



Evaluating the experience of using e-learning tools in tourism education during COVID-19: students' perspectives

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ABSTRACT

E-learning has become one of the most appropriate ways to deliver curricula, conduct assessments and do exams, especially after the spread of Coronavirus (COVID-19) pandemic, which is a major turning point in accelerating the use of e-learning technologies around the world. This study evaluates the experience and readiness of tourism undergraduate students for adopting e-learning in governmental universities of Egypt. The study employs the deductive approach using quantitative method and uses a questionnaire form to evaluate internet efficacy, communication self-efficacy, computer anxiety and institutional support relevant to student's readiness of e-learning. Collecting data from a random sample of 1757 students, the findings revealed positive attitudes of students toward e-learning experience. The present study provides useful implications to policy-makers in tourism and hospitality education in Egypt and other developing countries in order to develop the e-learning experience.

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1. Introduction

With the declaration of the COVID-19 pandemic at the end of 2019 and its global outbreak, working conditions have been changed and caused many disruptions in the countries' economies (Dinh & Nguyen, 2020; Shahzad, et al., 2020). According to World Health Organization there are 172,680,104 confirmed COVID-19 positive cases in the world, with 3,711,794 confirmed deaths, 155,411,521 recovered and the virus has affected 222 countries. To confront the pandemic, the majority of world countries have been keen of the necessity to implement social distancing (Dinh & Nguyen, 2020), as the Egyptian Ministry of Higher Education and the Supreme Council of Egyptian Universities mandated the closure of all educational institutions as an emergency

measure to decrease the spread of infection with the need to delegate all educational activities to e-learning (Ministry of Higher Education & Scientific Research, 2021). Some Tourism and Hotel faculties in the Egyptian universities offered supplementary electronic services to the educational process such as students e-mails, blogs, in addition to providing students with uploaded materials, and broadcasting recorded lectures through the Internet (Hammad & Zohry, 2020).

E-learning is not a recent phenomenon (Ismaili, 2021), it has appeared since the mid-1990s (Masrom, et al., 2008; Ozturk, et al., 2018; Ismaili, 2021), as a result of technological advancement and the spread of information and communication technology (ICT) applications, which prompted many universities and educational institutions to use it to support and

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facilitate the educational process (Ozturk, et al., 2018; Hammad & Zohry, 2020). However, it should be noted that at the moment e-learning in Egypt is still in its nascent (Mukhtar, et al., 2020). Thus, e-learning developers and providers need more understanding of how students' realize and interact of the e-learning elements as perception of students and their attitudes are critical to stimulate and learn along with how to apply these methods more efficiently to enhance learning process (Smart & Cappel, 2006). E-learning is an abbreviation term of electronic learning, which also commonly known as distributed learning, hybrid learning, web-based learning, Open learning, online learning, and internet-based learning (e.g, Aldhafeeri, 2016; Forson & Vuopala, 2019; Alqahtani & Rajkhan, 2020; Hammad & Zohry, 2020).

Thus, e-learning has many definitions in different contexts. As stated by Aldhafeeri and Khan (2016, p. 203), e-learning can be “an innovative approach for delivering well-designed, learner-centered, interactive, and facilitated learning environments to anyone, anyplace, anytime by utilizing the attributes and resources of various digital technologies along with other forms of learning materials suited for the open and distributed learning environment”. In addition, Gurley (2018, p.200) mentioned that e-learning is “education that uses one or more technologies to deliver instructions to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously”. (Forson & Vuopala, 2019, p. 277) Forson and Vuopala (2019, p. 277) also defined e-learning as “provision of instructions via digital devices such as a computer or mobile device that is thought of to support learning”. Meanwhile Alqahtani and Rajkhan (2020, p.2) defined e-learning as “the wide set of applications and processes which use available electronic media and tools to deliver vocational education and training”. Accordingly, E-learning where the learner is at a distance from the lecturer, uses some forms of technology to access educational materials, interact with the lecturer and other peers, and a sort of support is provided to the learners (Rapanta, et al., 2020; Ismaili, 2021). In addition, self-speed independent study units and simultaneous or nonsynchronous interactive lectures can be used (Smart & Cappel, 2006).

