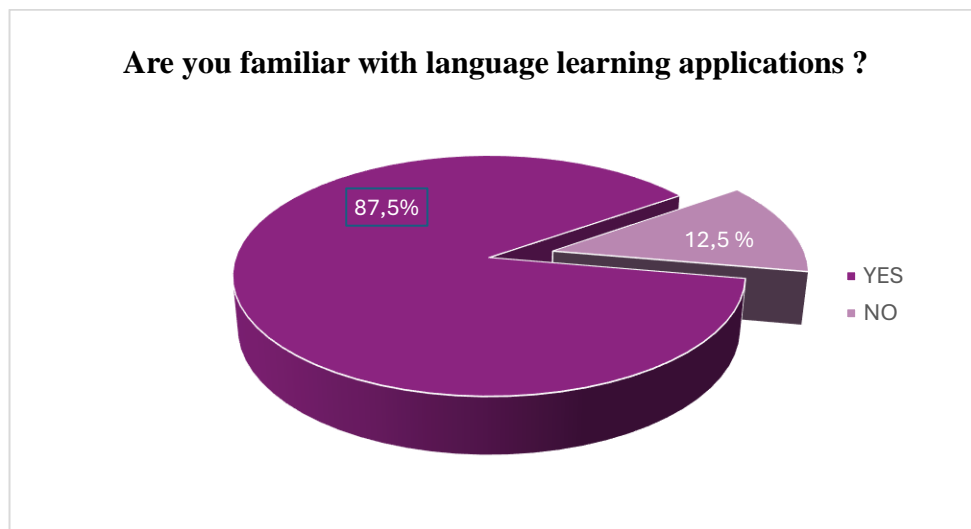
3.6.1 Analysis and Interpretation of the Questionnaire

Gender		Age		
Male	Female	20-22	22-25	More than 25
19(33.9%)	37 (66.1%)	28(50%)	26(46.4%)	2(3.6%)

Table 1 Personal Information for the Respondents

Question 1

The aim of asking this question is to find out whether third-year students in the Department of Economic, Commercial, and Management Sciences have an idea about various language learning applications. The results displayed in the pie chart below revealed that 87,5% of the respondents were familiar with language learning applications, while the minority of 12,5% had no clue about these applications



Graph 1: Knowledge of Language Learning Application

Question 2

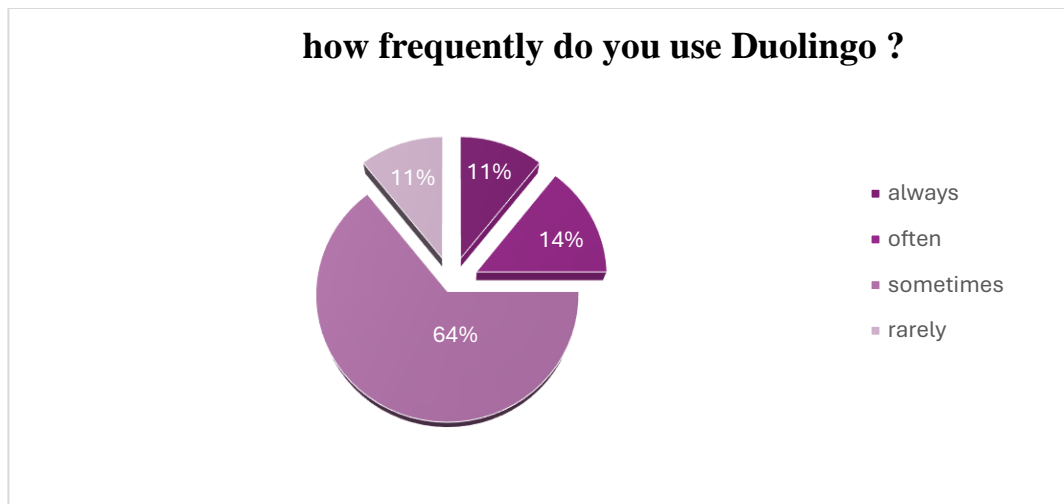
Duolingo is a popular language-learning app used by people around the world. Based on the data we collected from this question, the main reason people use Duolingo is to learn a new language; the most dominant is learning English. Many users find it a good application for beginners, where one can build vocabulary and grammar. Some users also indicated that they were using Duolingo as a tool for developing their language skills, which they had already had. In the table below are some answers from the participants.

