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The Factors that Facilitate Graduate Learners' Participation in Online Training Programs: A Qualitative Case Study in Egypt

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THE AMERICAN UNIVERSITY IN CAIRO | SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

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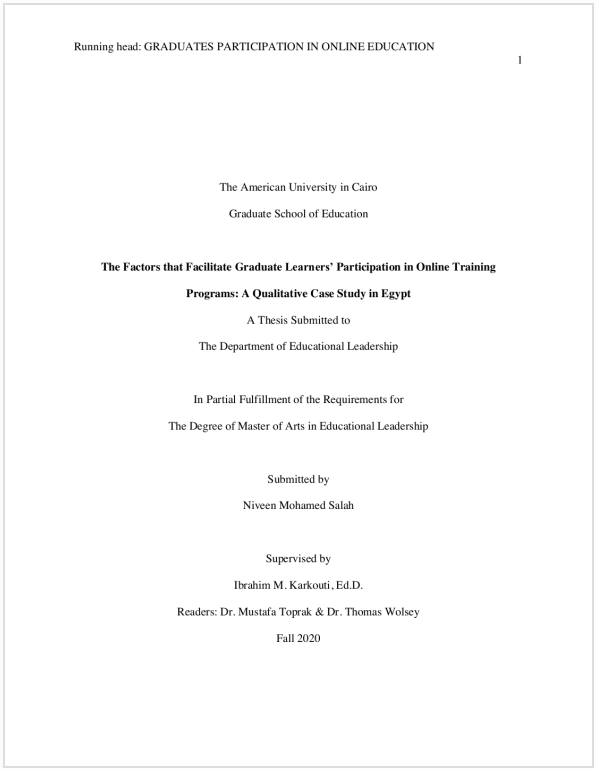

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The American University in Cairo

Graduate School of Education

The Factors that Facilitate Graduate Learners' Participation in Online Training Programs: A Qualitative Case Study in Egypt

A Thesis Submitted to

The Department of Educational Leadership

In Partial Fulfillment of the Requirements for

The Degree of Master of Arts in Educational Leadership

Submitted by

Niveen Mohamed Salah

Supervised by

Ibrahim M. Karkouti, Ed.D.

Readers: Dr. Mustafa Toprak & Dr. Thomas Wolsey

Fall 2020

THE AMERICAN UNIVERSITY IN CAIRO
الجامعة الأمريكية بالقاهرة
Graduate Studies

The Factors that Facilitate Graduate Learners' Participation in Online Training Programs: A Qualitative Case Study in Egypt

A Thesis Submitted by

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Abstract

This study explored graduate learners' perceptions of the factors that facilitate their participation in online training programs to advance their careers. The study adopted a qualitative approach and took place at the American University in Cairo (AUC), via Zoom. The study conducted virtual, semi-structured interviews with 10 participants who are currently attending online training courses in the Engineering and Science Services Department (ESS). It aimed to understand graduate learners' perceptions of the factors that facilitate their participation in online training programs and advance their careers. The study participants perceived online learning as the future of higher education and lifelong learning that helps them to enhance their knowledge and advance their careers. Graduate learners' perceptions of online learning yielded multiple recommendations that might help address and expand online education in Egypt. The findings of this study show the importance of improving online education in developing more efficient and successful strategies within the online learning environment in Egyptian universities.

Keywords: Educational technology, Egypt, Higher education, Online learning

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List of Abbreviations

AUC: The American University in Cairo

CACREP: The Council for Accreditation of Counseling and Related Educational Programs

CAPMAS: Central Agency for Public Mobilization and Statistics

CLT: Center of Learning and Teaching

ESS: Engineering and Science Services

ICT: Information and Communication Technology

PEOU: Perceived Ease of Use

PFPR: Professional Programs

PU: Perceived Usefulness

MCIT: The Ministry of Communications and Information Technology

NELC: National E-learning Center

OECD: Organization for Economic Cooperation and Development

SCU: Supreme Council of Universities

TAM: Technology Acceptance Model

TRA: Theory of Reasoned Action

UNESCO: United Nations Educational, Scientific and Cultural Organization

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Chapter 1: Introduction

The advent of technology has impacted the education arena creating new teaching and learning methods (Karkouti, 2016). There has been a growing interest in a modern learning environment that can accommodate diverse learners, improve lifelong learning, and prepare the learners to meet the needs of the job market. Today, online technology continues to evolve in terms of enhancing online learning that has become a preferred delivery method of education (Hendricks & Bailey, 2016). A global consensus tends to perceive online learning as a modern environment that provides a viable alternative to the lack of conventional education infrastructure.

Online learning has emerged as a result of developments in technology. Although the term lacks a unified definition, it can be defined as the learning approach which employs electronic devices such as computers, mobile phones, and any other technological device connected to the internet for educational purposes (El-Seoud et al., 2013). Since the early 1990s, the literature on online education delivery significantly increased with the rise of the Internet, creating various terms such as distance learning, computer-based learning, and lifelong learning (Volery & Lord, 2000). Lai (2011) stated that the significant shift in traditional learning from teacher-centered learning to student-centered eliminates the conventional conceptualization of learning as a passive activity where knowledge transmitted from someone who knows to someone who does not. Online education embodies this learning shift as a self-paced learning system supported by technology. This advantage of the online world has transferred students from passive to active learners rather than accepting what teachers transmit to them (Guessoum, 2006). Moreover, learning extended beyond the traditional classroom with the support of technologies (Lai, 2001).

In today's economy characterized by globalization, competition, knowledge sharing, and technology revolution, traditional education and training could not fulfill all the needs for lifelong learning (Zhang & Nunamaker, 2003). The "technology-driven era" calls for the need to continue training and promote individuals' knowledge and skills to be able to meet the challenges imposed by that epoch (Wagner, Hassanein, & Head, 2008). Research has shown that online learning is a strategic way to achieve quality in a short timeframe, within a context of continuous education, because it enables the workforce to make positive impacts on their organizations and reaches its aims and goals (Docebo, 2014).

Currently, the online market is witnessing fast growth due to its flexibility in providing learning opportunities for learners unrestricted by place and time. For example, learning can happen in classrooms, homes, or offices via the Internet, providing people with a personalized experience to learn, learning-on-demand opportunities, and reducing learning costs (Zhang & Nunamaker, 2003). The positive annual growth and market acceptance of online learning enhances its application in the corporate world (Docebo, 2014). This progress provokes educational institutions to adopt online training programs to globalize the recruitment strategies of their learners (Haijun, 2014). Vassiliou and McAleese (2014) affirmed that embracing online education can provide a shift in lifelong learning and continuing professional development for higher education institutions.

Universities must therefore use latest technologies in order to be competitive in the context of globalization and technological progress (McAvinia, 2016). Also, it is worth mentioning that the real value of online education not only lies in its ability to enhance student learning outcomes, but also in its ability to improve their skills or knowledge at the right time (Govindasamy, 2002). Accordingly, this integration of technology in education and adoption of

online learning can assist in providing a better learning experience that meets the needs of higher education learners in the 21st-century.

Background

In the first half of the 20th century, technological innovations have led to many advancements in distance learning, becoming the main platform for online learning in the 1990s and beyond (Hendricks & Bailey, 2016). Distance learning is probably the most familiar term which has designed for learners whose geographical remoteness from university campuses deprived them of knowledge, so technology helps to provide a useful and reasonably cheap higher education beyond a physical school (Volery & Lord, 2000). However, with the emergence of new learning platforms, like Blackboard, Moodle, and web apps, online education becomes a growing field practiced in higher education, companies, and training contexts as a part of lifelong learning transcending the traditional idea of distance education (E-Learn, 2017). Nowadays, the online education system has developed into an interactive process between students, instructors, and peers (Craig, 2015). It is also considered one of the most broadly used techniques due to its flexibility and accessibility (El Zayat, 2008).

Globally, the demand for higher education is increasing in many developed countries. This expansion imposes pressures on the governments to fund such upsurge with the limited capacity of existing classrooms and the high cost of new facilities at universities. For example, in Canada, it is estimated that over 70% of new jobs require higher education (Snow, Lamar, Hinkle, & Speciale, 2018). This rapid increase causes a decrease in the input "costs and resources" with a rise in the output "graduates" (Bach, Haynes & Smith, 2006). The UK has raised its outputs over the inputs, which raised concerns about the quality of education (Bach et al., 2006). Consequently, online education becomes a viable alternative, and its enrollment

continues to grow (Wagner et al., 2008). Enrolment in online education continues to grow, with six million students taking online courses in the United States (Snow et al., 2018). In 2018, the analysis of the **Council for Accreditation of Counseling and Related Educational Programs** (CACREP) database reported that over 12,000 students are enrolled in the CACREP-accredited online programs compared to 45,820 enrollments in 2016 (Snow et al., 2018). Thus, many universities increased their offerings to include online programs to stay competitive and maintain their market share (Wagner et al., 2008).

Likewise, there is a growing interest in online education in the Arab world such as Egypt, Saudi Arabia, Jordan, Lebanon, Bahrain, Palestine, United Arab Emirates, and Yemen (Adel, 2017). Online education is seen as a realistic response to educational problems across the globe in terms of budget restraints, lack of facilities, high enrollment rates, and quality considerations. Though, there are various levels of progress in the implementation of online education in the Arab world due to digital infrastructure, Internet access, and connection costs (Guessoum, 2006).

In 2006, the number of Blackboard users in UAE's National University (UAEU) jumped from 4000 to 8000; as such, the Arab Gulf realized that business needs the cost-efficient online programs and continuous training to cope with the globalized economic world (Guessoum, 2006). The largest university in Sana, Yemen has collaborated with Microsoft to deploy an online education platform (Guessoum, 2006). Despite these efforts and other initiatives, online learning in the Arab states has lagged behind the Western countries (Adel, 2017).

Moving to the local context, Egypt's higher education system is the largest in the Arab region (Barsoum & Rashad, 2018). Therefore, the educational arena is facing dynamic challenges. For example, Egyptian universities have to admit all students coming out of secondary into tertiary education, meaning that their numbers will double in the coming years

(Hussein, Mohammed, Tobeily, & Sheirah, 2009). This assimilation makes it difficult to provide high-quality education, which in turn affects the quality of learning outcomes.

The significant numbers in Egyptian higher education system have called the need for incorporating online education in the learning process, which can aid a high number of students despite the class capacity (El Gamal & Abd El Aziz, 2012). Hence, switching to online learning tends to be a feasible strategy that can help reduce classroom capacity, admit more students, and boost the quality of higher education in Egypt to meet the needs of the global market.

Problem Statement

Lai (2011) clarified that access to higher education has created a wide variety of students with diverse learning backgrounds and needs. This diversity highlights the need for a transformation into an education system that can accommodate this multiplicity of needs. Some policymakers perceive technology as a mechanism that will help to respond to changes in education as well as a transformative tool in teaching and learning (Lai, 2011). Docebo (2014) argued that the use of online education has increased considerably in many parts of the world as the future of education in the coming era. As a result, many universities worldwide are offering thousands of online courses, degrees, and certificate programs (Zhang & Nunamaker, 2003). Furthermore, the integration of online learning has extended to the post-graduate education level as a part of lifelong learning owing to the innovation and sustainable development of contemporary technologies. E-learn Center (2018) indicated that online education is a developing field that has been experienced not only in higher education but also in training contexts as a part of lifelong learning.

According to some regional reports, the highest rate of growth in the global online market of self-paced learning has reached 17.3% in Asia, 16.9% in Eastern Europe, 15.2% in

Africa and 14.6% in Latin America (Docebo, 2014). There has been recent, steady growth in Egyptian universities which utilize the internet for educational purposes. This fact makes Egypt ready to expand online learning in higher education and lifelong learning to enhance graduates' employability.

Employability is not only about getting a job but also about acquiring a set of broader skills and attributes which enable graduates to be successful throughout their career life (Yorke, 2006). There is a mismatch between the outputs of the Egyptian higher education system and the labor market needs (Assaad, Krafft, & Isfahani, 2018). Consequently, the number of graduates who need to enhance their skills by attaining training courses to match the requirements of the labor market has increased. Assaad et al. (2018) warned that Egypt has twice as many college graduates yet with lower returns to the economy due to their limited skills. This gap between the supply "graduates with limited skills" and the demand "skills required for the labor market" has enriched the field of online training in Egypt. It has created a tendency for online training programs to improve individual skills and reduce the incompatibility between the skills produced by the education system and the needs of the labor market (Assaad et al., 2018). Docebo (2014) asserted that companies can avoid being outdated in the business market by providing continuous training to their employees.

Since the 1970s, Egyptians have considered English language as a gateway towards better jobs (Schaub, 2000). The field of continuing education in Egypt was limited to English courses due to the market demands at that time. Therefore, Egyptians are highly motivated to acquire English language skills (Schaub, 2000). Nowadays, companies have realized that a business strategy that builds synergy between lifelong learning, technology proficiency, and workforce productivity is an optimal approach to adapt to a rapidly changing economy (E-learn

Center, 2018). As such, the online training domain started offering many new subjects in many fields as business, engineering, information technology, and others to help the employees boost their career skills and accomplish the goals of their organizations. This corporate training market continues to represent a feasible investment opportunity (Docebo, 2014).

There is a clear gap in the literature when it comes to studying the factors that facilitate online education and its effects on career advancement for graduate learners in training courses. The research primarily focuses on online education strategies, potentials, improvements, challenges, inclusions, and implementations, is too rich, especially in the academic arena. Literature has been rich with studies regarding online potential benefits and adoption; nonetheless, technologies cannot be adopted regardless of the adopters' nature, perception, and readiness (El Gamal & Abd El Aziz, 2012). Hussein et al. (2009) presented the use of e-learning technologies in the Egyptian public universities and identified the factors which represent a challenge towards its proper integration as (a) high student numbers, (b) staffing-related problems such as, recruiting unqualified academic personnel without considering expertise or skills in teaching and conducting research, (c) financing of higher education, (d) governance and management of the higher education system, and (e) quality assurance.

Zhang and Nunamaker (2003) introduced the demands for enabling technologies to enhance and facilitate the implementation and the design of e-learning systems. Their study concluded that the advancement of technologies would have a significant future impact on e-learning in the new millennium. Whereas, Adel (2017) investigated the (a) possible challenges that Egyptian higher education institutions face while introducing quality e-learning initiatives, and (b) recognition of e-learning in Egyptian higher education institutions. However, research which explores factors that facilitate graduates' participation in online training courses to

advance their careers is very limited in Egypt; therefore, the focus of this study is essential because it provides educators, policymakers, and various stakeholders with a better understanding of the factors that facilitate graduates' participation in online training programs. It becomes essential for universities to identify and understand the critical successful factors affecting the online delivery of education to make the utmost use of the Internet (Volery & Lord, 2000).