Educational institutions and students have hurried to use e-learning because there are many advantages that can turn education into a lifelong learning method, boost independent learning and promote learning

efficacy (Hung & Chou, 2015; Alqahtani & Rajkhan, 2020; Khan, et al., 2020; Widodo, et al., 2020). Through, The benefits of e-learning which include: flexibility as lecturers can be accessed at any time and anywhere as long as there is Internet connection (Berdea, 2009; Forson, et al. 2019), easy using of e-learning platforms (Khan, et al., 2020), saving time and costs for students who move (Berdea, 2009), letting students to better recollect the information that is needed for traditional education, additionally educational institutions apply e-learning techniques to support communication between students and lecturers for a good exchange of knowledge. Furthermore it improves the learning community to accomplish personal goals (Alqahtani 2020). Despite the advantages of e-learning, it also has some possible drawbacks, for instance feelings of isolation and lack of human interaction with colleagues and lecturers, technology problems (Tuntirojanawong, 2013; Khan, et al., 2020), lack of basic computer skills and some students may suffer from phobias of utilizing computers and modern ICTs (Berdea, 2009; Tuntirojanawong, 2013; Rafique, et al., 2021), in addition to, the lack of self-regulation and self-stimulation. Moreover, problems arising from choosing the most suitable way to evaluate work participants in the e-learning process (Tuntirojanawong, 2013).

As a result of the imposition of quarantine, educational institutions have turned to e-learning instead of traditional learning in a very short period (Rafique, et al., 2021; Dinh & Nguyen, 2020). UNESCO has explained that the transition to E-learning on a large scale as a very difficult and complex task for different education systems even in the best of circumstances, but it has become an urgent necessity (Ali, 2020). Hence, many developing countries have faced a lot of challenges in transition process during the time of COVID-19, whether challenges for employees, students or administrators (Ali, 2020; Ismaili, 2021). For example, the readiness of instructors and institutional, experience coherence, gaps in student access and readiness, and confidence in institutions' ability to solve these problems (Fox, et al., 2020). While, Zhang, et al., (2020), and (Oyedotun, 2020) elucidated that the implementation of the e-learning policy faces at least five challenges, which are:

- 1- E-learning is limited by infrastructure in terms of how fast the internet is, internet providers are prepared for sudden huge demands for their services, and the differences in IT infrastructure between regions are substantial.

- 2- Lack of ripe and disaggregated plans to switch to e-learning in emergency times, causing uneven quality of lecturers and teaching resources used.
- 3- Inadequate pre-training on online educational requirements, whether for students, faculty members or staff.
- 4-The environment difference in teaching and learning between the university and the home, there may be a set of distraction factors from teaching and studying at home, whether through finding suitable spaces for learning, inadequate devices or an unstable network at home. Moreover, universities are a hub for social activity and human interaction without them the mental and physical health of students can be negatively affected.
- 5-The lack of clarity on what are the best teaching methods & curricula, characteristics and patterns of E-learning, that can be used efficiently and effectively, and how teaching can be linked during and after the COVID-19 epidemic, as well as the need to take into account the unique features of E-learning and integrate them into daily teaching and learning.

Hence, this study aims to evaluate the experience and readiness of tourism undergraduate students for adopting e-learning in governmental universities of Egypt. The paper discusses the internet efficacy, communication self-efficacy, computer anxiety and institutional support relevant to student's readiness of e-learning. The study provides useful implications to policy-makers in tourism and hospitality education in Egypt and other developing countries in order to develop the e-learning experience

2. Literature Review

2.1 Internet Self-efficacy

Self-efficacy is defined as one's confidence in his ability to mobilize the motivation, cognitive resources, and the necessary action plans to perform potential tasks (Sam, et al., 2005; Galy & Johnson, 2011). Understanding self-efficacy can contribute to the improvement and success of e-learning (Shen, et al., 2013). Since e-learning is based on the use of Internet networks, it is essential to know the abilities of students to complete Internet tasks and academic learning processes and to evaluate their competencies in the use of ICT (Hung, et al., 2010). Thus, the Internet self-efficacy (ISE) is not just about uploading or downloading files, but rather the individual's ability to perform high-level skills and work to discover errors and fix them easily. Besides, students with high ISE learn better than students with low ISE during e-

learning, Accordingly ISE is considered an important dimension that affects the extent of students' readiness for e-learning (Hung, 2016; Rafique, et al., 2021). Thus the first hypothesis is developed as follows:

H1. Internet Self-efficacy has a significant effect on Student readiness to E-learning

2.2 Communication self-efficacy

Communication self-efficacy (CSE) is particularly important in challenging learning environments, including the e-learning environment (Shen, et al., 2013), wherever personal beliefs and motivational circumstances can have an impact on performance (Alanazy, 2018), behavioral intent, and student readiness for e-learning (Ismaili, 2021; Rafique, et al., 2021). Hung, et al., (2010) and Rafique, et al., (2021) stated that shy students prefer interacting with other students in an e-learning environment more than in traditional learning environment. CSE in e-learning is a crucial dimension for transcending restrictions of online communication (Hung, 2016). Successful students should achieve the most benefit from online discussions (Rafique, et al., 2021). The using of async discussion is believed to be crucial for ideas and information exchanges, in addition to developing critical thinking and cooperation. Hence, it has become essential understand the best ways to communicate between students, their peers and lecturers during E-learning, and how they are able to use computers and electronic communications effectively (Hung, 2016; Hung, 2016 a). The more student's communication self-efficacy, interacts with lecturers, and contributes to the online community, the more likely to use active interaction strategies, such as writing, responding, and reflecting (Shen, et al., 2013). Therefore, the second hypothesis is developed:

H2. Communication self-efficacy has a positive effect on Student readiness to E-learning.

2.3 Computer Anxiety

Galy & Johnson, (2011) indicated that computer anxiety (CA) as an individual's tendency to adverse reaction while considering using a computer or fear of using a computer. Computer anxiety is an emotional response, an emotional fear of possible negative outcomes such as damaging equipment or looking fool. Students with high computer anxiety may perform poorer than those with little or no computer anxiety. The higher the level of computer anxiety, the lesser they perform tasks, and computer skills they learn. However, although levels of Internet use may not affect computer self-efficacy, but high Internet use

can reduce levels of computer anxiety among undergraduates. Undergraduate with less computer anxiety showed more positive attitudes toward the Internet (Sam, et al., 2005). The third hypothesis is formulated as follows:

H3. Computer Anxiety has a negative effect on Student readiness to E-learning.

2.4 Institutional support

The e-learning standard is an important issue that demands a basic focus. Nowadays, an unexpected turn has occurred from face-to-face learning to the E-learning (Shahzad, et al., 2020), which requires achieving quality of education, availability of skills, knowledge, experience and psychological preparedness for both students and lecturers (Forson & Vuopala, 2019), furthermore the provision of excellent infrastructure like computers and modern IT equipment's (e.g., smart phones and devices, online learning platforms (software/mobile applications)) (Ali, 2020; Rafique, et al., 2021) Thus, Students must have accessibility to some of these to successfully participate in e-learning. In addition to the tendency of universities to change their education models using intellectual capital (Shahzad, et al., 2020).

Institutional support (IS) refers to active organizational encouragements in the form of pecuniary and nonpecuniary policies, rules and assistance that drive the employees to carry out their responsibilities in a highly efficient and productive manner (Falola, et al., 2020). IS corresponds to the factors that may assist or impede people's behavior in particular environments. Hung, (2016 a) analyzed educational environments and indicated that there are three significant types of institutional support; support for superiors, support for colleagues, and favourable organizational surroundings. In e-learning, the student is the main entity and the core of the educational system. The faculty staff responsibility is to study ways to maximize the possibility of students' environments to support learning and decrease the elements in the environments that may hinder it (Aldhafeeri & Khan, 2016).