To learn English
For learning the Spanish language
I use it to develop my language
Raising the linguistic level
Learning languages
To improve my English language
Enjoying
Take a test to evaluate your level of English or any other language online

Table 2 The Goal Behind the Use of Duolingo

Question 3

The purpose of asking this question was to know the frequency of the Duolingo application. The data circle below shows that the majority of people, around 64.3% sometimes use Duolingo In addition to that (14.3%) of learners suggest that Duolingo is a well-used language learning application by choosing the answer often. in addition, a significant portion of users, around 10.7%, reported that they are always using Duolingo, which indicates that they have integrated the app into their daily routine. On the other hand, a smaller percentage of users reported that their use of Duolingo is rarely (10.7%)



Graph 1.2: The Frequency of Using Duolingo

Question 4

In this inquiry, we gave the participants some suggestions about some possible goals that might be developed using Duolingo:

Take initiative in their language learning

After Asking this Inquiry we received data as it appears in the table below 14 of the participants strongly agree that Duolingo encourages them to take initiative in their language learning. diving into other responses we found out 29 others agree with Duolingo as a helping tool to take initiative steps in the language learning process, we also noted that some participants (12) are undecided about whether Duolingo encourages their initiatives or not. This could be due to various reasons, such as how they use Duolingo or their overall learning style. Finally, a few participants (1) disagree that Duolingo encourages initiative steps in learning languages. This data confirms that Duolingo is aiding learners to take some initiative steps in their learning process.

Duolingo helps me to set realistic and Achievable goals

After asking this question, most participants (43) agree (18 strongly agree & 25 agree) that Duolingo helps them set realistic and achievable learning goals. This suggests Duolingo's effectiveness in promoting goal-oriented learning. We also noted that some participants (10)

are undecided about whether Duolingo provides a helping hand with setting goals or not. This could be due to the way these learners are using Duolingo or their overall learning style. Finally, a small number of participants (3) disagree that Duolingo helps with setting goals. This probably means that Duolingo didn't help them to set and achieve goals they did it all by themselves. Overall, the data provided suggest that Duolingo is effective in helping learners set real and achievable goals for many learners. However, it is also important to consider differences in learners' needs when we design a program it is a must to cover all their needs

Duolingo helps me identify my strengths and weaknesses

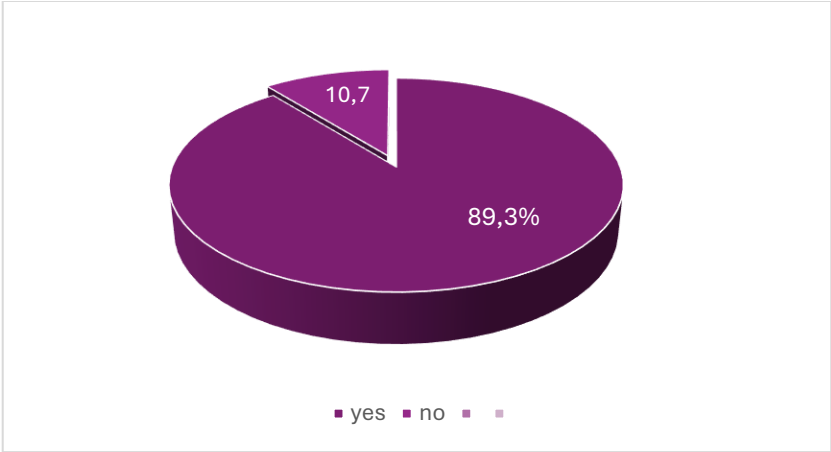
The data, as it appears in the table below, indicates that out of the surveyed students, 21 strongly agree with the identification of their strengths and weaknesses when using Duolingo. Scrolling down to other responses, we found that about the same amount—21—agree with Duolingo as a helping tool to detect learners' strengths and weaknesses in the process of learning the language; we also noted that some participants are undecided about it (12). This might be due to several reasons, for instance, they have not taken any tests to identify that. Last but not least, a few participants—3—don't agree that Duolingo identifies their strengths and weaknesses when they feel no difference.

	Take initiative in their language learning	Duolingo helps me to set realistic and Achievable goals	Duolingo helps me identify my strengths and weaknesses
Strongly agree	14	18	21
Agree	29	25	21
Undecided	12	10	11
Disagree	0	3	3
Strongly disagree	1	0	0