Adopting online education, which has been successful in many countries, requires a complete understanding of its needs, opportunities, and prospects. This paper aims to study the factors that graduate learners perceive as facilitating their participation in online training programs to increase the awareness of the benefits of online education. The study further points out how much online education has helped these graduate learners with their needs to advance their careers. Subsequently, it generates a set of suggestions that could help to improve online education in Egypt.

The study is a qualitative, exploratory case study that conducted virtual, semi-structured interviews at the American University in Cairo (AUC), specifically, the Engineering and Science Services (ESS) training center. It comprised a sample of 10 graduate learners who took online training professional programs (PFPR). It also explored the factors that facilitate their participation in online training programs to advance their careers. This research aims to make contributions by providing a framework for better and broad access to the field of online education in Egypt.

The findings of this paper highlight the importance of online education and the necessity to expand it on a broader scale. The results also might have significant implications for educational policymakers, stakeholders, and administrators. For example, facilitating information

exchange, improving the quality of teaching and learning, improving access to education and training, responding to labor market conditions, and preparing for lifelong learning (Farahat, 2012). The adoption of these implications could have similar positive impacts on online education in Egyptian universities.

Integrating Online Learning in the Higher Education Context

The growth of some jobs at the expense of others has made lifelong learning necessary for graduates to boost their employability. Online lifelong learning can incorporate the required proficiencies and technological literacy that are considered core skills in the present time. Higher education institutions must accommodate the demands of the current globalized economy by supplying learners with the skills and competencies needed for today's labor market (Lai, 2011). Nonetheless, Egyptian higher education does not supply the graduates with the labor market needs in today's rapidly changing job market. Many Egyptian universities do not guide graduates about job-hunting and training (El Gamal & Abd El Aziz, 2012). Therefore, training can play an essential role in fostering lifelong learning and equipping learners with these skills to keep up with economic changes. In the future, the demand for postgraduate studies will increase because people will have to develop their skills to remain competitive in the job market (Lai, 2011).

In the training context, AUC's ESS have rich experience in the field of online and continuing education in addition to the resources which can assist in fueling its expansion. Continuing education embraces training provided by organizations for employees to improve their professional development by covering specific needs to accredit knowledge and skills (E-learn Center, 2018). The essence of online learning includes several features that are consistent with today's technological age. Current technological advancements that surround us in our daily tasks have increased online learning, particularly for those who choose it because it

suits both their learning and lifestyle (Snow et al., 2018). Online learning supports this lifelong learning for its ability to transcend the time and place barriers and provide new opportunities for learning, enhance metacognitive, problem solving, and collaborative learning skills (Lai, 2011). For example, its flexibility enables the learners to study at their convenience and keep them responsible for their learning. It is also affordable for learners who cannot bear the high costs of physical education. It is the flexibility of online education that help non-traditional learners to participate in lifelong learning and continue their professional development (Vassiliou & Mcaleese, 2014).

Significance of the Study

This study is important because it could enhance the quality of online education at higher education institutions in Egypt. The Egyptian learning institutions have recognized the importance of investing in technology to address factors such as controlling costs, attracting learners, and meeting their needs (El Gamal & Abd El Aziz, 2012). Most of the literature on online education has focused on the implementation, development, and application of the online practice (Adel, 2017). There is a developing awareness of the initiatives which explain the necessity of integrating and practicing technology into education and preparing learners, teachers, and other stakeholders to foster this new approach in education. Several types of research have tackled the performance and evaluation of online education and addressed its impact on the educational outcomes and the performance of the learner (Adel, 2017). These studies have primarily covered the pre-university and tertiary education. However, the literature which tackles the postgraduate level and continuing education is inadequate. There is almost no present research in Egypt which generally focuses on online education for graduate learners in

training programs or explicitly explores the factors that enhance their participation in online education to advance their careers.

Therefore, expanding the existing knowledge pertaining to online education in Egypt and covering this literature gap seem both timely and important. El Gamal and Abd El Aziz (2012) pointed out that it is essential to explore the perceptions of different stakeholders towards online education and whether their various attitudes affect its provision and practice in the Egyptian context to promote online learning in Egypt.

Secondly, according to Karkouti (2016), there are several studies on technology integration into education using quantitative approaches. Quantitative methods use standardized measures on a large sample and produce some systematic and generalizable findings. In contrast, qualitative methods use realistic queries on a small sample and generate detailed information with less generalizability (Patton, 2002). This study applies qualitative interviews to reach an in-depth and comprehensive understanding of the factors that graduate learners perceive to facilitate their participation in online training programs.

Thirdly, human capital is one of the longest-lived assets, a value that businesses use to increase their revenue; therefore, its improper allocation is tremendously costly (Assaad et al., 2018). Through this sense, the study is also considered significant as it focuses on the critical dimension of "career development" for graduates. The current higher education system fails to respond to the needs of the labor market and thus causes a high level of unemployment rate among graduates in Egypt. This kind of inconsistency between the labor market and graduate employability is considered of great importance to individuals and decision-makers who make vital decisions about higher education throughout the globe (Assaad et al., 2018). By examining the factors that graduate learners believe could contribute to their career enhancement, this

study could also contribute to developing the training sector in Egypt towards economic progress.

Finally, online learning is an opportunity for those who cannot afford traditional learning due to different reasons. There has been a present inclination to online education in Egypt highly encouraged by stakeholders as international learners, learners with tight schedules, disabled learners, and learners living in remote areas. Online education can accommodate all of these types of learners. Access to higher education for marginalized groups in rural areas, cost-effectiveness and convenience are the major drivers of online learning (El Gamal & Abd El Aziz, 2012). In addition to educators, technical support organizations, and universities that perceive online education as an opportunity to extend access to their courses. Most of all, the present Egyptian government, which acknowledges e-learning and online education as viable alternatives to the problems of the conventional education system (Afifi, 2011).

Theoretical Framework

Davis (1986) Technology Acceptance Model (TAM) addresses why users accept or reject technology. TAM originated from the Theory of Reasoned Action (TRA) proposed by Fishbein and Ajzen (1975) which explains and predicts the behaviors of individuals in a particular situation. TAM includes five constructs: (a) external variables, (b) perceived usefulness, (c) perceived ease of use, (d) attitude, and (e) behavioral intention. Each of them relates to this study as it discusses a different aspect of the factors that promote the involvement of graduate learners in online education. TAM will be thoroughly clarified in the next paragraph and will be used as a tool to interpret the results of this study. The reason for choosing this model is that its design is consistent with the essence of the analysis.

The TAM (Davis, 1986) is important to this study because it can predict the personal use and acceptance of technology, and online learning is considered a powerful educational technology resource. The Internet is one of the main technical innovations that have reshaped universities to incorporate technology into teaching, making advances in the use of electronic education delivery methods (Volery & Lord, 2000). Davis's TAM was designed to describe the actions of individuals in the use of technology based on two technology acceptance constructs: (a) the perceived usefulness and ease of use of technology and (b) personal attitudes, behavior, intentions, and actual technology acceptance behaviors (Karkouti, 2016).

Davis's TAM (1986) postulates the reasons for personal acceptance or rejection towards the use of a computer-based technology system, such as online education. The model is a remodeling of TRA (Fishbein & Ajzen, 1975). The basic assumption of TRA is that people are rational but not automatic, and that their behaviors are based on their beliefs in the consequences of actions in addition to what other people want them to do; therefore, behavior is rational and social (Doleck, Bazelaid, & Lemay, 2017).

It suggests that the attitudes of people in a particular context rise from their intentions as well as the perceptions of others regarding their performance (subjective behavior norms) (Karkouti, 2016). Figure 1 presents a description of TAM, showing the homogeneity and the correlations between the components of the model. The technology acceptance model provides a framework for understanding how users embrace and use technology (Doleck et al., 2017).

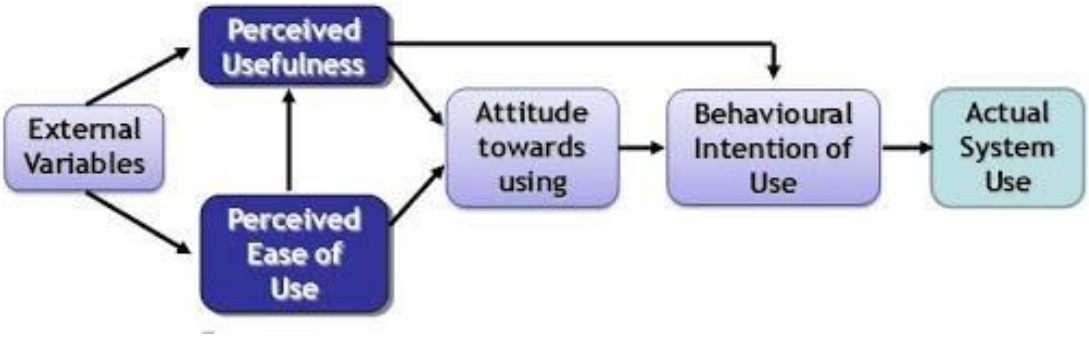


Figure 1. Davis's TAM Model. Source: Adapted from (Davis, 1986)

As shown in Figure 1, TAM introduces four interrelated components: (a) external variables, (b) perceived usefulness of the technology, (c) perceived ease of using the technology, and (d) attitude toward using the technology. The model illustrates that these four components intervene and affect the internal beliefs, norms, attitudes, and intentions. TAM proposes that external variables occur indirectly, influencing attitude, subjective norms, and influencing perceived usefulness and perceived ease of use (Legris et al., 2003). The perceived ease of use (PEOU) and perceived usefulness (PU) are the most relevant factors in predicting the individual's attitudes toward technology acceptance and usage (Karkouti, 2016).

Description of TAM Components

External Variables

External variables are demographic factors with manifested characteristics as gender, level of study, language, skills, and computer knowledge. The perceived usefulness and perceived ease of use are considered mediators that influenced by these external factors (Akinbobola & Adeleke, 2016). Akinbobola and Adeleke (2016) argued that such demographic variables reveal variances among users in practicing information systems. For example, computer knowledge and computer literacy that increases user's promptness adaption to information systems more than those who lack such awareness.

In a study carried out in Damietta Faculty of Education, Farahat (2012) found that learners have negative attitudes and perceptions of online education because they do not perceive the usefulness and ease of online learning. Consequently, they refused to use it. This reluctance to practice online learning is the product of a lack of adequate skills that facilitate online learning. Moreover, the insufficient support the students perceive from instructors and families to embrace this new system. Poor readiness and resistance of people are the most significant factors that may adversely impact online learning. The negative attitudes toward technology remain a major reason behind resisting using e-learning in university (Sadik, 2007).

Perceived Usefulness

Davis defined perceived usefulness as the person's postulation that using a specific application system will enhance his or her job performance (Doleck et al., 2017). For example, if users believe that the use of technology entails professional benefits, the likelihood of using it will increase (Farahat, 2012). Graduate learners might tend to or online learning as they perceive that it would deliver better outcomes on their job performance. In the same way, instructors may embrace online education if it positively impacts their financial, academic, or career status.

Perceived Ease of Use

Perceived ease of use explains the learner's perception of the amount of effort needed to practice a particular system (Farahat, 2012). Friendly user systems are more likely to be applied in online learning to facilitate the learning process for the participants.

Attitude

An individual's settled way of thinking or inclination towards adopting or disregarding the implementation of a specific system. Attitude plays a mediating role between the perceived

usefulness, perceived ease of use, variables and behavioral intentions (Doleck et al., 2017). This attitude determines whether the person will use or not a particular system (Karkouti, 2016).

Behavioral Intention

Davis defined behavioral intentions as a measure of the strength of one's intention to perform a specific behavior to predict actual use (Doleck et al., 2017). It is used to explain the extent to which a learner frames conscious plans to use or not online learning-related activities (Farahat, 2012).

Research Questions

This paper aims at exploring graduate learners' perceptions of the factors that facilitate their participation in online training programs to advance their careers. Davis's (1986) TAM guided this study and the research question which the study aims to answer: What are graduate learners' perceptions of the factors that facilitate their participation in online training programs to advance their careers?

To further investigate this topic, the study addresses the following sub-questions:

1- What are the external variables that facilitate graduate learners' participation in online training programs and advance their careers?

2- What are graduate learners' perceptions of the usefulness of online training programs in terms of career advancement?

3- What are graduate learners' perceptions regarding the ease of using online resources for career advancement purposes?

4- What are graduate learners' perceptions regarding the attitudes that facilitate their participation in online training programs?

5- What are graduate learners' perceptions regarding the behaviors needed to facilitate their participation in online training programs and enhance their career advancement?

Definition of Terms

For the purpose of this study, the following definitions of key terms applied:

Online Education: A learning approach using electronic devices such as computers, mobile phones, and any other technological devices connected to the internet for educational purposes (El-Seoud et al., 2013)

Perceived Usefulness: The extent to which persons trust using a specific system would boost their career performance (Doleck et al., 2017).

Training Programs: A practice through which a person acquires skills needed for a job (Merriam-Webster's online dictionary, n.d.).

Instructors: Full or Part-time academic professors are teaching courses at an educational organization.

Graduate Learner: A person holding a college degree and seeks to continue education to enhance personal and employability skills.

Perception: The way of viewing or understanding something or someone (Merriam-Webster's online dictionary, n.d.).

Career Advancement: A process by which individuals develop their skills to move their jobs forward (Merriam-Webster's online dictionary, n.d.).

Lifelong learning: The multiple ways of learning throughout life that is influenced by the constantly changing social and cultural norms (Volery & Lord, 2000).

Organization of the Thesis

The research consists of five chapters using the following references:

Chapter 1 included an introduction, the purpose, problem statement, and significance of the study. It identifies the theoretical framework which guides the study and the research question that shapes the study. Finally, it sets out some definitions of different key terms frequently used in the study.

Chapter 2 highlights the body of literature that relates to online education, the perception of graduate learners of the factors which facilitate their participation in online training programs to advance their careers, the impact of online education on career advancement and academic achievement, the value of training, and some success features that lead to the involvement of graduate learners in online training programs.