Therefore, to apply a learning-focused system, all stakeholders, counting university managers, faculty staff, support services staff, and the institution must be aware of the technology and institutional support factors based on students' perspectives that influence success in e-learning, , as well as be on the readiness to supply students with a purposeful learning environment supported by well-designed learning materials, Special when trying to adopt e-learning

courses or programs (Masrom, et al., 2008; Aldhafeeri & Khan, 2016), Some of the institutional support that higher education institutions can provide includes: technical support, pedagogical support (Falola, et al., 2020) , through training and support of faculty and students to make good use of e-learning technologies (Linjawi & Agou, 2020), as well as the involvement of lecturers in the design of these courses (Philipsen, 2019). The fourth hypothesis is developed as follows:

H4. Institutional support has a significant effect on Student readiness to E-learning.

2.5 Student readiness to e-learning and evaluation of e-learning experience in tourism education

E-learning for students is a sort of education that includes motivation, communication competence, participation (Berteau, 2009). Warner, Christie, and Choy in 1998 outlined the first concept of e-learning readiness. They defined e-learning readiness as students' preference for classroom instructional process versus face-to-face learning, in addition to students' trust in using various types of technology, world wide web, particularly tools that rely on the computer for communicating in online learning, and students' participation in independent learning (Rafique, et al., 2021). Furthermore, Demir, (2015) refere that eLearning readiness as the ability of stakeholders to use e-learning resource and multimedia technologies and take advantage of their benefits in order to enhance the quality of learning.

Based on Aldhafeeri & Khan (2016) E-learning readiness is an appraisal of some organizational and individual factors that must be deemed if institutions want to succeed in the introduction of an e-learning strategy. Where e-learning strategies demand a great deal of up-front analysis, time for developing, money, technology infrastructure, prior experience with technology, self-efficacy, and leadership support to succeed (Aldhafeeri & Khan, 2016; Rafique, et al., 2021). Demir, (2015) explained that e-Learning readiness is one of the most important factors affecting the successful outcomes of e-learning programmes. The majority of students have their own devices that support internet as computers or mobile phones for connecting to formal and informal networking platforms such emails, blogging, etc (Khan, et al., 2020), the ability to form a virtual study group with other and the comfortable with doing various Internet tasks that may include navigating the web, emailing, downloading and uploading files, and ect (Tuntirojanawong, 2013).

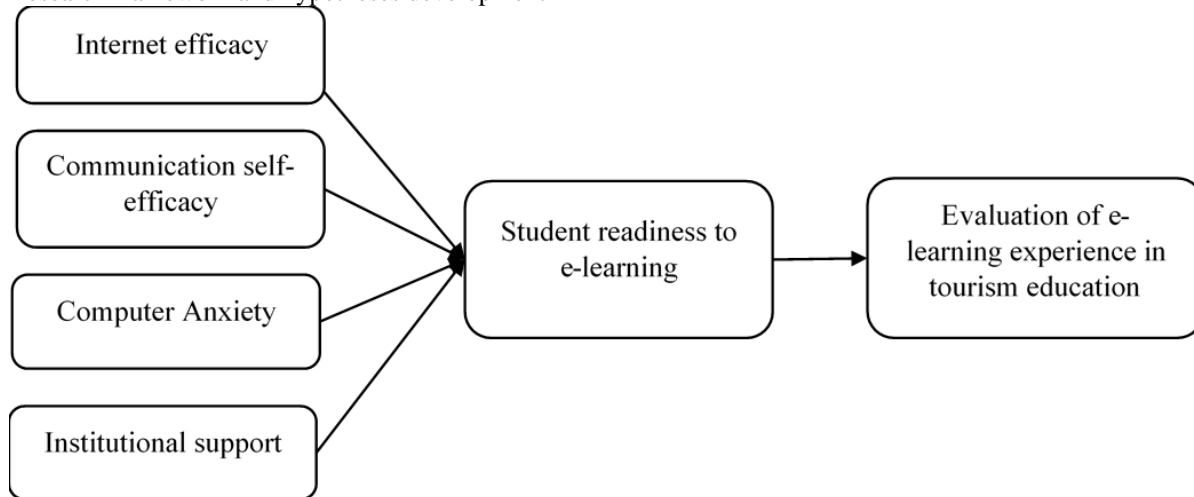
Hammad & Zohry, (2020) clarified that in the tourism education, when faculty staff merge network technology into their traditional education well, this leads to the formation of a positive attitude by students towards e-learning, and improves their sense of satisfaction, comfort and flexibility. This achieves the best integration between the two methods of education and better results than only traditional educational courses. The fifth hypothesis is formulated as follows:

H5. Student readiness to E-learning has a significant effect on evaluation of e-learning experience in tourism education

2.6 Conceptual framework and Hypotheses development

Fig 1

Research framework and hypotheses development



From Figure (1), five hypotheses were developed as follows:

- H1. Internet efficacy has a significant effect on Student readiness to e-learning.
- H2. Communication self-efficacy has a positive effect on Student readiness to e-learning.
- H3. Computer Anxiety has a negative effect on Student readiness to e-learning.
- H4. Institutional support has a significant effect on Student readiness to e-learning.
- H5. Student readiness to E-learning has a significant effect on evaluation of e-learning experience in tourism education

3. Methodology

3.1 Research Instrument

The deductive approach employing quantitative method to test the hypothesized model. There are six constructs in the proposed research model (Figure1): Internet efficacy, communication self-efficacy,

Based on the literature review of student readiness to e-learning and using of E-learning tools in tourism education at faculties of tourism and hotels in Egyptian universities (Helwan, Alexandria, Fayoum, Suze Canal, Minia, Sadat City, Mansoura, Bani Sweif, and Luxor), the conceptual framework of the current study has been developed. It has four predictors of student readiness to e-learning. These are communication self-efficacy, institutional support, Internet efficacy and computer anxiety. These four constructs act as predictors to measure their impact on student readiness to E-learning and how this readiness affect students' evaluation of e-learning experience (Figure 1).

computer anxiety, institutional support, and student readiness to e-learning and evaluation of e-learning experience in tourism education. Data were collected via a questionnaire form addressed to students. Statements used to measure the research constructs were developed from literature review and a five-point Likert scale (1=strongly disagree to 5=strongly agree) was used to estimate the respondents' perceptions.

The initial questionnaire form was designed in English language. It is checked by a panel of academics to ensure it measures what it should do. For the validity issues, the form then translated back into Arabic language to ensure questions comprehensibility. Once more, the Arabic copy was translated back into English language to be compared with the original version. After that, the questionnaire was piloted on 100 random students to check its validity.

The research questionnaire is divided into two main sections. The first section was designed to elicit the general characteristics of the respondents (i.e., gender,

age university, department, year of study, technology skills level, living area and e-learning platform(s) used). The second section consisted of the measurement scales for the studied constructs, selected depending on existing validated scales or adapted from the previous literature (Table1). From the 29 items, the questionnaire form included three items to measure communication self-efficacy, six

items for institutional support, five items for Internet efficacy, four items to measure computer anxiety. In addition, five items to measure student readiness to e-learning. Moreover, six items for evaluation of e-learning experience in tourism education. The indicators were slightly modified to be appropriate for the present study.