Table 3 Duolingo's Help in Acheiving Goals

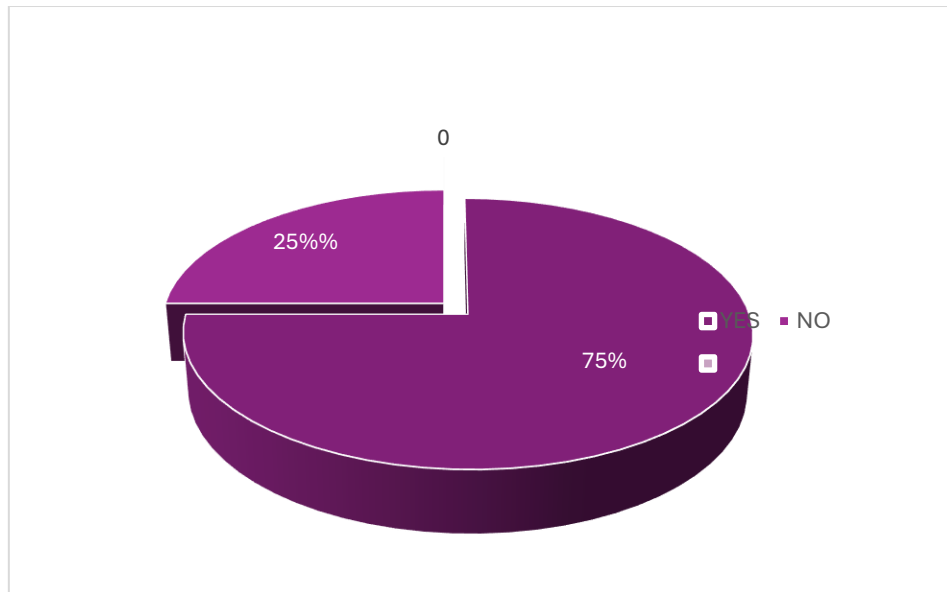
Question 5

The aim of asking this question is to figure out whether Duolingo users think this application has improved their speaking abilities so it will provide us with valuable information on its Efficacy for this specific category of people, it is clear from the data that the majority of respondents (89.3%) think Duolingo has improved their ability to communicate easily this suggests that improving speaking proficiency in foreign language is thought to be possible using Duolingo



Graph 1.3:Learners’ perceptions of Duolingo’s impact on Speaking skill

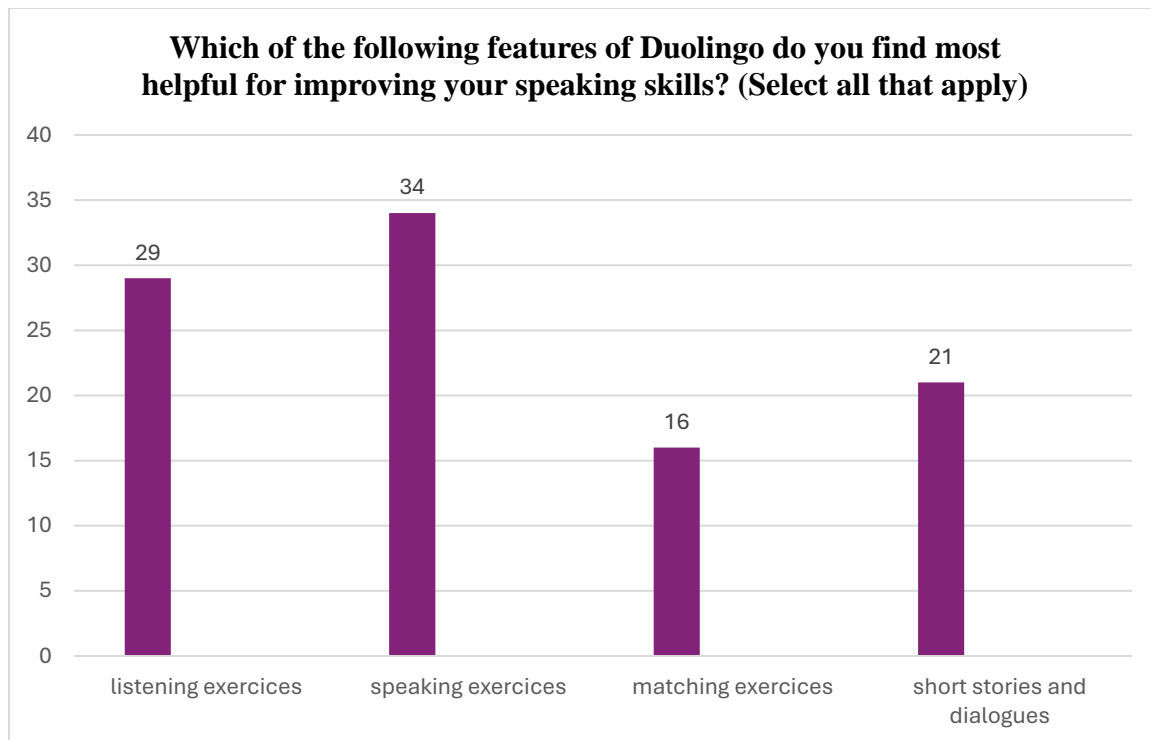
Question 6 The aim of asking this question was to assess whether Duolingo promotes independence in English language learning. Interestingly, 75% of respondents reported that self-reliance in their studies increased after using Duolingo, suggesting it could be a valuable tool for those who want to acquire the English language independently.



Graph 1.4: The Efficacy of Duolingo in Promoting Independence

Question 7

The purpose of asking this question is to Figure out which of the following tasks helps improve speaking skills with the Duolingo application. According to the statistics indicated in the table below, a significant number of 29 students (51,78 percent of the total) chose listening exercises. It was also remarkable that a considerable portion of 34 students out of 56 selected speaking skill exercises as an effective feature to develop their speaking ability. 28,57 % of learners which means 16 learners think that matching exercises are a beneficial feature to develop speaking skills while out of 56 21 of the total number of participants reported that reading conversations and stories that the Duolingo software contains will do the job



Graph 1.5:Duolingo’s Activities for Developig Speaking Skill

Question 8

The reason behind asking this inquiry is to find out to what extent learners can express themselves in this suggested situations