Chapter 3 sets out the methodology used for this study, the research design, the analytical process, research tools, data collection, data analysis techniques, recruitment of participants and steps taken to maintain their privacy in research**.**

Chapter 4 This chapter deals directly with the findings of the study. It presents interviews with participants and the various themes that arose from these interviews to obtain a deep understanding of each of the participants. The themes were explored through TAM Model literature and theories. The themes revealed some commonality in the experiences of the participants and their mutual interest in online education.

Chapter 5 This chapter discusses the research findings and offers recommendations for future research and practice in the online education field.

Chapter 2: Literature Review

Introduction to the Chapter

This research is a qualitative, exploratory case study in Egypt that focuses on exploring graduate learners' perceptions of the factors that facilitate their participation in online training programs to enhance their careers. A qualitative research design was deemed appropriate for this study because it empowers people to explore and share their stories (Creswell, 2007). More specifically, it's a qualitative, exploratory case study because it tries to explore phenomena in a real-world setting (Yin, 2014). According to Creswell (2007), case studies help researchers understand an issue, a program, and even one or more individuals in a specific setting or context.

The researcher conducted this study at ESS, a continuing education training department at the AUC. The findings of this study could be used to develop, enhance, and incorporate online learning into the education system in Egypt. In order to explore graduate learners' perceptions of the factors that facilitate their participation in online training programs to enhance their careers, the study sought some relevant literature that addressed online education. The chapter begins by describing the value of online education in general and offers an overview of online education in Egypt in particular. It continues to show the importance of training and continuing education as relevant to the topic of the study. The chapter then discusses some of the literature reviews that tackled the effect of online education on both participants' career development and academic achievement. The final section addresses the factors which facilitate the participation in online programs based on the interrelated literature.

The selected literature is obtained from primary sources based on a methodical search of electronic database (AUC Library) and two search engines (EBSCOhost, ERIC, and Google Scholar) and through using different keywords relevant to the study. For example, technology,

online education, online learning, career advancement, academic achievement, post-graduate studies, lifelong learning, training programs, academic performance, online approaches, and continuing education.

The Importance of Online Education

In the new millennium of globalization, international growth, and technological revolution, online learning is seen as a robust technology tool that is transforming the face of education around the world. Online education seems to be the upcoming trend (El Gamal & Abd El Aziz, 2012). New pedagogies have emerged as a result of technical advances, and online education has gained significant worldwide attention. According to Wagner et al. (2008), E-learning is considered the fastest-growing sub-sector of the $2.3 trillion dollars global education market. Owing to technology advances, the traditional modality of education and training sectors is undergoing a radical change. Zhang and Nunamaker (2003) explained that people could change their careers many times in their lives. Hence, the concept of conventional education is no longer compatible with the growing interest in lifelong learning. Even without career changes, people can continue to build and enhance their skills through lifelong learning. In this context, teaching and learning are no longer restricted to conventional classrooms because they do not meet the needs of the modern methodology of lifelong learning. Technology can add to this challenging environment and play a crucial part by increasing the efficiency of learning and providing new prospects to improve the quality of the learner's experience (Bach et al., 2006).

Many countries have fostered the integration of technology into education to help in building a labor force capable of competing in today's global economy (Karkouti, 2016). Education and training have become an enormous business worldwide estimated by $2 trillion

marketplaces from pre-school to retirement (Zhang & Nunamaker, 2003). From a student's perspective, online education streamlines lifelong learning, continuous training, and enhances the skills that are required by the knowledge economy (Wagner et al., 2008). Accordingly, online education can create learning methods that are more convenient and adaptable to meet this new challenge (Lai, 2011). Therefore, it is imperative to maximize the opportunities which online education can bring to improve the quality of learning as well as the learners' achievement.

Globally, the limited capacity of existing classrooms and the high cost of education in academic institutions have increased the demand for online learning for post-secondary education. For example, 2.8 million learners enrolled in online classes in the United States (Snow et al., 2018). Online education is witnessing an expansion in both schools and universities in Western countries to meet the rising demand for education (Cheng, 2018). Despite this evidence, information technology appears to add to, but has not transformed, traditional learning experience (Lai, 2011).

Over the past years, there is growing attention in e-learning initiatives in the Arab world (Adel, 2017). For example, some successful educational initiatives carried out by Arab countries, such as those that occurred in Jordan and Kuwait, promote the integration of technology into education to develop human capital and economic progress (Karkouti, 2016). Nevertheless, online education is still at an early stage relative to that of Western countries (Adel, 2017).

In Egypt, online education has not reached the complete implementation stage (El Zayat, 2008). Although the widespread use of this system can have a positive impact on learning outcomes. It can enhance the learning process and allow learners to adapt to global changes in the modern world of advanced technology. Research assessing the overall effect of information technology on higher education learning over the past two decades has concluded that the use of

technology in higher education has not entirely benefited from the potential benefits of technology (Lai, 2011).

Online Education in Egypt

In 2017, the population of Egypt reached 97,553 million with an annual population growth of 1.90 % (UNESCO, 2019). According to the OECD and the World Bank, the Egyptian higher education system is expected to enroll 1.1 million students in 2021, "increasing the higher education participation rate from 28 % to 35 % over the same period" (Barsoum & Rashad, 2018, p. 129). Given those enormous rates, no traditional education system can persist with this steady growth in the number of learners. Therefore, embracing a new system that can help to accommodate such numbers without affecting the quality of education has become imperative. Barsoum and Rashad (2018), argued that the increasing demand for higher education poses pressures for institutions that surpass their seats and budgets and hinders the quality of education.

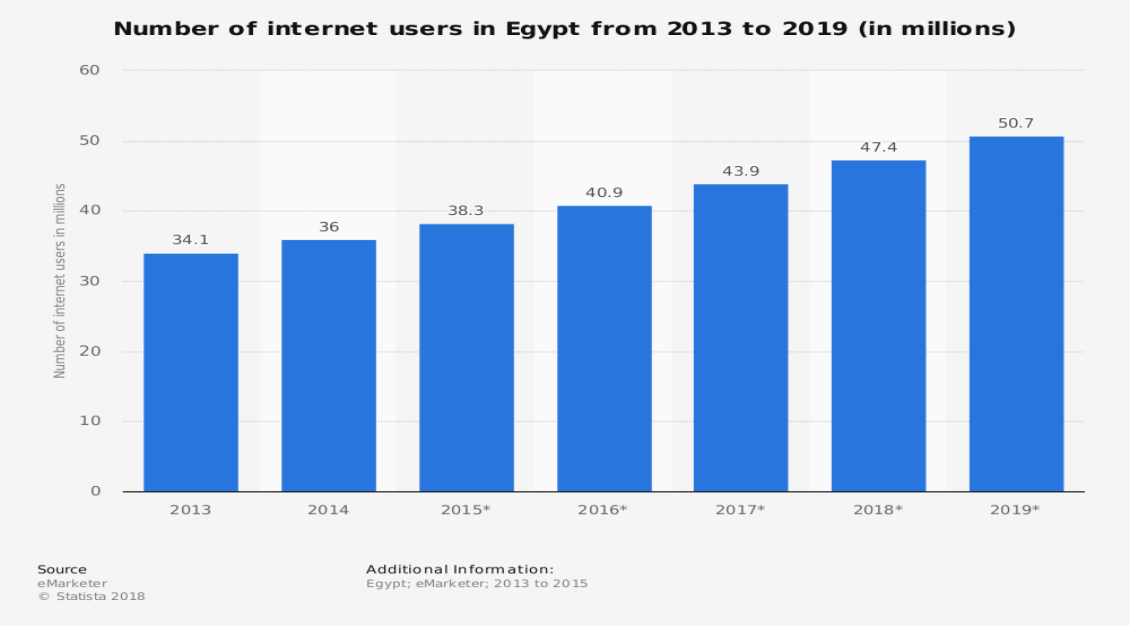
The Egyptian higher education system is suffering from the growing number of learners, and the insufficient slots in schools, colleges, and even training centers. The number of graduates from 17 public universities reached 368,000 and 22,000 from 19 private universities (CAPMAS, 2019). This growing demand for higher education puts pressure on educational institutions and places severe restrictions on the quality of education, making it impossible for them to afford all of these large numbers of students. However, educational institutions have to accept numbers that exceed their capacity to accommodate the needs of the learners (El Zayat, 2008). This density affects the quality of education, causes difficulties in interacting with the professors, and hinders participation in the classroom. Even in the ESS training center, this problem represents one of the challenges which affects the quality of the educational services provided.

Consequently, there is a need to bridge the gap between the increasing enrollment in different contexts of education and the limited places in educational institutions. This situation opens the way for online education to respond to the rising demand on education. Online learning could bridge the gap between the number of slots available in universities and the rising demand for higher education in Egypt (El Gamal & Abd El Aziz, 2012).

Online education is characterized by being (a) flexible as learners can study at their own pace, (b) convenient where learners can complete their studies at remote locations, (c) accessible to all learners, including disabled people, who can have special accommodations to their needs, (d) obtainable as learners can attain a large amount of information and knowledge, (e) cost-effective and affordable because it saves time, effort, and money, and (f) networking as learners interact and share experience from diverse backgrounds and cultures (Snow et al., 2018).

In evaluating Egypt's readiness for online education, factors such as current infrastructure, affordable access to the Internet, and "PC in Every Home project" are considered sufficient to provide support to online learning. The number of internet users in Egypt has increased significantly, owing to technological advancements. It reached 50.7 million in 2019 compared to 47.4 in 2018, representing an annual growth rate of 3.3% (Statista Website, 2019). Figure 2 illustrates the growth of internet use in Egypt, as shown below:

Figure 2: Growth of Internet Users in Egypt 2013-2019. Source: (Statista Website, 2019)



The Ministry of Higher Education (MOHE) is the responsible entity for the higher education system in Egypt. The National Institutional Information and Communication Technology (ICT) in collaboration with the MOHE implements policies and initiatives that embrace e-learning as an alternative teaching strategy to overcome the challenges faced by the traditional system such as high enrollment, budget deficit, management problems, and quality of the order (Hussein et al., 2009).

In 2007, the Information and Communication Technology Project (ICTP) had established the National E-learning Center (NELC) project at the Supreme Council of Universities (SCU) to build, manage, and monitor the infrastructure of the e-learning and online technique in Egyptian universities (National E-learning Center, 2019). Today, the NELC has 22 Sub-Centers at Egyptian universities aiming to provide all forms of e-Learning for everyone and everywhere by creating an adequate e-learning environment where instructors connect to students (National e-learning Center, 2019).

In 2007, Egypt also established the Egyptian e-Learning University (EELU) with Decree No. 233, the first e-learning, private, and non-profit University that provides 24-hour online learning to become a leading university offering e-learning in both national and international contexts (EELU, 2019). It provides educational opportunities for learners who cannot attend on-campus. Besides Cairo, it covers remote areas where students can learn, access material, and interact with their instructors through EELU internet (EELU, 2019). In addition to these initiatives, the use of the Internet continues to cover both rural and urban areas with 42.10% and 62%, respectively, as indicated in Figure 3.

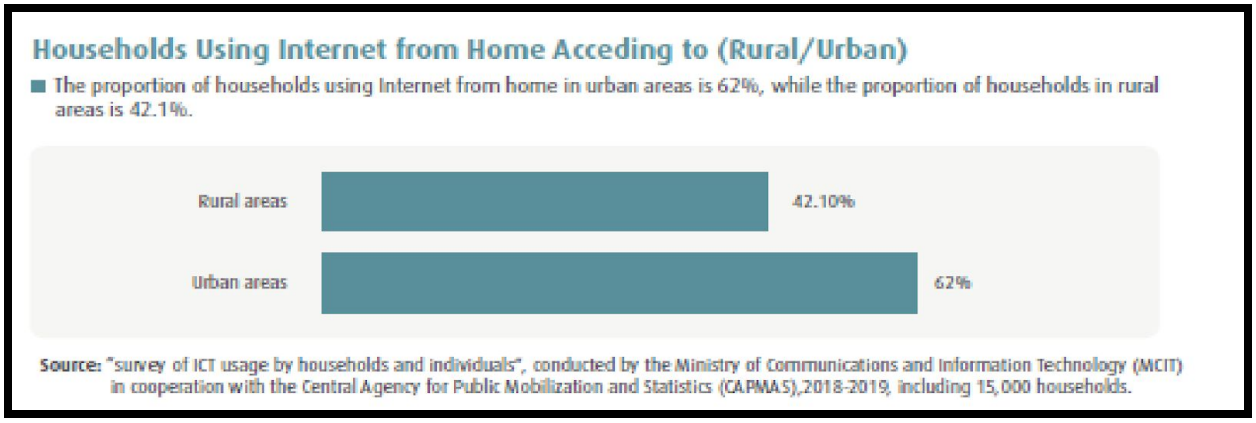


Figure 3: Internet Usage in Rural and Urban Areas. Source: (MCIT Website, 2019)

Figure three displays Egypt as an up-and-coming platform for online education. It shows that the number of people who access the internet at home is 42.10% in rural areas and 62% in urban ones. The "in-home use" percentage is still unclear; however, education can be one of the reasons. On another note, culture could be one of the challenging barriers that impede the growth and expansion of Internet use in rural areas. El Gamal and Abd El Aziz (2012) explained that there is a poor perception of online learning in some Arab regions, which in turn explains why these percentages are relatively low.

Despite the above efforts, online education in Egypt has not produced tangible results. Universities are making efforts to expand online learning (El Gamal & Abd El Aziz, 2012). Yet, these efforts are not adequate as there is a need to market, stimulate, and encourage online education in Egypt. Policymakers and different stakeholders should tackle these problems more efficiently. Until now, Egyptian people are not fully aware of the viability of online education as a learning method. On the other hand, and ironically, Egypt is one of the largest countries to use Facebook among Arab countries. According to the Ministry of Communications and Information Technology (MCIT) (2019), the percentage of Egyptian people who have access to

social media is 90%. If this number shifts to online education, it could make a difference in its development and expansion.