Research Constructs

| Construct | Measure | No. of Items | Adopted from |
|-----------|---|--------------|---|
| | Internet efficacy | | |
| IE1 | I can deal with various computer programs such as Microsoft Office and Adobe Acrobat | 05 | Hung, (2010) |
| IE2 | I can work in a group for studies online. | | Rafique, et al., (2020) |
| IE3 | I am able to perform homework and online educational activities (participate in classroom forums - download assignments...etc) | | Hung, (2010) |
| IE4 | I can interact quickly and efficiently with e-learning techniques | | Hung, (2016) ; Hung, (2016 a) |
| IE5 | E-learning platforms are easy to use. | | Khan., et al. (2020) |
| | Communication self-efficacy (CSE) | | |
| CS1 | I trust in myself when utilizing e-learning tools to efficiently connect with others. | 03 | Hung, (2016) |
| CS2 | I trust in myself when handling with e-learning content well | | Shen, et al., (2013) |
| CS3 | I trust in myself when usage e-learning system. | | Shen, et al., (2013) |
| | Computer Anxiety | | |
| CA1 | I feel nervous when using the computer technologies | 04 | Bertea, (2009) |
| CA2 | I am afraid that I will make mistakes that I'm not able to correct | | Hung, (2016); Rafique, et al., (2020). |
| CA3 | I find difficulty to understand the technical characteristics of computers for e-learning systems | | Ali, (2020) |
| CA4 | I don't like working with technologies smarter than me | | Bertea, (2009) |
| | Institutional support (IS) | | |
| IS1 | My faculty has an efficient e-learning platform | 06 | Ali, (2020); Rafique, et al., (2020) |
| IS2 | In my faculty, IT technical support employees are available to aid professors and students with e-learning techniques | | Masrom, (2008) Aldhafeeri., et al. (2016) |
| IS3 | In my faculty, constant internet computers are available. | | Ali, (2020); Rafique, et al., (2020) |
| IS4 | My faculty is given considerable attention to encourage faculty members to switch from face-to-face learning to online learning | | Shahzad, et al., (2020) |
| IS5 | My faculty hold workshops and training courses to qualify students to use e-learning techniques | | Linjawi & Agou, (2020) |
| IS6 | My faculty encourages students to use e-learning technologies in lectures | | Linjawi & Agou, (2020) |
| | Student readiness | | |
| SR1 | In home, I have a computer /smart phone connected to the internet | 05 | Khan, et al., (2020) |
| SR2 | I have an active university e-mail address | | Hammad & Zohry, (2020) |
| SR3 | I have a suitable environment at home that enables me to attend lectures online without distraction | | Zhang, et al., (2020) |
| SR4 | I have internet service that enables me to attend online lectures, download assignments and research | | Hammad & Zohry, (2020) |

| | | | |
|--|---|----|---|
| SR5 | I can work in virtual groups and perform e-learning activities with my colleagues | | Tuntirojanawong, S. (2013) |
| Evaluation of e-learning experience | | | |
| ET1 | Study through e-learning is characterized by flexibility | 06 | Forson, et al. (2019) & Berteau, (2009) |
| ET2 | Various e-learning tools help to achieve interactive communication between the student and the lecturer | | Alqahtani (2020); Khan., et al. (2020) |
| ET3 | E-learning helps me to record lectures and return to them at any time | | Hammad & Zohry, (2020); Aldhafeeri & Khan, (2016) |
| ET4 | E-learning provides me more incentives than traditional lectures | | Aldhafeeri & Khan, (2016) |
| ET5 | I prefer to continue the e-learning experience in the future as an alternative to traditional learning | | Hammad & Zohry, (2020) |
| ET6 | I feel satisfied about the e-learning technologies that have been used in my college in the past period | | Hammad & Zohry, (2020) |

3.2 Research population and sample

The population of the study included relevant students in Egyptian faculties of tourism and hotels including (Helwan, Alexandria, Fayoum, Suze Canal, Minia, Sadat City, Mansoura, Bani Sweif, and Luxor). A random sample was employed to select relevant students. Of 1834 responses, 1757 valid questionnaires were collected. Data were collected, coded, and entered in SPSS 16 for statistical analysis. Descriptive statistics were computed including frequencies, percentages, mean, and standard deviation. To test the research hypotheses, structural equation modelling, the advanced multivariate technique was used using WarpPLS software.

4. Research Findings

4.1 Descriptive statistics

The descriptive statistics show that 47.4% of the respondents are male, whereas 52.6% are female. 2.0% of respondents are less than 18 years, while 71.4% of them is between 19 and 21 years old, and 26.6% is aged more than 21 years.

Moreover, 26.8% of the respondents belong to Helwan University, 17.8% to Luxor University, 15.2% to Bani Sweif University, 13.8% to Sadat City University, 12.1% to Fayoum University, 6.7% to Suez Canal University, 4.7 % to Alexandria University, 1.7% to Minya University, and 1.3% Mansoura University. In addition, 52.0% of the responders belong to Tourism Studies Department, 28.4% Hotel Studies Department, and 19.6 % Tourist Guidance Department. 36.7% of respondents is in the first year, 30.9% is the second year, 19.6% is the third year and 12.8% is the fourth year.