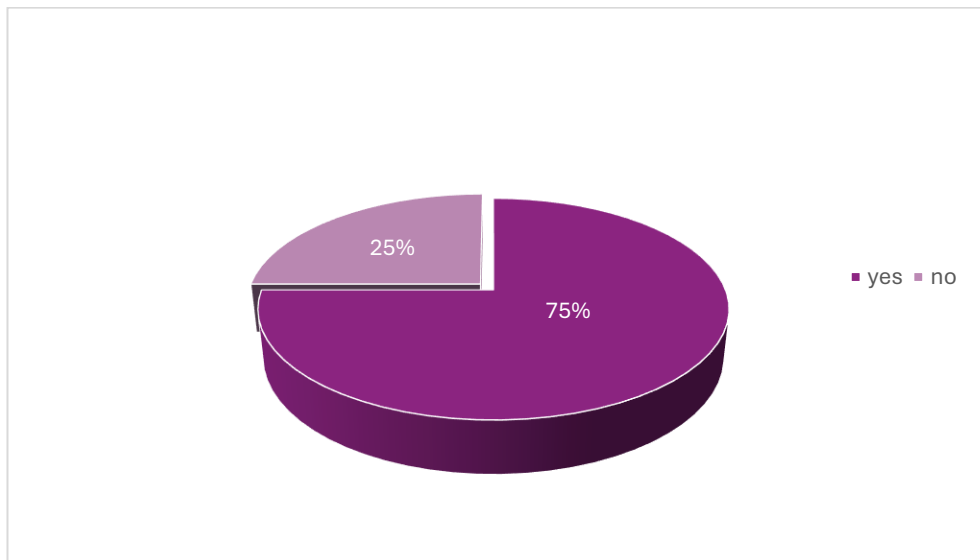
Self-introduction to someone new: According to the statistics indicated in the table below. 34 of the learners are very confident in introducing themselves, While the other 13 students are predominantly confident in presenting themselves to someone new, 06 learners are slightly confident, and finally, approximately 3 students are unable to introduce themselves to someone new.

Students’ ability to order food in a restaurant based on the analysis of the table, We noted 17 participants are very confident in Ordering food in the restaurant whereas 29 learners are predominantly confident in asking for a meal, additionally, we noticed 06 learners are Slightly confident in requesting for ma an eal, and ultimately 04 students are unable to order food in the restaurant.

Talking with friends The data presented in the table reveals that the number of students who are very confident in talking with friends is equal to predominantly confident students so this number is estimated at 22. Whereas 08 learners are Slightly confident in talking with friends, as well 04 learners are not confident in talking with friends

Question 9

The aim of asking this question was to assess whether Duolingo promotes independence in English language learning. Interestingly, 75% of respondents reported that self-reliance in their studies increased after using Duolingo, suggesting it could be a valuable tool for those who want to acquire the English language independently.



Graph 1.5: The Effectiveness of Duolingo in Promoting Independence

Question 10:

Learners provided different answers some consider Duolingo as the best language learning app with feedback to reinforce their opinion. On the other hand, there are those who in their perspectives Duolingo is not the only option and there are a variety of apps that can promote language learning, they provided their feedback. The table below shows some of the participant's answers:

Yes, because it helped me to learn the English language very well

No, because I have a lot of applications

Yes it is the best learning language app

yes, I do

Definitely

Yes Duolingo is the best for me because when you start learning a language the app doesn't make you feel bored

Table 4 Learners Feedback about Duolingo

3.7 Analysis and Interpretation of the Interview

Question One: In your experience, how effective is Duolingo in helping non-native English speakers improve their speaking skills?

The answers to this question express different views towards Duolingo's effectiveness in enhancing learner speaking skills. Responses were all similar and agreed that it was an excellent, ideal, and wonderful application, as the first and second teacher believes that Duolingo is considered a useful tool for learning the English language in general, as it provides interactive exercises that include reading, writing, listening, and speaking. This application provides the ability to build a correct sentence using various grammatical vocabulary exercises and argues that By practicing various skills, non-native English speakers can improve their skills in general and effectively. On the other hand, The 09 remaining teachers are united by the idea that it is an excellent application that effectively helps in developing speaking skills.

Question Two:

Do you think Duolingo is the perfect choice for beginners, intermediate, or advanced when it comes to improving speaking a language other than your mother tongue?

Generally, the answers to this question express two different views, 07 teachers agreed that Duolingo is the best and appropriate choice We mention some of the answers that were as follows: Duolingo is a great choice for beginners, intermediate, or advanced to learn a new language because of its ease of use, fun, and wide range of diverse lessons also because it provides useful content based on images that help the learner focus. It is easy to work with, and it explains the different rules Simply, 2 other teachers view it as among the best choices because it depends on education from the beginning stage and at gradual levels, and Because of the freedom that this application gives, it is among the best options. There are those 2 teachers who had a different opinion about this application who expressed their opinion that There are other more effective methods, and this application remains only an assistant

Question Three Do you think that the various exercises offered by Duolingo help people develop speaking skills?