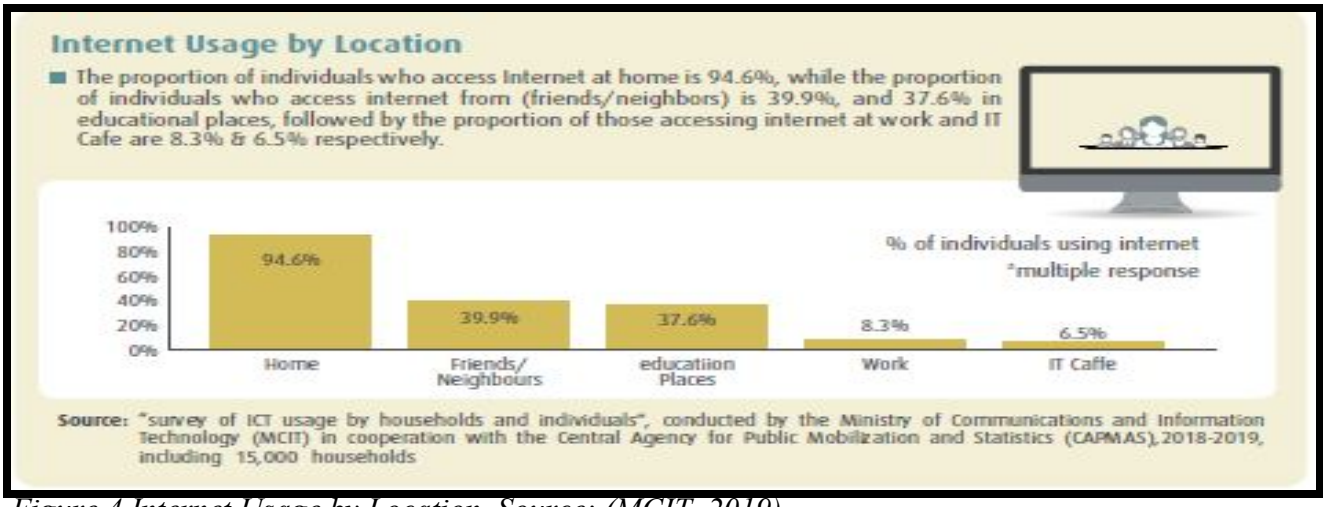


Figure 4 Internet Usage by Location. Source: (MCIT, 2019)

Figure four highlights the percentage of Internet use in education places; 37.6%. This shows people's willingness to accept online learning as an educational tool conducive to academic success. Technology use for teaching and learning purposes can have an impact on student learning if educators envision its benefits and how it improves learning outcomes and quality (Lai, 2011). Education practitioners must, therefore, help the government to make a tangible change to the education system. On the other hand, the government must raise people's awareness of the pressing need for viable solutions to minimize the shortcomings of the current education system.

ESS Experience in Online Education

The American University in Cairo (AUC) is considered one of the early adopters of online learning technology by providing a wide range of online courses and activities for both academic and non-academic learners that aims at improving their skills for lifelong learning and building solid foundations for future online learning programs. Engineering and Science Services (ESS) established in 1983 as a non-academic training center. According to AUC's website, "ESS

serves more than 600 public and private sector organizations in the field of training programs by providing a wide range of intensive courses, professional programs, and tailored trainings in Egypt and the Middle East" (American University in Cairo [AUC], 2019, para. 2). Its state of the art facilities are "well-equipped with modern laboratories, highly trained professors, and diverse trainees to help the local industry meet the demands of the international market" (para. 3).

Online education at ESS can be categorized into two phases, the first phase is using Blackboard as a platform for instruction. The participants and instructors have been exposed to this learning and teaching method which enables instructors to incorporate resources to improve the teaching and learning processes. "Blackboard is a web-based course management system, used worldwide by universities, designed to allow students and instructors to interact and build a rich learning atmosphere using online resources and up-to-date networking technologies such as email, message forums, and wikis" (AUC, 2019, para. 9). Given that certain learners may not have expertise in the online course platform, ESS offers personal technical assistance 24/7 and online instruction and a manual to help graduate learners overcome any technical difficulties during their courses. Currently, ESS offers more than 40 online courses with a total of 500 participants as shown below (Figure 5).

Figure 5: ESS Online Courses' Enrollment. Source: (ESS Data, 2019)

The above figures indicate a substantial rise in online enrollments from Fall 2013 to Summer 2019. It shows how online education can be a true breakthrough for education and how it became popular in graduate training circles (Cheng, 2018). This first phase was also marked by a major change as the courses were extended to include numerous online platforms. For example, sessions are divided into live and audio-recorded sessions. Task community forums involve a message board, WhatsApp, and concise input on tasks, comments, and projects. The course content is divided into chapters each of which includes one lecture, a quiz, and an interactive session to help the students to gain the knowledge and develop a deeper understanding of the course subject (Cheng, 2018).

Currently, in the second phase, ESS uses the online Moodle platform in delivering the online courses where participants can learn and interact virtually with their instructor and peers. Online learning is primarily about planning the learning process before it takes place. The online course is designed and administered in a manner that governs all facets of the course, including

content delivery, evaluation, and communication (Hendricks & Bailey, 2016). ESS is collaborating with the Center for Learning and Teaching (CLT) at AUC to enhance its online experience. This new system is designed by AUC for all non-degree seeking students. It is characterized by a promising project and a win-win solution for all stakeholders. In this phase, the system is an entire self-paced where participants handle everything at their own pace. However, it emphasizes the role of the professor as a key factor in the success of the online learning process. Courses provide a range of activities aimed at creating a sense of class identity and fostering productive communication and sharing information and interaction by incorporating useful and meaningful activities to promote teamwork among participants.

According to Cheng (2018), the principles of making a good online course involve making content appealing with graphics and videos, effective quizzes with proper feedback, and the design of databank exams. Likewise, Hendricks and Bailey (2018) added that it is the instructor's responsibility to create a showcase teaching skills by developing a meaningful and engaging online course. The professor should have a discussion session via the skype, Zoom, or any other device to increase student satisfaction. Therefore, identifying the needs of the participants would also help to properly address them and meet their aspirations for a more effective implementation of online education. Such aspects contribute to identifying the factors that promote participants' involvement in online education.

The Impact of Online Education on Learners' Achievement and Career Advancement

A good deal of the literature suggests that online education can make a positive transformation of learning, leading to an improvement in the quality of learning experiences (El-Seoud et al., 2013). There has been a growing understanding in Egypt of investing in technology to manage problematic factors such as rising costs, accommodating students, and

meeting their educational needs (El Gamal & Abd El Aziz, 2012). The rising number of Internet users and people who have access to social media makes Egypt an ideal venue for online education. It is also considered one of the viable solutions to mitigate the problems facing the existing education system at all levels of education.

This research focuses on the experience of the ESS in online education and on the possibility of transferring this experience to promote online learning in other Egyptian educational institutions and, most of all, to have an impact on society. The Egyptian Government has succeeded in establishing the essential infrastructure for e-learning. There are still some shortcomings that prevent online learning from being properly integrated, such as preparing stakeholders to effectively participate in the e-learning process (Afifi, 2011). In this regard, the main focus of the study is on the factors that enhance the participation of graduate learners in online training programs to advance their careers.

In their study of empowering e-learning and technology in the new millennium, Zhang and Nunamaker (2003) suggested that online learning fosters self-directed learning by structuring learning experiences where learners are free to choose the topic of their interest that best suits their background and profession. Their study revealed that online learning helps learners to be active rather than passive receptors that help to enhance their critical thinking.

Research assessing the advantages of online education for learners by Hoskins and Hoof (2005) proposed that it is granting them anonymity and opportunities to exercise a wide variety of specific skills. Practices and self-assessments provide advantages over conventional approaches that allow students to advance at their own pace (Volery & Lord, 2000). For example, management of self and others, task, and information. Moreover, they will benefit from a collaborative and engaging learning atmosphere that encourages and assists them in extending

their learning experience (Hoskins & Hoof, 2005). Interfacing learners with technology should boost their computer literacy regularly, which is a crucial factor in the future job market (Volery & Lord, 2000).

By the same token, El-Seoud et al. (2013) perceive online learning as involving more technology that facilitates a more inclusive learning approach and allows learners the ability to interact and communicate effectively and flexibly with teachers and peers. This engagement contributes to the success of the learning process because learners can create an environment in which they can manipulate, explore, and experience new skills. The study showed that online education could have significant impacts on learners. It teaches them how to master a new skill rapidly through the easiness of online process while enjoying their learning experience. Recent studies indicated that university students who have joined online courses perform better than those in traditional courses (El-Seoud et al., 2013).

Likewise, Anh (2017) attempted to measure the impact of online learning activities on the learning outcomes of participants in online courses. The study reported that pedagogy, posting of messages, content production, quiz initiative, and the number of files viewed are among the factors influencing the academic performance of students by 52%. For example, the online methodology at Carnegie Mellon University (CMU) not only improved student exam results and learning techniques, but also served as an educational bridge across conventional discipline boundaries in the US (El-Seoud et al., 2013).

These findings were not so far from Lim, Hall, Jeong, and Freed (2017), whose quantitative analysis of the characteristics of online education, noted that the success of online learning centered on successful teaching strategies and stressed the need for discussion forums as a unique feature of interaction between instructors and learners. This feature helps to stimulate

learners to create new knowledge by synergistically combining concepts into a series of discussion posts that build on each other. Online technologies foster asynchronous discussions and collaboration among graduates lead to better learning and scholarship (Jarboe, Raman, Brumm, Martin, & McLeod, 2016).

Snow et al. (2018) looked at how participants viewed online education fitting into their educational mission. They collected a sample of graduates attending both face-to-face and online programs. Participants responded to three questions to determine the success rates of their online graduates versus residential graduates in achieving clinical placements, clinical licensure, and acceptance into doctoral programs. The results showed that 93% of online graduates of online students have been as successful as residential participants in securing clinical placements and receiving state licensure. Whereas, 85% of them were successful in getting their doctoral programs accepted. The study concluded that online graduates have been as successful and competitive as residential graduates.

Finally, in assessing the efficacy of e-learning and the expectations of learners about this tool, Adel (2017) pinpointed that if factors that enhance the participation of learners in online learning are taken into consideration; the universities will be controlling both present and future online learning. Overall, online learning has potential benefits and success factors that, if effectively implemented, online learning might be considered the best approach to improve higher education in Egypt.

Factors that Facilitate Learners' Participation in Online Training Programs

In their study of critical success factors in online education, Volery and Lord (2000) identified three key factors for success in online learning, such as (a) technology (easy access,

interface design, and level of interaction); (b) instructor (student attitudes, technical competence, and classroom interaction); and (c) prior use of technology; from a student's perspective. They further suggested that the perceived usefulness of the technology and attitude of the instructors towards technology can influence the learning outcomes. Findings from this study indicated that the Internet could support educational programs and expose students to the positive effects of technology. This result shows the potential of computer literacy to improve learner knowledge and adapt to information systems and technology.

In an effort to point out how online courses guided student success, Runnels, Thomas, and Lan (2006) determined that the effectiveness of online learning is influenced by learner's acceptance of the online material over the traditional text. They reported a survey conducted by Schrum and Hong (2001) with 70 educational institutions in which eight dimensions were found to impact learner's success. These dimensions include access to tools, technology experience, learning preferences, study habits, goals, purposes, lifestyles, and personal traits. The quality of the online instruction, instructor's feedback, evaluation, and the stimulation of the auditory are all essential elements in any course. The literature showed that computer literacy, convenience, and autonomy provided by online education are among the reasons that enhance learner's acceptance of online learning. Even learners with less acquaintance with technology stated that their online experience has reduced their computer anxieties and improved their computer abilities. The results also showed that successful technology and design of courses were necessary for the success of online learning. Learners in well-implemented and designed online courses, for example, have learned more successfully than those in courses that lack such quality, apart from technical challenges, hindered the delivery and accessibility of courses (Runnels et al., 2006).

The result of this study was similar to that of El-Seoud et al. (2013) who reported that online education increased learners' knowledge with technology and their ability to interpret vast information. This acquaintance helps them to facilitate their decision-making in the context of their business organization. For universities to compete in a global higher education market, therefore, they must use technology as a strategic tool capable of transforming education and business practices (El-Seoud et al., 2013).

In conclusion, the majority of the research referred to above dealt with online education and highlighted its advantages in general. However, none of them identified factors that facilitate participation in online education through the perception of participants or explicitly demonstrated the impact of online learning on participants' knowledge or career advancement. Furthermore, it did not address the area of graduates' participation in online training programs. Such studies have approached the topic from a general viewpoint. They did not discuss graduate learners who engage in online training programs to advance their careers, which is the primary purpose of this research. Therefore, the purpose of this study is to fill this gap by exploring the graduate learners' perception of the factors that facilitate their participation in online training programs to advance their careers.

The Value of Training and Continuing Education in the Workplace

According to Volery and Lord (2000), a growing appreciation of the importance of lifelong learning has increased the demand for higher education facilities among people outside the typical 18-24 age group. They added that, by taking advantage of this growing market, many educational institutions could generate significant revenues. Zhang and Nunamaker (2003) projected that 50% of the credentials of workers would be out of date within 3 to 5 years. Efficient training for workers has become an inevitable factor in the modern economic

climate. Businesses need to ensure that workers are trained with up-to-date expertise and specialized skills to help them determine their position and competitiveness on the market. As a result, U.S. businesses spend $62.5 billion on educating their staff and more than $3 billion on technology-delivered training to sustain a high-performance workforce in today's global economy (Zhang & Nunamaker, 2003).

In the domain of training, it has not been suitable in the past due to work, family obligations, and program offerings may not have met the needs of the learner (Volery & Lord, 2000). Online training and education can help a wide variety of people who opt for geographical isolation, job obligations, childcare obligations, physical limitations, disadvantaged communities that can benefit from the flexibility and accessibility of online education (Snow et al., 2018). It has been estimated that travel expenses consume 40% of the money spent on corporate in-person learning (Zhang & Nunamaker, 2003). Online learning makes lifelong learning possible without the need to travel or to be restricted to a particular class schedule (Wagner et al., 2008).

Companies using online training can save time and money compared to conventional face-to-face training (Joo, Lim, & Kim, 2012). The implementation of online education will not only help the institutions to survive rising costs and shrinking budgets, but will also create new opportunities for both institutions and learners (El Gamal & Abd El Aziz, 2012). Given these facts, it is evident that these economic savings, time constraints, and travel costs are the main drives for which institutions have shifted to online training as a high priority, as shown in Figure 6.