When we asked about the variety of activities provided by the Duolingo app that can develop speaking skills, All answers were united and agreed that yes the exercises in this application help greatly in developing speaking skills Some respondents point out that I and many people believe that the various Duolingo exercises can help develop language skills due to its various activities that stimulate the mind, as well as the repetition feature in training. One teacher believes that This application relies on daily tasks regularly, which helps the learner to continue practicing, and in this way, it makes the student feel that he is living an adventure and a challenge to learn the language, on the other hand, 3 of the teachers expressed their ideas by saying Yes, which helps greatly in conversation because it depends on gradually raising levels, one teacher expressed his views on Duolingo by saying Yes because it depends on the mechanism of repetition until the idea is understood

Question Four: With the widespread use of Duolingo, do you think that Duolingo can replace traditional methods of language learning?

The responses given by the teachers were different and conflicted about whether Duolingo could replace traditional methods of language learning so 05 teachers answered no the Duolingo application can not take the place of traditional methods, They demonstrated their arguments as follows: Duolingo app can complement traditional methods and not take their Place, similarly to the other four teachers supported his colleague's idea by saying Not at all because it is a complementary tool, whereas the sixth teacher just said no never can In the other hand some professors who agreed with the idea that Duolingo can replace the traditional methods by saying: Learning languages from a distance using this application is a common matter globally, and for this reason it may replace traditional methods, and for other ideas Due to the tremendous development of this application and advanced technologies such as learning with pictures and videos can easily replace the traditional methods of language learning

Question Five: Do you advise students to use Duolingo extensively because the application is proving its worth day after day? The responses to this question are that teachers extremely encourage learners to use this application, so we highlight the following important answers Yes, because this application has shown its worth and produced positive results, it has begun to help learners organize their time. For the other answer, yes, it provides simple translation and explanation of vocabulary and phrases using games, so this tool helps learners avoid boredom. From a different perspective, this application is regarded as one of the greatest, due to its various and challenging exercises that foster motivation.

Question Six: In your opinion, what are some of the challenges that students face when using Duolingo?

There are two main perspectives to this question, on the first hand 03 teachers think that There are no challenges that learners face when using this application, As for the teachers who saw that there are challenges, they demonstrated the value of their ideas as follows: The first

challenge students face is the lack of interaction provided by Duolingo, unlike the professor's interaction with students, and it also lacks advanced exercises, As for another professor's argument, Lack of clarification and insufficient assistance in completing the tasks of this application, in addition for on other ideas, Among the difficulties that the learner finds is returning to the lower level if he does not pass the required level, which leads to loss of passion. And finally the last argument, In my opinion, the greatest weakness is the Internet in some areas for learners who find difficulties in continuing practice

Question Seven: Do you recommend other effective language-learning apps?

The purpose of this question is to gather information about new learning applications where every professor had his suggestion, Their suggestions were as follows: the first 4 teachers suggested Memrise, and Babbel, another 2 teachers recommended Hello Talk, and one of them proposed the application Speaky and Bussu, however, the teacher number 04 supported YouTube channels whereas the last two teachers Their answers were similar to each other by suggesting Khan academy

3.8 Discussion of the main findings

The significance of the study findings concerning the research topics is discussed in this section. To guarantee the originality of the information collected, reliable and credible responses from the participants were considered. This section extended the discussion of the findings in light of the obtained data interpretations and analyses and offered insightful recommendations concerning the investigation.

3.8.1 Perceptions Towards Duolingo Application

Based on the findings obtained It has been found that Duolingo appeared as the most famous language learning application that enables learners to promote their autonomy in the language learning process and Monitor them on the way to achieving the learning goals they already set at the beginning of the use of this application, because of its engaging features that keeps

them away from boredom. The current findings proved that Duolingo is a great way of learning a language Away from the traditional methods that are still used in departments today

From the perspective of learners: Digital learners acknowledge smartphone applications as an essential resource to supplement traditional language learning methods. While social connection and structure are delivered by traditional learning approach, language learning applications offer a quick, simple, and satisfying way to master vocabulary, grammar, and pronunciation on mobile devices. This allows learners to focus and customize their learning process in an effortless way

From the perspective of teachers:Duolingo is an effective language learning application due to a variety of beneficial features, The app's characteristics promote motivation and make learning fun, encouraging consistent learning. Duolingo is considered an interesting website that can be an assistance resource for building a foundation for learning a new language, this application has proven to be effective in generating satisfactory results, That's why Duolingo is regarded as a component of the comprehensive approach to language learning. There is a particular group of teachers, nevertheless, who feel differently about this application. The educator's lack of support for implementing mobile-assisted language learning applications like Duolingo into the curriculum prevented students from having access to captivating and efficient language learning approaches. In addition, The teachers are unwilling to deal with these applications to encourage themselves and the students to improve their skills in speaking the English language, and they did not have the desire to even try these applications, and they judged these applications as useless and ineffective applications. and it can not replace the traditional teaching method because it still debatable the efficacy of language learning applications such as Duolingo