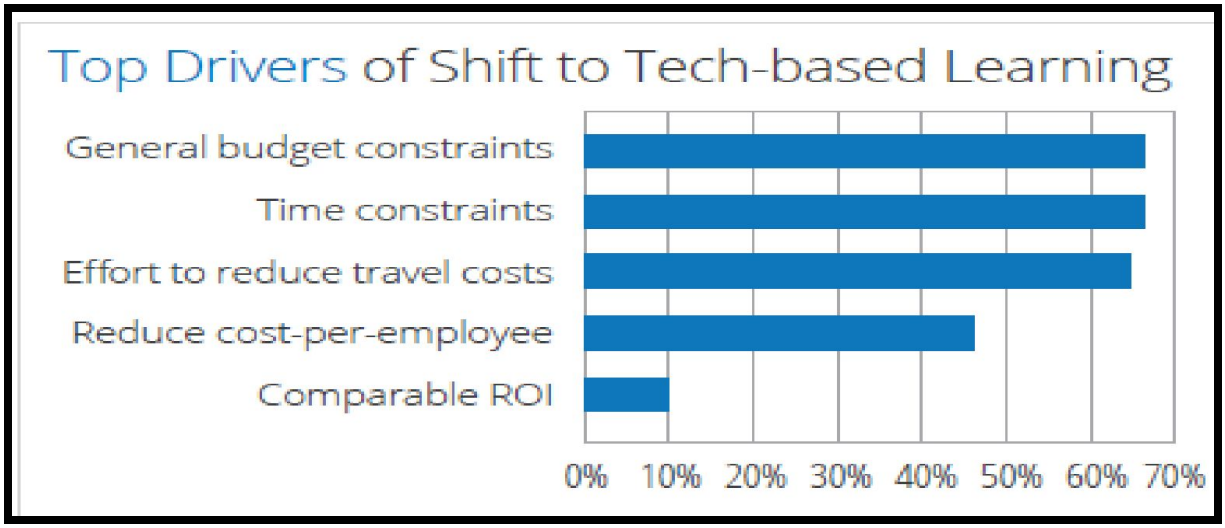


Figure 6: Causes for Shifting to Online Training for Corporates. Source: (Docebo, 2014)

The research titled "Lifelong Education and Labor Market Needs," published in *Evolution* online newspaper, investigated the need for continuing education in the workplace and found that 64% of executive managers and employees who are recruited externally would fail within four years of joining the organization (Docebo, 2014). This failure is due to the lack of continuing education and training that can develop their skills and enhance their careers. In 2016, the revenue of the worldwide market for e-Learning reached $51.5 billion dollars, with an estimated annual global growth rate of 7.9% (Figure 6). These returns deliver high anticipations for prospects of online education.

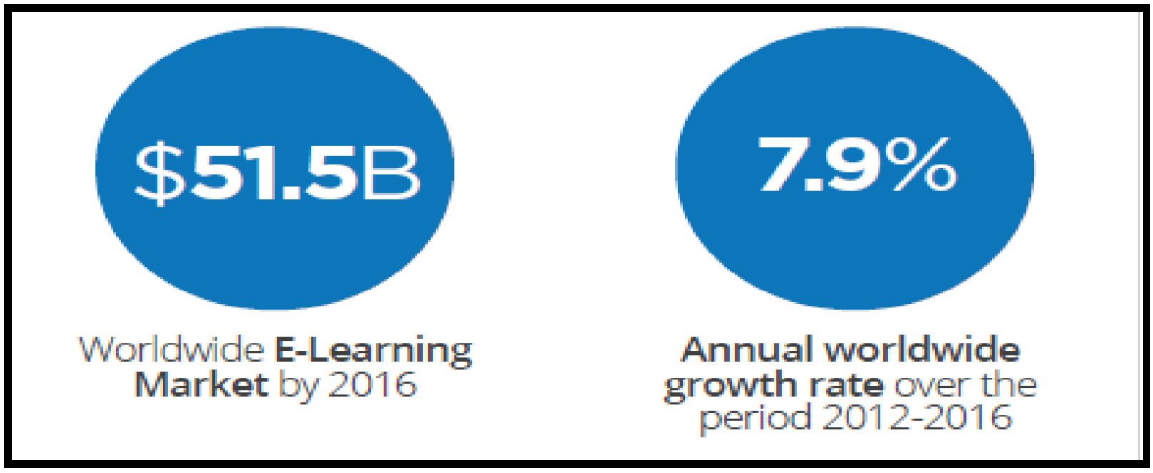


Figure 7: E-learning Global Market Growth. Source: (Docebo, 2014)

Training adds value and a positive impact on both the trainee and the company, as seen in Figure 7. The fundamental solution for investment in the workplace is the training market, as it helps workers enhance their professional skills and boost their career path through the development of lifelong learning activities and the achievement of positive impacts on their businesses. Learning through different academic methods of study provides the individual with a well-rounded education (Yorke, 2006). The current dynamic industrial climate has expanded the field of training. It has made it necessary for both workers and businesses to invest in human capital to be able to respond to rapid changes and stay competitive on the market. The economy creates a great need for continuous training and skills development (Wagner et al., 2008). Many companies, whether in the public or private sector, allocate a line budget for the training of their employees. Recently, online education has increased with the flow of an estimated $6 billion of venture capitals driven by budget constraints and the need in the training industry (E-learn Center, 2018).

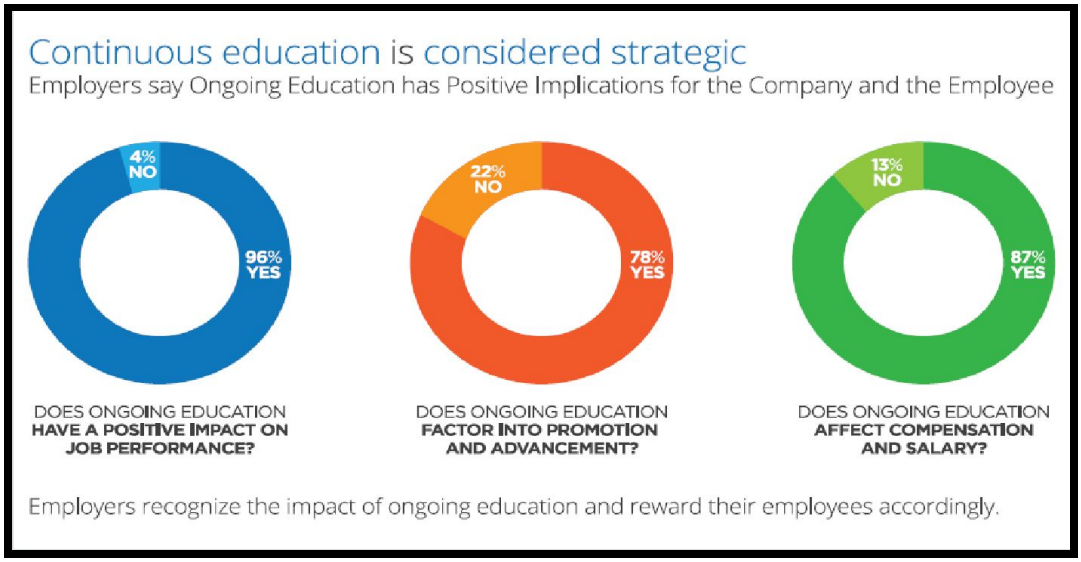


Figure 8: Survey on the Strategic Role of Continuing Education. Source: (Docebo, 2014)

Online education aids workers in acquiring the knowledge and skills that help them progress within their organization (Docebo, 2014). It also assists the companies to control the training budget and invest in their workforce. Conversely, unqualified workers decrease profitability and cause detrimental impacts on the company. Currently, many organizations map up an annual training plan for their employees, which defines their career development paths as well as the training programs needed to allow employees to acquire the knowledge and skills necessary to achieve the objectives of the company.

Training Sector in Egypt

Since the higher education system in Egypt does not equip students with the skills required for the workforce, training has become essential to empower them with these skills to perform better or acquire new occupations. It is noteworthy that learning will not end with graduation from a university. On the contrary, education is a lifelong process that needs to be continued, enhanced, and reacted to changes during the individual's career path to remain competitive, among others. University provides graduates with a degree that is relevant to their

potential careers, but it is employability, a collection of individuals' skills, which makes them stand out from the crowd (Yorke, 2006). These individuals' capacities are built and developed through education and ongoing training to help them to have better job opportunities.

The Egyptian economy needs to create a million jobs every year to absorb new entrants into the labor market (estimated at 700,000) and reduce the high unemployment rate that exceeded 13% after 2011 (Hassan & Kandil, 2014). In this regard, the Egyptian government has planned some training programs in cooperation with several training institutes to boost the skills and knowledge of Egyptian calibers to meet the needs of the market. For example, MCIT aims to raise the competitive edge of individuals, who despite their education, have not been prepared for the marketplace (MCIT, 2019). It provides training through comprehensive capacity building programs, communication courses, process improvement courses, e-learning courses, and diplomas. The training is based on real-world experience, and a total understanding of the industry requirements because acquiring skills and knowledge will increase the employment rate in Egypt (MCIT, 2019).

In 2004, the MCIT founded the e-learning competence center in cooperation with Cisco Systems to support Egypt's educational reform and entrepreneurship development. The Egyptian President El Sisi launched the Next Technology Leaders (NTL) Initiative to build the capacity of the youth on the latest information technologies (MCIT, 2019). The initiative handled by MCIT targets senior undergraduate students, graduates, university staff, entrepreneurs, and professionals. It includes online courses in data science, machine learning, the Internet of Things (IoT), entrepreneurship, programming, and strategic management and innovation to establish a high-quality learning ecosystem. Top universities and leading companies prepare the course content. In 2017, the number of graduates of the NTL presidential initiative reached 5,000. This

initiative helps in increasing the competitiveness of local ICT companies by facilitating their training and supporting job creation and business opportunities through wage employment (MCIT, 2019).

Additionally, there are many informal educational institutions, companies, and training centers offering training courses in different areas to several professions. For example, the American Chamber, Amideast, and British Council. Some companies have established their training unit as Orascom, El Sweedy vocational training, and Enppi. They are building the technical skills of their employees, which will assist in keeping their business competitive and competent.

Chapter 3: Methodology

This research is a qualitative, exploratory case study in Egypt that focuses on exploring graduate learners' perceptions of the factors that facilitate their participation in online training programs to enhance their careers. A qualitative research design was deemed appropriate for this study because it empowers people to explore and share their stories (Creswell, 2007). More specifically, it's a qualitative, exploratory case study because it tries to explore phenomena in a real-world setting (Yin, 2014). According to Creswell (2007), case studies help researchers understand an issue, a program, and even one or more individuals in a specific setting or context.

A case study can be described as a bounded system, meaning that it could be a person, a community, a program, a culture, or an organization (Patton, 2002). The ESS provides innovative and specialized programs in some fields that are not offered by any other university. The researcher conducted online interviews with 10 graduate learners who studied these specific "distinctive" online professional programs at AUC, ESS educational setting in Cairo, Egypt. According to Stake (1995), a case study approach is the best option when a researcher can perceive cases with clear boundaries and achieve an in-depth understanding of the case. The study's primary objective is to provide insight into the factors that facilitate graduate learners' participation in online learning. Thus, a case study is a suitable approach to this research to capture the complexity of the explored phenomenon (Stake, 1995).

The study occurred at the American University in Cairo (AUC), a higher education institution, which offers undergraduate and graduate programs. The findings can be used to improve and expand online education in all educational contexts in Egypt. The AUC was founded in 1919 as a non-profit educational organization. According to the AUC website (2019), the University is a leading English-language, accredited institution of higher education and

center of the intellectual, social, and cultural life of the Arab world. Its community involves 5,474 undergraduate students, 979 graduates, 38069 Alumni, and 598 faculty members from more than 60 countries. The University offers 36 undergraduates, 44 masters, and two doctoral programs. It provides a global education to meet the needs of the local and international market (AUC Website, 2019).

Davis's TAM model (1986) is relevant to this study as a theoretical framework because it suggests the reasons for the individual's acceptance to use technology systems before using it by learners. The four constructs involved in the TAM model: external variables, PU, PEU, and the students' ATT were found to be significant predictors for learners' behavioral intention to use online learning based on their perspectives.

Chapter 3 explains the focus of the study, design, theoretical approach, and the methodology used for the study. It identifies the sampling strategy and types of data that will be collected. Besides, a restatement of the problem along with the research questions, definition of basic terms, protection of participants' rights, and how ethical issues will be taken into consideration?

Restatement of the Problem

Employability is not only about getting a job but also about acquiring a set of broader skills and attributes which enable graduates to be successful throughout their career life (Yorke, 2017). In Egypt, there is a mismatch between the output of the higher education system and the labor market needs (Assaad, Krafft & Isfahani, 2018). This mismatch has enriched the field of online training in Egypt because companies realized that one of the best tactics to adapt to a rapidly changing market is to implement a business strategy that builds synergy between lifelong learning and workforce productivity (E-learn Center, 2018). Thus, the online training domain has

offered many new subjects in many fields as business, engineering, information technology, and others to help the employees to boost their job skills and accomplish the goals of their companies.

There is a clear gap in the literature when it comes to studying the factors that facilitate online education and its effects on career advancement for graduates in training courses. The majority of research has focused on online education's strategy, potentials, improvements, challenges, inclusion, and implementation. Online learning extensively presented in secondary and higher education. Literature has been rich with studies regarding online potential benefits and adoption, nonetheless, technologies cannot be adopted without considering the adopters' nature, perception, and readiness (El Gamal & Abd El Aziz, 2012). Research which explores factors that facilitate graduate learners' participation in online training courses to advance their careers is very limited in Egypt. This inadequacy remarkably minimizes the number of practices under review due to the difference in nature between undergraduates and graduates' studies that require different needs, stakeholders, and a broader scope of education.

In addition, most of the research on online learning focused on micro-level subjects as teachers, students, or educational institutions. Almost none of the current research provides an in depth look at what online education can bring to graduate learners in Egypt or how it can improve their knowledge and develop their careers. These limitations provide a sound basis for the need of this research to tackle some untrodden areas on a broader scale. Therefore, the focus of this study is essential because it can play a crucial role in providing educators, policymakers, and various stakeholders with a clear understanding of the multiple positive impacts of online education. Thus, they can learn to maximize the benefits of this experience and

address its shortcomings for better application to a broader scale to the education system in Egypt and in accordance with international standards.

Research Design

Qualitative research explores individual experiences, describes phenomena, and develops a theory (Cope, 2014). This study is an exploratory, qualitative case study as it seeks to explore the factors which facilitate the participation in online training programs for career advancement, as perceived by graduate learners. This research is a qualitative, exploratory case study because it tries to explore phenomena in a real-world setting (Yin, 2014). According to Creswell (2007), case studies help researchers understand an issue, a program, and even one or more individuals in a specific setting or context. Similarly, Thomas (2011) argues that a case study is an exploration of individuals, events, projects, strategies, organizations that are objectively analyzed by one or more methods. The graduate learners in online training programs at AUC's ESS are the elements of exploration in this study. The case study is the best research approach where behavioral events are beyond the researcher's control, and the aim of this study is a contemporary phenomenon in its real-world setting (Yin, 2014).