3.8.2 Autonomous Learning

In today's Technology globalized world, Autonomy in Language Learning is gaining the interest of scholars from different societies because it is widely spread among learners nowadays, it is also known as self-govern learning which is an approach to learning that allows learners to take control of their educational experience contrary to the teacher-centered traditional method. autonomous learning is an ongoing process that guarantees learners' instead of focusing on the impact of these applications it would turn the focus on the impact of the implementation of these applications as part of curriculum leadership in identifying weaknesses in knowledge and the areas to be developed. They then develop particular and feasible objectives, transforming their aspirations into a plan to acquire new or strengthen current abilities. Self-directed learning is characterized by the accurate choice of the ways and resources that suit the learning style perfectly

Based on the results, Economy students seem to be aware of the relevance of learner autonomy and how crucial is the use of the Duolingo application in promoting English language proficiency. Through technological advancements, it is crucial for learners to develop autonomous behavior to enhance their language skills. This may include anything from exploring instructional videos and educational platforms to attending workshops or studying helpful books and articles. Taking ownership goes to fully connecting with the selected assets, either via completing an established internet-based course or experimenting with there are plenty of learning approaches. It is important that self-directed learning emphasizes ongoing evaluation. Learners need to evaluate their progress toward their goals and reflect on what has succeeded and what adjustments may be necessary. This self-monitoring circle maintains learning concentration and efficiency, generating a sense of ownership and achievement with the knowledge and skills gained. Self-directed learning fosters lifelong learners able to freely access skills and attain personal and professional goals.

3.8.3 Duolingo and Speaking Skills

There are numerous applications for learning speaking skills. Among most learners, Duolingo is one excellent example that can assist students in developing their speaking skills. Based on the research findings, learning speaking skills using Duolingo is an appropriate tool that must be implemented in the classroom environment because this application has proven its effectiveness, leading to the rapid advancement of the learner's speaking abilities. In addition to that, Duolingo has proven its worth by helping learners achieve fluency when engaging in communication with others. learners choose and rely on this application during their academic season because it makes them able to recognize and memorize word and sentence structure in their speech and because of the speaking exercises that allow them to daily practice their language. The feature of receiving feedback makes the student more motivated and interested in their practice.

Generally, the findings of this study confirm the formulated hypothesis at the beginning of the research process which suggests that Duolingo is one of the best language learning applications and its Usability in fostering autonomous speaking skills proficiency

Recommendations

This part of the research suggests some recommendations about the use of mobile applications in learning-process

A) At the Level of Students

- students should utilize mobile phones as an instrument to thrive in their learning process.
- students should never neglect language classroom lessons and depend only on language learning mobile applications
- Learners should engage more in group conversation to develop language packages rather than relying on phones.
- Learners should avoid the exaggerated use of mobile.

B) At the Level of Teachers

- Teachers should motivate learners to twine between the traditional and the newly discovered approach to learning
- Teachers should be aware of these mobile learning applications.

At the Level of Universities

- Institutions should dedicate workshops to talk about these language-learning applications and their importance in transforming a person into a multilingual.

Recommendation for future researchers

The piece of guidance given below can assist upcoming research in conducting creative studies with reliable data:

- It is preferable to conduct a study that tracks learners' progress over a specific period (month semester or year)
- Carry out comparative research between Duolingo or any other application with traditional methods of teaching and learning.

Limitations of the study

There are several and diverse limitations and struggles we faced in this study, which will be discussed below. The main problem we faced was the lack of teachers' acceptance of introducing the English language into the Department of Economic, Commercial, and Management Sciences. While some of them refused to provide us with their feedback, others said that they didn't have time to answer or be part of our interview. In addition, we also struggled with collecting learners' answers to our questionnaire, because our questionnaire contains closed-ended and open-ended questions. Later, we found some irrelevant answers to the questions. For example, in the question of (What do you use Duolingo for? we received some answers like «YES » « Doling », and «JSP».. In another example for the questions

(please explain how Duolingo has helped you become a more autonomous learner), we received inappropriate answers such as « مسیتوش ». « ... » and « Y ».

In this questionnaire, our goal was to obtain a maximum of 60 answers to give credibility to our study, but unfortunately, we did not reach the number of answers we were looking for.

3.9 Conclusion

In this section of our investigation, we illustrated the most significant contributions made by the participants (teachers and learners). We have attempted to collect the maximum amount of information for our research. According to the study, the use of mobile-assisted language learning applications such as Duolingo, has a positive effect on learners in their academic learning process, and this study has proven that Duolingo can develop and help learners improve their speaking skills. Along with the overall findings, the unexpected thing is that the teachers do not have any will or intention to use and test this application, which led us to face many difficulties and troubles in completing the research process.

General conclusion

General conclusion

The concept of Mobile-assisted language learning has increasingly become a considerable topic in technology and English language learning—particularly, the various users' perspectives; including teachers, students, and responsible from different disciplines.