This research is based on the particular perspective of online learning at ESS. ESS is considered unique in providing educational opportunities to graduates who aim to advance their careers by participating in ESS's professional diplomas and programs. "Case study methodology maintains deep connections to fundamental values and intentions, is particularistic, descriptive and heuristic" (Merriam, 2009, p. 46). It should be noted that no other university has similar programs with the same method of delivery and offerings. This exclusivity in training programs characterizes the uniqueness of ESS. It is also evident in some of the participants' comments that ESS's uniqueness in offering programs in certain fields that are not found in any other training

institutions encouraged them to enroll. Finally, Stevenson (2004) stated that a case study allows the opportunity to benefit from others' success. In this regard, exploring graduate learners' online learning experience might positively affect other students in Egypt.

The nature of the qualitative methodology is appropriate to gain an in-depth and comprehensive understanding of the various perspectives, impressions, and experiences of the learners towards online education. Qualitative research is the best approach to explore a problem because it encourages people to share their stories and hear their voices (Creswell, 2007). It allows the researcher to interpret the data to form thematic ideas. Moreover, it provides further probabilities that unfold some observations. Qualitative research fosters a holistic approach paying attention to the context and complexities (Patton, 2002).

Validity of the Study

"Validity in qualitative research means "appropriateness" of the tools, processes, and data" (Leung, 2015, p. 326). Maintaining a chain of evidence and testing rivals' explanations helps to protect a study against threats to validity (Yin, 2014). There are various validation methods to enhance the credibility of the research and ensure the accuracy of the information in qualitative research. Member checking is a process in which the researcher asks one or more participants to check the accuracy of the findings report (Creswell, 2012). After completing the data analysis process, the researcher shared a summary of the emerged themes with the participants to check their answers, request their feedback, and enhance the accuracy of the information. This process can validate the conclusions after interpreting the data (Cope, 2014). The technique of member checking is the most frequently used validation strategies to ensure the accuracy of data (Creswell, 2012).

Reliability of the Study

In qualitative research, reliability is the degree of consistency of what is measured (Gay, Mills, & Airasian, 2009; Leung, 2015). Reporting the procedures of collecting data enhances reliability and replication of the study, which in turn improves the representativeness of the findings (Karkouti, 2016). The researcher reported the data analysis process and data collection procedures, ensured its consistency, and accurately revised them to ensure the reliability of this study and the possibility of future research replication.

Participants

The sample for the study consists of 10 graduate learners enrolled in four different online professional programs at the Engineering and Science Services, the American University in Cairo. The selection comprised learners enrolled in the spring 2020 semester to facilitate access and communication. The researcher aimed at recruiting participants using the following criteria:

1- Participants must have received a passing grade in their online courses.

2- Participants must have completed a minimum of two online courses.

The above criteria were set to ensure that the participants have prior experience in online courses and have earned satisfying grades to ensure that receiving a frustrating grade is not going to affect their answers or discourage them from participating in the research. Also, to help the participants provide adequate answers for the raised questions, each of them was assigned a pseudonym that ensures their confidentiality and anonymity (see Chapter 4).

The sample was selected using a purposeful sampling technique to ensure dealing with participants who are participating in online courses. A purposeful sample helps to choose people who can aid the researcher in understanding the central phenomenon (Creswell, 2012).

The study design includes semi-structured interviews. It used a qualitative case study design to display a specific experience in online education to maximize to a larger scale. The interviews conducted with 10 graduate learners who were enrolled in four different online professional programs at AUC's ESS. The sample size does not have a rule in qualitative research because it is determined based on the available resources and timeframe (Patton, 2002). A smaller size sample can provide precise information rather than a larger one. In qualitative research, studying a few persons is useful for the researcher to be able to report accurate details that could be reduced with larger samples and result in shallow perspectives. Moreover, adding more participants will consume time in collecting and analyzing data (Creswell, 2012). The data collected were thorough and enough to draw conclusion and make recommendations for future research and practice. Thoroughness refers to adequate sampling and data saturation to achieve a full exploration of the phenomenon (Cope, 2014).

Data Collection Instruments

Interviews provide rich data and help to elicit detailed and insightful information about different perceptions of the research topic for graduate learners. Semi-structured interviews are one of the essential sources to obtain information in many case studies (Patton, 2002). It is the appropriate tool to explore the graduate learners' perceptions of the factors that facilitate their participation in online training programs. It provides a chance for the participants to express their opinions freely without any fear of restraints or suppression and allows the interviewer to explain any vagueness related to the questions. It can also promote a follow-up conversation between the researcher and the participant to extend an understanding of the topic or central studied phenomenon (Creswell, 2012). Likewise, it allows for a smooth process of data interpretation.

The interview sessions included a standardized set of open-ended systematic questions designed as a guide for the interview flow to cover as many aspects of the study as possible. Interviews consist of open-ended questions provide in-depth responses about learners' experiences, perceptions, opinions, and knowledge (Patton, 2002). Open-ended questions offer diversity and trigger significant and explanatory replies to the questions. They allow the participants to voice their experience unconstrained by any perspectives of the researcher (Creswell, 2012).

The data collection instrument was submitted and approved by the Institutional Review Board (IRB) for approval before collecting any data (see Appendix A). The researcher informed all the participants about the nature and purpose of this study before signing the consent form (see Appendix B). In this study, the researcher conducted semi-structured interviews that allowed asking open-ended questions concerning any specific issue in this study. The interview protocol included eight questions that align with TAM's constructs (see Appendix C). Prior to asking the questions, the researcher had a friendly conversation with the participants to create a comfortable atmosphere and help them to talk freely without any formalities. To save the time of the participants, the researcher provided them with an overview about the study to help them to form a better idea about the topic and prepare them for the questions.

Data Collection Procedures

Interview sessions were in the English language; however, the Arabic language was used when needed. The interviews occurred via Zoom in a suitable, quiet place to avoid distractions. The study conducted semi-structured, online interviews with 10 participants who take online training courses in ESS. The online interviews occurred once at participants' convenience and did not exceed 30 minutes. During the lockdown, the researcher interviewed 10 graduate learners

who attended online training professional programs at AUC, ESS. The questions were emailed to the participants to provide them with an overview of the topic of the study, followed by the online interviews. Sending the questions before the interview may help to trigger detailed conversation during the interview. Additionally, probes were used during the interviews to elicit more information. Probes allow the participants to elaborate more on their ideas (Creswell, 2012). Upon completing the online interviews, the researcher thanked the participants, assured them the confidentiality of their responses before and after the virtual interview, and provided them with a summary of the results after transcribing and analyzing data (Creswell, 2012).

It should be mentioned that the researcher is working at the ESS as a Senior Program Officer, who is responsible for the PFPR in the ESS. This fact facilitated access to information and connecting to the participants' database, which is developed and updated by the researcher. The researcher used to receive different feedback from the participants as well as course evaluation upon course completion. This allowed the researcher to access massive information and data that helps the participants to share their opinions freely and voluntarily. Therefore, the researcher might reflect on previous experience. This technique of "self-disclosing" and revealing the position of the researcher in the study is one of the validation strategies (Creswell, 2007). The researcher made all the efforts to ensure being objective and away from any possible bias. This was accomplished by selecting random participants, allowing them to review their transcripts, and framing open-ended questions that would allow participants to provide a thorough truthful response without any intervention from the researcher.

Data Analysis

In a qualitative study, research begins when the researcher starts collecting the data (Creswell, 2012). The data collection and coding process followed the Creswell's (2012) open

coding model by (a) textualizing data, (b) dividing it into text parts, (c) labeling the parts with codes, (d) examining codes to select relevant data and remove redundancy, and (e) summarizing these codes into broad themes. A Word file was created to document the questions, observations, and data. These files are kept and saved on a personal laptop that is secured by a password.

The data analysis process followed the steps identified by Creswell (2012), which respectively include: (1) data organization and preparation, (2) reading and revising the data, (3) analyzing data to gain enough knowledge through the information provided, (4) refining data from irrelevant information, (5) the coding process for participants in the study, and (6) interpreting the data as the final stage in the process of data analysis. The researcher read and listened to the recorded interviews twice to start transcribing and coding the data. Transcription is the process of converting audio recordings or observations into text data saved to a computer Word file for analysis (Creswell, 2012).

Protection of Human Participants

In any research, the researcher must consider ethical issues when approaching participants and sites into consideration in all aspects of the study. Creswell (2007) indicated that before and during conducting any research, ethical aspects, including seeking participants' consent, ensuring confidentiality, and protecting their identities, must be considered. In this regard, the researcher followed the ethical study protocol as articulated by AUC.

The participants were informed that their participation is voluntary. The researcher acknowledged the protection of the privacy of participants' responses, including their right to withdraw from the study at any time. Furthermore, their identity and information were treated with anonymity, confidentiality, and would not be used for any other purpose or study without

their prior formal permission. Finally, via email, their permission and consent were taken prior to conducting the interviews.

Research Limitations

Limitations in qualitative studies may address problems in data collection, questions lacking answers by participants, or better selection of purposeful sampling of individuals or sites for the research (Creswell, 2012). The study was conducted with only 10 graduate learners as the primary sources of data to explore the research questions. This small size of sampled participants can yield a sample that is not the most symbolic of the whole population; though the goal was not to generalize but to describe a particular case. Consequently, the findings of this research were drawn from in-depth interviews with 10 graduate learners in AUC, ESS cannot be generalized to other graduates or training centers in Egypt. They can only provide a thorough understanding of the experiences of these participants. The application of one data collection tool (interviews) is another limitation that didn't allow for data triangulation. Future studies should recruit more participants, engage multiple research sites, and use multiple data collection to enhance the validity of the findings.

As mentioned in the research design section, the researcher works at ESS and is responsible for Professional Programs, including online courses. This fact helped in terms of accessibility of data and information, trust of the participants, and deliver insights. On the other hand, it was challenging during the interviews as the interviewees asked for some help and requests on their current running courses. This off-topic discussion led to a deviation from the topic sometimes and short answers to some of the questions. Thus, there is a possibility of missing some opportunities to probe more deeply into the participants' responses.

Lastly, English language sometimes stood as a barrier to comprehend the questions and answers for the participants who were not comfortable in English discussions. As a result, the translation process into the Arabic language may have hidden some implications or caused any misinterpretation of the findings.

Chapter 4: Findings of the Study

This study explores graduate learners' perceptions of the factors that facilitate their participation in online training programs to advance their careers. The findings provide insight into the possibility of improving and expanding online education in all educational contexts in Egypt.

The outcome of the research is introduced through themes that emerged from the participants' responses. Some of the comments made by the respondents were quoted to clarify their opinions thoroughly. The table below outlines the process used to create a code that was used to refer to the interviewees. Participants' responses were coded based on the sequence of interviews. Each participant was given a number, and his/her quotes will be referred to as (Part.1 = Participant number 1).

Table 1

Participants' Demographics and Coding Scheme

Participants	*Code*	*Gender*	*Age*	*Job Title*
Participant	Part.1	Male	27	Civil Engineer
Participant	Part.2	Female	31	Engineer
Participant	Part.3	Male	36	Engineer
Participant	Part.4	Male	39	Engineer
Participant	Part.5	Male	27	Engineer
Participant	Part.6	Male	64	Mechanical Engineer
Participant	Part.7	Female	31	Engineer
Participant	Part.8	Male	28	Petroleum Engineer
Participant	Part.9	Male	49	Labs Operation Manager

Participant	Part.10	Male	48	Business Development Manager

After transcribing data, a thematic analysis model by Creswell (2012) was adopted to analyze the data. The interviews were read and revised twice to get a general idea and to build a holistic understanding of the participants' views. Then, I highlighted the main themes relevant to the research objective to gain an in-depth understanding of the experience of each participant in the online training programs. No data were excluded or removed because all that the participants expressed were related to the subject. The analysis started by exploring the perceptions, attitudes, experiences, and goals of the participants towards the online training programs to approach the research question holistically.

Through discussions with the participants, several themes that are relevant to the research questions were generated and refined. Each theme can be categorized under each research question, as shown in the below table:

Table 2

Themes Related to Each Research Question

Research Questions	**Themes**
1- What are the external variables that facilitate graduate learners' participation in online training programs and advance their careers?	A- Convenience of studying online.
2- What are graduate learners' perceptions of the usefulness of online training in terms of career advancement?	A- Skills development.

3- What are graduate learners' perceptions regarding the ease of using online resources for career advancement purposes?	A- User-friendly online applications.
4- What are graduate learners' perceptions regarding the attitudes that facilitate their participation in online training opportunities?	A- Readiness for online practice.
5-What are graduate learners' perceptions regarding the behavioral intentions that facilitate their participation in online training opportunities and enhance their career advancement?	A- Proactive approach to technology.

Findings for Qualitative Analysis

This study explores the factors that graduate learners perceive to facilitate their participation in online training programs to advance their careers. Therefore, constructing and refining themes were the keys to present the results of this research and to analyze the implications from a theoretical perspective.

Findings for Research Question One: External Variables

Convenience of studying online. In answering this question, the majority of the participants have agreed on some common factors behind their participation in online training programs. They expressed a consensus on the flexibility, convenience, and time-saving that online programs provide. They can access their courses anytime at their own pace despite

having a workload, living in remote areas, or traveling abroad without any need to commute. According to Part. 7, "I do not have time to attend a course in class, so I chose the online modality due to the possibility of accessing the sessions from anywhere and at any time." She briefly pointed out the most important features and benefits in online learning which is flexibility and convenience in both time and place. Even so, only one of the participants added a different argument by mentioning that offering the program online allowed him to take it online: "I am interested in green power solutions and did not find it except online in this program at AUC" (Part.8).

They pointed out that the ability to access lectures from anywhere, heavy workload, full lifestyle, inability to attend regular classes, and learn from home-based experts make online courses convenient to study. These reasons were among the factors that attracted the participants to the online courses.

Besides, virtual learning turned out to be productive by tasks such as assignments, quizzes, and interactive sessions. There is a little distinction between face-to-face and online courses for those who prefer face-to-face online courses. Indeed, the latter allows participants to gain full control of their learning process, saves their time, and costs less than the former.

Three of the participants referred to a different point, such as the importance of research into specific topics and the opportunity of more choice of course topics.

"……..I can get a partial course, just the topic I need to know more about" (Part.10).

"……..It fits everyone as no certain times to study the lectures. You can choose specific topics to consider among varieties (Part.1).