This research is designed to investigate Economy students' perspectives on the Duolingo application and its role in promoting new avenues for non-English students to develop autonomous behavior. Furthermore, it sheds light on to what extent Duolingo application usability promotes English language proficiency in the Department of Economy.

This dissertation is divided into three main chapters. The initial chapter provides a solid background knowledge of the concept of autonomy and language learning. The second chapter deals with the emergence of computer and mobile-assisted language learning, and its integration in the educational context. Furthermore, the third chapter is devoted to the methodological framework. The description of research design, procedures, and data analysis are presented.

To achieve the research objectives, we conducted a case study research using a questionnaire directed to students from the Department of Economic, Commercial, and Management Sciences. Additionally, we designed a semi-structured interview for teachers in the same department. The results of the students and teachers revealed their positive perception of Duolingo application usability. Also, the data obtained from the questionnaire showed a correlation between the formulated hypotheses and research findings. It has been demonstrated that the use of Duolingo leads to the improvement of fluency in spoken English. Furthermore, Duolingo's speaking interactions's features can facilitate self-directed learning and independent practice of spoken English.

General conclusion

On the other hand, the results revealed some overlap between students and their teachers. Teachers hold positive attitudes but are reluctant to change their ways. We may relate this fact to the lack of time and digital literacy.

In conclusion, autonomous learning could occur when learners become motivated, and build self-responsibility, and self-direction. In addition to that, the ability to manipulate language-learning applications supports learners to learn at their own pace.

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Appendices

- Appendice A: Students' Questionnaire English version
- Appendice B: Students' Questionnaire Arabic version
- Appendice C: Teachers interviews questions Arabic version
- Appendice D: Teachers interviews questions English version

Appendice A :

Students' Questionnaire English version

Please take some time to complete this questionnaire. Your responses will provide valuable information for our study, "Evaluating the Efficacy of the Duolingo Application in Fostering Autonomous Learning and Speaking Skills Proficiency. This investigation aims to learn about the use of the Duolingo application in developing speaking skills and learning English autonomously. All the responses will be kept strictly confidential.

SectionOne: Respondants´ Personal Information

Gender: *

- Male
- Female

Age?

- 20-22
- 22-25
- 25+

Academic Level

.....

Section Two: Experience with the Duolingo application

Are you familiar with language learning apps?

- Yes
- no

what do you use the Duolingo application for?

.....

How frequently do you use it?

- Always
- Often
- Sometimes
- Rarely

Please rate your agreement with the following statements on a scale of 1 (strongly disagree) to 5 (strongly agree)

	Strongly Agree	agree	Undecided	Disagree	Strongly disagree
Duolingo encourages me to take initiative in my language learning journey.					
Duolingo helps me set realistic and achievable learning goals.					
I am able to identify my learning strengths and weaknesses when using Duolingo					

Section three: Speaking Skills Proficiency

Do you think that Duolingo has helped improve your speaking skills?

- Yes
- No

Which of the following features of Duolingo do you find most helpful for improving your speaking skills? (Select all that apply)

- Listening exercises
- Speaking exercises
- Matching exercises
- Short stories and dialogue

How confident do you feel speaking English in the following situations? (Rate from 1 - Not confident at all, to 5 - Very confident)

	very confident	predominantly confident	slightly confident	Not confident at all
Introducing yourself to someone new.				
Ordering food at a restaurant				
talking with friends				
Online chatting (skype, Google Meet)				

Section Four: Autonomous learning

Have you noticed an increase in your autonomy in learning English since using Duolingo?

- Yes
- No

Please explain how Duolingo has helped you become a more autonomous learner.

.....

Do you consider Duolingo as the best language-learning app? And why?

.....

Appendice N° 02

Students' Questionnaire Arabic version

يرجى تخصيص بعض الوقت لاكمال هذا الاستبيان. ستوفر إجاباتك معلومات قيمة لدراستنا، "تقييم فعالية تطبيق Duolingo في تعزيز التعلم الذاتي وكفاءة مهارات التحدث. الغرض من هذا البحث هو معرفة استخدام تطبيق Duolingo. في تطوير مهارات التحدث وتعلم اللغة الإنجليزية بشكل مستقل سيتم الاحتفاظ بجميع الردود بسرية تامة.

القسم الأول: المعلومات الشخصية للمجيبين

الجنس

ذكر

انثى

العمر

20-22

22-25

25+

المستوى الدراسي

.....

القسم الثاني: تجربة تطبيق ديولنغو

هل أنت على دراية بتطبيقات تعلم اللغة؟

نعم

لا

في ماذا تستخدم تطبيق ديولنغو

.....

كم مرة تستخدمه؟

دائما

غالبا

أحيانا

نادرا

يرجى تقييم موافقتك على العبارات التالية على مقياس من 1 (لا أوافق بشدة) إلى 5 (أوافق بشدة)

لا أوافق بشدة	غير موافق	لم أقرر	موافق	موافق بشدة	
					يشجعني Duolingo على أخذ زمام المبادرة في رحلة تعلم اللغة الخاصة بي.
					يساعدني Duolingo في تحديد أهداف تعليمية واقعية وقابلة للتحقيق.
					أنا قادر على تحديد نقاط القوة والضعف في التعلم عند استخدام Duolingo

القسم الثالث: إتقان مهارات التحدث

هل تعتقد أن ديولنغو ساعدك في تحسين مهاراتك في التحدث؟

نعم

لا

أي من ميزات ديولنغو التالية تجدها مفيدة جدا لتحسين مهاراتك في التحدث؟

• تمارين الاستماع

• تمارين التحدث

• تمارين المطابقة

القصص القصيرة والحوار

ما مدى ثقتك في التحدث باللغة الإنجليزية في المواقف التالية؟ التقييم من 1 واثق جدا إلى 5 غير واثق على الإطلاق

غير واثق على الإطلاق	واثق قليلا	واثق في الغالب	واثق جدا	
				تقديم نفسك لشخص جديد
				طلب الطعام في مطعم
				التحدث مع الأصدقاء
				(skype , google meet) التحدث باستعمال تطبيقي

القسم الرابع: التعلم الذاتي

هل الحظت زيادة في استقاليتك في تعلم اللغة الإنجليزية منذ استخدام ديولينغو

نعم

لا

يرجى توضيح كيف ساعدك ديولنغو في ان تصبح اكثر استقلالية

.....

هل تعتبر ديولينغو افضل تطبيق لتعلم اللغات لماذا

Appendice C

Teachers' interview questions Arabic version

استبيان الاساتذة

هذا الاستبيان موجه لأساتذة كلية العلوم التجارية والاقتصادية وعلوم التسيير
من اجل معرفة انطباعهم حول تطبيقات تعلم اللغات (Duolingo)

-- من خلال تجربتك ما مدى فعالية ديولينجو في مساعدة المتحدثين باللغة الإنجليزية غير الأصليين على
تحسين مهارتهم في التحدث؟

- هل تعتقد ان ديولينجو هو الخيار الأمثل للمبتدئين او المتوسطين او المتقدمين عندما يتعلق الامر بتعلم
ابجديات التحدث بلغة غير اللغة الام؟

-هل تعتقد ان التمارين المتنوعة التي يقدمها ديولينجو تساعد الناس على تطوير مهارات التحدث
لماذا ولماذا لا ؟

- مع الانتشار الواسع لاستخدام ديولينجو هل تعتقد ان ديولينجو يمكن ان يحل محل الأساليب
التقليدية لتعلم اللغة ؟

-هل تنصح الطلبة باستخدام ديولينجو بطريقة مكثفة لان التطبيق يثبت جدارته يوما بعد يوما؟

- في نظرك ما هي بعض التحديات التي يواجهها الطالب عند استخدام ديولينجو؟

- هل توصي بتطبيقات أخرى فعالة لتعلم اللغة ؟

Appendice D

Teacher interviews questions English version

Teachers' Interview

This interview is directed to professors of the Faculty of Commercial, Economic, and Management Sciences To know their impression of language learning applications (Duolingo)

- In your experience, how effective is Duolingo in helping non-native English speakers improve their speaking skills?

- Do you think that Duolingo is the ideal choice for beginners, intermediate, or advanced when it comes to learning the ABCs of speaking a language other than your mother tongue?

-Do you think that the various exercises offered by Duolingo help people develop speaking skills? Why and why not?

- With the widespread use of Duolingo, do you think that Duolingo can replace traditional methods of language learning?

-Do you advise students to use Duolingo extensively because the application is proving its worth day after day?

- In your opinion, what are some of the challenges that students face when using Duolingo?

- Do you recommend other effective applications for language learning?

Summary

In the present days, English is gaining the status of an international language and emerged as a significant tool for effective communication between Algerian students Who have become heavily dependent on language-learning applications to develop their English language. This research seeks to highlight language learning applications such as Duolingo and determine the effectiveness of this application in enhancing the mastery of independent speaking skills.

Resumé

De nos jours, l'anglais acquiert le statut de langue mondiale et s'impose comme un outil important de communication efficace entre les étudiants algériens devenus fortement dépendants des applications d'apprentissage des langues pour développer leur anglais. Cette recherche vise à faire la lumière sur les applications d'apprentissage des langues telles que Duolingo et à déterminer l'efficacité de cette application pour améliorer la maîtrise des compétences orales indépendantes et l'auto-apprentissage en général.

ملخص

تكتسب اللغة الانجليزية في أيامنا هذه مكانة لغة عالمية وبرزت كأداة مهمة للتواصل الفعال بين الطالب الجزائريين الذين أصبحوا يعتمدون بشكل كبير على تطبيقات تعلم اللغة لتطوير لغتهم الانجليزية. ويسعى هذا البحث إلى تسليط الضوء على تطبيقات تعلم اللغة مثل ديولنغو و تحديد مدى فعالية هذا التطبيق في تعزيز إتقان مهارات التحدث المستقل والتعلم الذاتي بشكل عام.