"……..Choose freely the courses I want to study" (Part.8).

Findings for Research Question 2: Online Learning Usefulness

Skills development. When asking the participants about the role of online training in enhancing their career prospects, improving their job performance, or helping them to achieve other goals, a significant number (100%) believed that online training programs made a difference on two correlated scales: knowledge and career path. They explained that these programs developed their educational skills and knowledge. Studying online courses have introduced them to new technologies and new fields such as safety, green technologies, and project management because lacking specific knowledge in such disciplines will not facilitate working in these global fields. A participant commented that: "....Online study has positively affected my way of work and updated my knowledge and made them environmentally oriented" (Part.6).

Remarkably, one of the participants explained that the acquisition of knowledge through online programs is more imperative than earning a certificate: "The main objective is gaining knowledge rather than having a certificate" (Part.10).

Another participant asserted that online training help him in improving his career path: "Training programs help in future career paths, and being online makes it easier to be followed" (Part.4).

Unexpectedly, promotion and career advancement was not found to be the main goal of the majority of participants in the online training program (80%). They recognized, however, that more knowledge and information would help them to get promoted at their employment through online training programs. "The mix between the experience and science will generate more potential and ability to do good jobs…then good to the employer" (Part. 6). Although

they stated that online training programs could facilitate promotion and provide an opportunity to be quickly promoted in a number of jobs, three of the participants emphasized that communication skills with instructors would contribute to the achievement of excellent knowledge essential to promotion at work.

Participants interviewed were also asked whether the online training programs helped them achieve other goals; some participants (60%) responded that it has opened new fields to expand their knowledge and provided them with other promising opportunities. For example, one of them had a salary increase while another was assigned to a big project. One participant commented that: "Learning a lot of technologies and tools is an excellent achievement in itself" (Part.9).

Most of the participants argued that continuous learning is an aim to be achieved rather than a degree to be obtained, and online training programs have provided this in no time. "The program aided in facilitating the gained knowledge I was aiming. I got so much new information in a suitable timing" (Part.8).

Findings for Research Question Three: Ease of Using Online Resources

User-friendly online applications. The responses of how participants use technology indicated their ability and willingness to engage in online education. When asked how user-friendly online applications and resources could be found, interviewees said it was a very "user-friendly" and "easy-to-use." The fact that lectures are available and can be accessed at any time provides a sense of comfort while learning. Practically 70% of them preferred Moodle to be a simple and uncomplicated interface rather than Blackboard. Moreover, these platforms enhance some of the technological skills that will be reflected in career advancement as

described by Part.3 who noted, "The online platforms are not as class detailed learning, but they enhance the search skills and presentation of work and the review of many references", referred to his opinion that while some in-class advantages might be absent in online classes, such as lack of in-depth analysis of topics, lack of body language or eye contact, this is compensated by learning new technical skills.

Though, participants perceived the tools that make online training programs easy for them to use from several angles. They listed that using accessible learning platforms such as Blackboard or Moodle are very useful tools that make online courses convenient to study. They pointed out that the presentation skills of the instructors, their clear guidance, and capabilities from the beginning of the course are among the critical factors in facilitating the use of the online courses.

However, two of them highlighted the importance of proper implementation, organization, feedback, and the availability of technical support to help throughout the course as vital success factors in online courses: "…..It depends on the course implementation, and how it is organized, for instance, courses should include videos and feedback, not only PDF files (Part.10).

"Technical support should be easily reached, especially during the exam time in case a problem is faced" (Part.2). Notably, one participant stated that he was not interested in technology and found it very difficult to deal with, but after taking part in online courses, he explained that: "For the first time, I did not see online resources as user-friendly because I'm not into technology, but when I give myself some time to learn how to deal with online applications, it becomes very simple" (Part. 9).

With respect to technical skills, the interview data analysis revealed that 90 % of the participants interviewed agreed that, for the participant to be able to entirely engage in online courses, a basic level of computer and internet usage is required. Consequently, the number of participants who are sufficiently equipped to take full advantage of online training programs has been a major one.

They argued that there is no need for professional competence in online courses because there are video tutorials and welcome emails that include instructions. In their point of view, it's enough to get acquainted with the use of online chat or email activities. It is also not difficult to search the internet to learn how to work with technology and to acquire all the skills required. Language may be the only requirement for using online programs because the content is in English; however, this does not constitute a barrier to those whose language is not good enough.

Part.8 stated that for computer skills: "Not too much proficiency, ordinary users can use online learning programs very easily. Besides, it is easy to get help when required"). Another commented: "Most of those sites are very basic and do not need a tech-savvy person to navigate through. Others, however, need some orientation like Moodle and Blackboard" (Part.10). On the other hand, one participant said that online training programs could be difficult for undergraduate students only because ".....The postgraduate student has background about the study subject and can search and do most of the work with less orientation" (Part.6).

Findings for Research Question Four: Attitudes towards Online Training

Readiness for online practice. With regard to the attitudes and motivators that graduate learners should have to be successful in pursuing online training programs, the responses obtained suggest that there are common as well as different motivators and attitudes among the participants. Two of them commented that offering more courses and acquiring knowledge that helps in their careers in the engineering field is a motivation in itself: "The Occupational Health and Safety Program is a unique program at AUC" (Part.1).

Another participant linked motivation to the challenges that occur in the workplace by saying: "There are challenges in the workplace of everyone, these challenges can be a smart motive to get learning parallel with work occupation" (Part.6). Six participants listed that clear instructions, organized information, tutorials, continuous feedback from the instructor and the organizers, the design of the course content, the communication and attitude of the instructor are essential motivators for the smooth running and continuation of online courses. "One of the good motivators that helped me is the continuous connectivity with classmates and professors" (Part. 8).

One participant had a distinctive view as he perceived online learning platforms motivating: "In most training platforms like Udemy and LinkedIn Learning, the learner must be self-disciplined and self-motivated" (Part. 10).

As for learners' attitudes, a significant majority of the participants (90%) have given one common perception that the participant must be willing to learn. Concerning online courses, basic programming knowledge and the ability to learn are sufficient to participate in online training programs: "**.....**The learner must want to learn new things and has basic computer skills" (Part.10).

Findings for Research Question Five: Behaviors and Intentions towards Online Learning

Proactive approach to technology. In this section, participants were asked to give their opinions on how their experience in online training programs frames their plans to use online learning-related activities. All of them (100%) agreed that their experience of participating in online training programs had developed their behavior towards it. Many of the interviewees (70%) said that their motivations have shaped their behavior towards online learning as the future of education. They believed that at the present time one has to search for information and that practical life was different from the earlier stages of education. Online education supports this self-reliance. One of them explained that graduate learners must "....have a mindset of continuous learning, and that is impossible to do always with face to face courses" (Part.10).

Some of them presented examples that factors such as continuous support and communication with professors, proper time management, in addition to informative sessions, and presentations encourage learners to pursue their learning mission. Part. 7 summarized all of these points by stating, "Online courses that involve the support of the instructor, effective communication with the participants, and most of all, saving the time of the learner, will motivate those who work, such as graduates, to pursue online learning."

They noticed that: "....many learners nowadays take online training into consideration as a good alternative of regular learning, and finish their online courses with good knowledge" (Part.5). This is because of the "....easiness of accessibility to information and more interactive ways of education" (Part. 4). Part. 8 added: "I'm interested in green power solutions and wanted to gain the required knowledge in this field."

The interviewed participants generally supported the idea of implementing and expanding the use of online learning and technology in the educational context to improve the quality of education. Markedly, a participant highlighted a crucial factor in the success of expanding online education, which is "culture": "…..Meanwhile, to encourage graduates to join online courses, this needs change in culture and way of thinking" (Part. 4).

In conclusion, online training programs have shown to have significant impacts on the development of graduate learners' skills and the progress of their careers. More importantly, gaining experience and acquiring new professional skills are the most significant factors for the involvement of graduates in online training programs. The participants' recommendations identified and reiterated the value of engaging in online training programs and courses to advance their careers. Some of these suggestions were collected in a SWOT analysis and included in the recommendation section.

Chapter 5

Discussion of Findings

Responses to research questions are explored in this section under five main themes. A discussion will be followed for each subject to explain the key points on the issue. At the end of this chapter, a holistic conclusion of the research results is included.

Discussion for Question One: Convenience of Studying Online

Several studies discussed in this chapter, which dealt with the reasons behind the participation of graduates in online programs, described significant motivational variables online learning has (e.g., Govindasamy, 2002; Volery & Lord, 2000). These factors were also noted in the study of Zhang and Nunamaker (2003) on the "Power of E-learning in the New Millennium" and identified in Hoskins and Hooff's (2005) study "Motivation and Ability". All participants agreed that the flexibility of online education is a considerable incentive. They have a consensus on the convenience, time, and cost savings provided by online services. Basic computer knowledge is the external variable directly specified by the participants. They also highlighted some of the factors considered important for taking part in online courses, such as the use of accessible learning resources for reasons such as distance, workload and cost savings. Technology provides useful and reasonably inexpensive learning for learners and also those with geographical distance (Volery & Lord, 2000).

As stated in TAM (Davis, 1986) theoretical framework section, external variables influence perceived usefulness and perceived ease of use. The aforementioned factors influenced participants to engage in online programs. However, all the participants did not pay any attention to the language as one of the most important external variables that could constitute an obstacle to participation in online training programs, except for only one participant. This lack of

attention can be rooted in their self-determination to overcome any challenge to gain knowledge that will help them to advance their careers.

Similar to what Zhang and Nunamaker (2003) reported in their study of powering e-learning and technology, three of the participants recommended that participants choose an online program that best fits their career paths.

Based on this review, it is clear that the external variables listed encouraged the involvement of graduates in online training programs and enhanced their computer literacy, which rapidly increased their adaptation and familiarity with information systems. It helped them strengthen their technical skills and improve their career path through the development of lifelong learning and technology-related. The other important reason for involvement was to pursue knowledge. The people who participated intended to develop their careers through their participation in online training programs.

Discussion for Question Two: Skills Development

Yorke in "Employability in Higher Education" (2006) pointed out that the university provides graduates with a degree that is relevant to their future careers. Still, the set of individual skills makes them stand out from the crowd. This practice referred to by Yorke, has been expressed in the different capabilities that participants acquired through their online study. Participants who have been through this online training have learned new skills. They learned that continuous education is an aim to be met, and online training programs deliver this in no time. They listed some of the successful implications of online education and career options that mirrored Docebo's report (2014), which showed that online learning is an excellent way to produce quality outcomes in a short timeframe. He considered it to be strategic in the context of

continuing education because it allows employees to learn the skills that enable them to have a positive impact on their companies.

Likewise, El-Seoud et al. (2013) concluded that online education improves awareness of technology which allows learners to promote their decision-making in the sense of their business organization. The study also indicates that online learning could have considerable effects on learners because of its ability to create an atmosphere in which they can control, discover, and develop new skills. Participants understood that online learning courses provide them with the opportunity to learn about emerging technologies and explore new fields that could facilitate research in a variety of global areas and lead to the development of skills that are essential to promotion. This recognition was a kind of reflection on their online experience, which, as a result, referred to the Davis (1986) TAM model, which perceived usefulness as the individuals' assumption that the use of a specific application system would improve their job performance. Graduate learners believed that using technology would boost their performance, so they were more likely to use online learning as part of their learning process.

Research assessing the benefits of online education for learners by Hoskins & Hoof (2005) suggested that it provides them with anonymity and chances to practice a wide range of broad skills. Practices and self-assessments offer advantages over conventional approaches that allow students to progress at their own pace (Volery & Lord, 2000). For example, management of self and others, tasks, and information. Moreover, they will benefit from a collaborative and engaging learning environment that encourages and assists them in extending their learning experience.

Discussion for Question Three: User-Friendly Online Applications

Graduate learners who have joined online training programs have clarified their understanding of the amount of commitment required to pursue online learning. Online applications and resources have been user-friendly and easy-to-use for them. This ease of use has led them to recognize and deal with some of the technological tools that have supported their learning process. Accessibility of lectures at any time, the Moodle app, proper implementation, reviews, and technical support were at the top of these resources. They identified these factors as critical success factors in online courses. In their study of critical success factors in online education, Volery and Lord (2000) identified these essential factors of success in online learning from a student's perspective, such as ease of access, interface design, and prior use of technology. Learners in well-implemented and designed online courses have learned more efficiently than those in courses that lack such quality, apart from technical issues, hindered the delivery and usability of the courses (Runnels et al., 2006).

The participants argued that having acquainted themselves with the use of online chat, or email activities, is sufficient to learn some skills because there are video tutorials that provide instructions in online courses. Runnels et al. (2006) demonstrated that the acceptance of online content by learners influences the efficacy of online learning. Their reported survey found that the consistency of the online training, teacher's input, the evaluation, and the stimulation of the auditory are all crucial factors in any course. Literature has shown that computer literacy, convenience, and the autonomy offered by online education are among the factors that enhance learners' acceptance of online learning (Cheng, 2018). Also, participants with fewer technology skills have claimed that their online exposure has reduced their digital anxieties and strengthened their computer skills. Moreover, successful technology and design of the course have proved to be significant (Runnels et al., 2006).

Interestingly, the role of language in online courses, in particular, was unclear. Communication may be one of the essential criteria for online courses. However, the above results made it clear that the lack of necessary language skills among some of the participants did not seem to create a barrier to the participants' learning process.

Eventually, this ease of use has promoted the readiness and willingness of the graduate learners to participate in online training programs. It has also improved some of their professional and technical skills, which in turn explains the progression of their careers. Technology use strengthen the students' computer literacy, which is a substantial success factor in the job market (Volery & Lord, 2000).

Discussion for Question Four: Readiness to Online Practice

In this question, graduates' perceptions are discussed by focusing on the attitudes and motivators that determine their participation in online training programs. Although course design, continuous feedback, and the communication and attitude of the instructor were the most engaging motivators to the participants, yet, the challenges that occur in the workplace and eagerness to learn were the most impactful regarding their attitudes. Quizzes are important in online courses because they promote learning, provide feedback to the learners, and to enhance their learning experience (Cheng, 2018).

From a student's perspective, online education streamlines lifelong learning, continuous training, and enhances the skills that are required by the knowledge economy (Wagner et al., 2008). Thus, online education can create learning methods that are more convenient and adaptable to meet this new challenge (Lai, 2011). These findings align with Zhang and Nunamaker (2003) in their study of powering e-learning and technology in the new millennium as they clarified that the conventional style of education and training is undergoing radical

change. Individuals will change their paths several times in their lives so that the idea of formal education is no longer consistent with the increasing interest in lifelong learning (Zhang & Nunamaker, 2003). The positive attitudes of the graduates towards the use of technology determined their interest in engaging in online training programs.

Discussion for Question Five: Proactive Approach to Technology

To assess graduate learners' behaviors towards online learning, they defined the degree to which they make deliberate choices about using or not online learning-related activities. They believed that their experience of engaging in online training programs had improved their attitudes towards it. These motivations continued to shape their attitudes towards online learning as the future of education. They have also developed a greater understanding of the potential use of technology through participation in online courses. This understanding of the potential of the technology can affect student learning and improve learning outcomes (Lai, 2011). From their perspectives, knowledge needs to be sought and not taught, particularly in their current practical life. They listed that features as continuous support, communication with professors, and informative online courses encourage them to pursue their online learning.

These findings focused on the association between positive behavior and online training programs previously documented by some researchers in different contexts. The perceived utility of technology and the attitude of instructors to technology can affect learning outcomes (Volery & Lord, 2000). These results were also consistent with what Runnels et al. (2006) stated that the efficacy of online learning is the product of the learner 's acceptance of the online content and that the reliability of the online curriculum and the input from the instructor and the assessments help to form the positive behavior of the learners in the online courses.

One of the participants discussed the troublesome challenge of "culture" and the need to shift perceptions of online education in Egypt to expand it. To date, people are not fully aware of the viability of online education. Some are not even certain of it as a method of learning. Technology usage may affect student learning if there is a greater understanding of its ability to enhance educational outcomes and quality (Lai, 2011).

In summary, the adoption of the technology by the graduate learners was determined by their behavioral purpose, perceived utility, and ease of use of the technology. Such behavioral purpose is related to their actual actions. The productive and enjoyable use of technology has enabled the participants to cultivate a positive attitude and proactive approach to technology and to make use of it. Graduate learners strongly supported the idea of integrating and expanding the use of online learning and technology in the educational contexts in order to improve the quality of education.

This research offered a nuanced analysis of how graduate learners respond to online learning and react to technology. The participants provided examples of how online learning impact their careers and knowledge. Finding enough and relevant literature on the subject was a significant challenge because online learning extensively presented in secondary and higher Education in Egypt. While there is a rich body of literature related to the effects of e-learning on higher education access and outcomes in Egypt (El Gamal & Abd El Aziz, 2012), the literature on perceptions about online learning is still very limited in the Arab world (Adel, 2017). This inadequacy remarkably minimizes the number of practices under review due to the difference in nature between undergraduates and graduates' studies that require different needs, stakeholders, and a broader scope of education. These limitations provide a sound basis for the

need for this research to narrow this gap in research and tackle new areas by researching the graduate learners, continuous education, and lifelong learning on a broader scale.

Conclusion

This research was an attempt to explore the factors that facilitate graduates' participation in online training programs to advance their careers. Online learning has been proposed for its considerable potentials to improve education in Egypt. This study probed the ESS model that offers a variety of online training programs for graduates to advance their careers. Drawing on Davis's TAM model (1986), this research tackled online education through different aspects such as external variables, perceived usefulness, and perceived ease of use, attitude and behavioral intention. The study is significant in terms of expanding the perspective of online education in Egypt by providing a clearer understanding of the factors that promote the involvement of graduates in online training programs in order to achieve a potential paradigm shift in education in Egypt. This research aims to make contributions by providing a platform for better and wider access to the field of online education in Egypt.

This is a qualitative case study that focused on ESS students participating in online courses to develop their skills and advance their careers. Using semi-structured interviews, the researcher was able to provide an in-depth view of the background, experience, and perception of the graduate learners of the factors that facilitate their participation in online training programs to enhance their careers. The theoretical framework and methodology added value to the study. Generated data were formulated, coded, and analyzed to address the research

questions. In the end, the researcher provided some recommendations to promote online learning in Egypt based on the data shared within the study, experience, and observations as well.

The study found that the idea of exploring the factors that facilitate graduates' participation in online training programs to advance their careers is very progressive and productive. This productivity was clearly articulated by analyzing the practice and experience of graduate learners. Also, the attitude of the participants towards online learning is interesting. They all believe that online learning is the future of education. The potential online learning has is promising based on the resources it possesses. Nonetheless, with the current global circumstances that the whole world is witnessing, online education is now going through a turning point that will shape its future. Further effort also needs to be made to ensure the sustainability of online programs in the AUC, ESS and the growth of online education in Egyptian universities.

Egypt faces many obstacles as a result of the increasing demand for higher education, which puts pressure on institutions that surpass their seats and budgets and hinders the quality of education. Encouraging online learning will help to overcome these problems without compromising the quality of education. Online education provides a pedagogical paradigm change in learning and teaching methods. It offers a solution to the ongoing problems of education today around the world, and especially in Egypt. It also provides an alternative to most of the existing educational institutions that encourage online education to meet the demands of the world market. This needs a shift in knowledge, the way of thinking, and the methods used to tackle online education that can set the pace for such a transition.

Egypt has witnessed advances in online education in recent years. The Egyptian government has succeeded in developing the necessary infrastructure for e-learning (Afifi, 2011). There has been an increasing willingness to invest more in technology in order to monitor challenging factors, such as rising costs, accommodating students and meeting their educational needs (El Alfy, Gomez, & Ivanov, 2017). However, few concrete outcomes have been obtained (Adel, 2017). Conversely, Egypt is one of the Arab countries with the most Internet users, and the percentage of individuals who have access to social media has risen annually. The constant increase in using the Internet can be easily spotted in Egypt as Egyptians constitute about 22% of total users in the Arab region (Abdelsalam, Reddick, Gamal, & Al-shaar, 2013). This increase makes Egypt the perfect place to implement the online education technique to mitigate the difficulties facing the existing education system at all levels, and suggests that there are some issues embedded in the Egyptian community with regard to the viability of online learning. Therefore, there is a need to encourage people to engage in online education and adopt a constructive approach; in other words, there has to be a mindset shift of how it is perceived.

Policymakers and various stakeholders can play an essential role in this equation, while educational transformation is something that can be achieved through education, preparing the stakeholders to participate efficiently in the online education process is another powerful resource that can support and accelerate this imperative transformation. Through this research, ESS model was presented as it integrates online learning into training courses for graduate learners and transfer this experience to promote online learning in other educational institutions in Egypt and, most of all, to have an impact on society.

The ESS offers a specific model of online training programs for students to develop their careers. This model can contribute to successful results on the ground and can also inspire other educational institutions and training centers to establish a similar framework. Such common interests within educational institutions are important for improving cooperation among them, minimizing shortcomings, and, maximizing and sustaining significant impacts.

Previous scholars addressed online education and highlighted its benefits in general. Tackling literature that addressed online learning, they either discuss the extent of the impact at the secondary or undergraduate level. Accumulated body of research in learning technology has introduced and tested several models and implementation methods that involve small-scale learners (Manathunga & Hernández-Leo, 2015). However, none revealed the factors that facilitate participation in online education from the perception of the learners or specifically showed the impact of online learning on career advancement for the graduate's level. Such studies have approached the topic from a general viewpoint. They did not tackle graduates who participate in online training programs to advance their career, which is the original purpose of this research. The objective of this study was therefore to bridge that gap by exploring the perceptions of graduates of factors that make it easier for them to engage in online training programs to advance their careers.

A variety of points can be inferred from the results, first online learning is a comprehensive alternative to conventional education. Second, certain constructs influence people's behaviors and predict whether or not they will use a particular program. Third, the deep insight and awareness that graduates have shown towards their online learning experience and their understanding of the value of online education. Fourth, there is a need to

raise awareness of the feasibility of online learning in order to promote online education. It was interesting to learn that the participants were not interested in obtaining certificates, as they were searching for information and knowledge. Finally, it is important to see a clear correlation between the theoretical TAM model that Davis (1986) created for technology acceptance and the realistic ESS model for online education that exists on the ground.

It is the opinion of the researcher that this model should receive more attention from the Egyptian universities, as more lessons can be learned from it and more studies might uncover other dimensions that could provide a more enriching insight into this context.

The key findings revealed a range of insights about the factors that promote participation in online training programs. In addition, the results provided a range of suggestions for future research and different stakeholders. Such findings and recommendations are outlined in the following section.

Recommendations for Practice

Although interview questions were not specifically asked about the factors that could hinder or improve online training, many of the participants highlighted some ideas for enhancing and promoting online training programs in Egypt. Such recommendations are illustrated in the form of Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis as follows:

Table 3
SWOT Analysis for Online Education at AUC, ESS

Strengths	**Weaknesses**
AUC's readiness to develop and improve the internet capacity.	The unaccredited online certificate may not be acknowledged or accepted by different educational institutions and employers, so useless for many participants.
Well-equipped laboratories, computer facilities, and high-qualified and devoted	The lack of personal interaction between learners and instructors.

Recommendations for Future Research

This study serves as a stepping-stone launching further research on online education in Egypt. This study was a comprehensive review of the experience of AUC, ESS in providing online training programs to graduate learners to advance their careers. Further research may consider selecting a larger group of participants to gain more insight into the experiences of individuals studying online training courses to advance their careers and to reveal different aspects of the challenges they face. Besides, future work is required to discuss individual preferences for entering online courses and to recognize the added value they bring to the career and job market.

Further investigations of the practical initiatives of government and higher education institutions to use technology in education could also be useful to provide solutions based on more relevant experiences. One more essential issue is to ensure the willingness and readiness of the various stakeholders and educational institutions to improve education through online learning and to reflect this in practice. Creating a proper technological infrastructure is crucial for the success of online learning.

The results of this research has furthered the current literature in this field. Nonetheless, future work with a broader emphasis on online education can theoretically provide more insight into the topic, extend it to higher education institutions, and generate solutions to the difficulties that obstruct online training in Egyptian universities.

Implications of the Study

Egypt has faced a problem due to the large number of students who need access to higher education. There is a need to look for another alternative to traditional learning to accommodate these numbers without sacrificing the quality of education. Egypt has a restrictive culture that does not accept online learning. Conversely, the time and energy that Egyptian students consume to deal with social media could effectively be devoted to their online education and the enhancement of their future careers. By focusing on online education as a viable solution to current educational challenges in Egypt, this research aims to raise awareness of the feasibility of expanding online education within Egyptian higher education institutions.

The findings of this research may highlight the benefits of online education and the necessity to progressively foster online learning. Farahat (2012) listed some of the benefits and implications of education, such as facilitating the exchange of information, encouraging collaborative learning, improving the quality of teaching and learning, improving access to education and training, responding to labor market conditions, preparing for lifelong learning, and improving the overall cost-effectiveness of educational services. The adoption of these implications could have similar positive impacts on potential developments of online education in Egyptian universities. The results may also have a significant effect on education policymakers, stakeholders, and administrators. Through addressing the reasons and attitudes that promote engagement in online education, there seems to be a strong possibility of positive improvements in the future of higher education.

When it comes to online education, the sky is the limit.

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Appendix A: IRB Approval

CASE #2019-2020-091

THE AMERICAN UNIVERSITY IN CAIRO
INSTITUTIONAL REVIEW BOARD

To: Niveen Salah

Cc: Dena Riad

From: Atta Gebril, Chair of the IRB

Date: March 23, 2020

Re: IRB approval

This is to inform you that I reviewed your revised research proposal entitled "**The Factors that Facilitate Graduate Learners' Participation in Online Training Programs: A Qualitative Case Study in Egypt**" and determined that it required consultation with the IRB under the "expedited" category. As you are aware, the members of the IRB suggested certain revisions to the original proposal, but your new version addresses these concerns successfully. The revised proposal used appropriate procedures to minimize risks to human subjects and that adequate provision was made for confidentiality and data anonymity of participants in any published record. I believe you will also make adequate provision for obtaining informed consent of the participants.

This approval letter was issued under the assumption that you have not started data collection for your research project. Any data collected before receiving this letter could not be used since this is a violation of the IRB policy.

Please note that IRB approval does not automatically ensure approval by CAPMAS, an Egyptian government agency responsible for approving some types of off-campus research. CAPMAS issues are handled at AUC by the office of the University Counsellor, Dr. Ashraf Hatem. The IRB is not in a position to offer any opinion on CAPMAS issues, and takes no responsibility for obtaining CAPMAS approval.

This approval is valid for only one year. In case you have not finished data collection within a year, you need to apply for an extension.

Thank you and good luck.

Atta Gebril

Dr. Atta Gebril
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Appendix B: Consent Form

THE AMERICAN UNIVERSITY IN CAIRO
INSTITUTIONAL REVIEW BOARD

Documentation of Informed Consent for Participation in Research Study

Project Title: [*Thesis*- The Factors that Facilitate Graduate Learners' Participation in Online Training Programs: A Qualitative Case Study in Egypt]

Principal Investigator: [*Niveen Mohamed Salah niveen_m@aucegypt.edu- 01005212408*]

*You are being asked to participate in a research study. The purpose of the research is to explore the graduate learners' perceptions of the factors that facilitate their participation in online training programs to advance their careers. The findings may indicate the importance of improving online education to develop efficient and successful strategies within the online learning environment in Egyptian universities. The expected duration of your participation will not exceed 30 minutes for each participant in a face-to-face interview.

The procedures of this qualitative research will include semi-structured interviews. It uses a case study design to display a specific experience in online education. The interviews will occur at the American University in Cairo, Engineering and Science Services department.

*There [*will not be*] certain risks or discomforts associated with this research.

*There [*will be*] benefits to you from this research. The findings can improve and expand online education in all educational contexts in Egypt.

*The information you provide for purposes of this research [*is confidential*].

*Participation in this study is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or the loss of benefits to which you are otherwise entitled.

Signature

Printed Name

Date

Appendix C: Interview Questions with Participants

Interview Questions

1. Why did you participate in online courses?
2. What are the factors that make online training programs easier to pursue? How does that enhance your future career prospects?
3. Do you believe that pursuing an online training program or degree could help you get promoted at work? How?
4. Other than career enhancement, does this program help you achieve other goals? What are they and how does this help you fulfill your purpose?
5. To what extent do you find online applications and resources user-friendly?
6. What level of technology skills or proficiency should graduate learners have in order to pursue online learning programs? Why?
7. In your opinion, what are the attitudes that graduate learners should have to be successful at pursuing online training programs? What about the motivators?
8. Do you think that what you have mentioned so far about online training programs could possibly influence or shape graduate learners' behaviors towards it? How do behaviors help graduate students enroll in such programs? Please explain.