Besides, 50.1% of the respondents are classified skillful in using technology, 42.7% is beginners and

7.2% have expert technology skills level. 72.4% of respondents are living in urban area, and 27.6 % in rural area. Furthermore, 57.3% of the respondents are using Zoom e-learning program in their faculties, 56.7% of them are using Microsoft Teams, 7.9% of them are using Google Meet, 2.4% of them are using Edmodo, 1.4% of them are using Blackboard platform, and 10.8% are using other platforms such as, Google Classroom, Discord, Skype, WhatsApp, Facebook Live, Telegram Groups, and Clubhouse.

Means and standard deviations of responses for the measured constructs are provided in table (2). The mean values of responses for all constructs range from agree (3.5) on student readiness to e-learning to neutral (2.7) on computer anxiety. Respondents' opinions towards student readiness to e-learning (mean= 3.5, agree), Internet efficacy (mean= 3.3, neutral), communication self-efficacy (mean= 3.2, neutral), use of e-learning tools (mean= 3.05, neutral), institutional support (mean= 2.8, neutral), and computer anxiety (mean= 2.7, neutral).

4.2 Measurement Model

Table 2 shows the standardized loadings of indicators, Cronbach's alpha (CA), composite reliability (CR), Average Variance Extracted (AVE) of constructs and Square Root of AVEs. The coefficient of internal consistency of scale reliability (Cronbach's alpha) and the composite reliability (CR) values were greater than 7 for all constructs. Thus, the internal consistency of the constructs used in this study is evident. Additionally, each construct's AVE is larger than 0.5 which leads to the existence of convergent validity. On the other hand, discriminant validity was investigated by comparing the square roots of the AVE for each construct with the correlations and it was greater than correlations among constructs which is evidence of

discriminant validity. The model fit indices for measurement model are within target limits: average path coefficient = 0.291 $p < .001$; average R2 = .489, $p < .001$; average adjusted R2 = .488, $p < .001$; average block variance inflation factor = 1.979; average full

collinearity variance inflation factor = 2.397; Tenenhaus goodness of fit = 0.595; Sympton's paradox ratio = 0.800; R2 contribution ratio = 0.996; statistical suppression ratio = 1.000; and nonlinear bivariate causality direction ratio = 0.800.

Table 2

The Measurement Model

| Construct | Indicator | Standardized Loading | Cronbach's Alpha (α) | CA (ρ) | AVE | SqRAVE |
|-------------------------------------|-----------|----------------------|-------------------------------|---------------|-------|--------|
| Internet efficacy | CE1 | 0.832 | 0.922 | 0.942 | 0.764 | 0.874 |
| | CE2 | 0.881 | | | | |
| | CE3 | 0.891 | | | | |
| | CE4 | 0.907 | | | | |
| | CE5 | 0.857 | | | | |
| Communication self-efficacy (CSE) | CS1 | 0.923 | 0.921 | 0.950 | 0.863 | 0.929 |
| | CS2 | 0.938 | | | | |
| | CS3 | 0.927 | | | | |
| Computer Anxiety | CA1 | 0.837 | 0.841 | 0.894 | 0.678 | 0.824 |
| | CA2 | 0.815 | | | | |
| | CA3 | 0.875 | | | | |
| | CA4 | 0.763 | | | | |
| Institutional support (IS) | IS1 | 0.807 | 0.908 | 0.929 | 0.686 | 0.828 |
| | IS2 | 0.845 | | | | |
| | IS3 | 0.820 | | | | |
| | IS4 | 0.831 | | | | |
| | IS5 | 0.842 | | | | |
| | IS6 | 0.824 | | | | |
| Student readiness | SR1 | 0.774 | 0.856 | 0.898 | 0.640 | 0.800 |
| | SR2 | 0.636 | | | | |
| | SR3 | 0.875 | | | | |
| | SR4 | 0.863 | | | | |
| | SR5 | 0.829 | | | | |
| Evaluation of e-learning experience | ET1 | 0.851 | 0.918 | 0.936 | 0.709 | 0.842 |
| | ET2 | 0.869 | | | | |
| | ET3 | 0.780 | | | | |
| | ET4 | 0.877 | | | | |
| | ET5 | 0.835 | | | | |
| | ET6 | 0.838 | | | | |

Note: AVE: Average Variance Extracted; Square Root AVE, CA: Cronbach's Alpha, CR: Composite Reliability

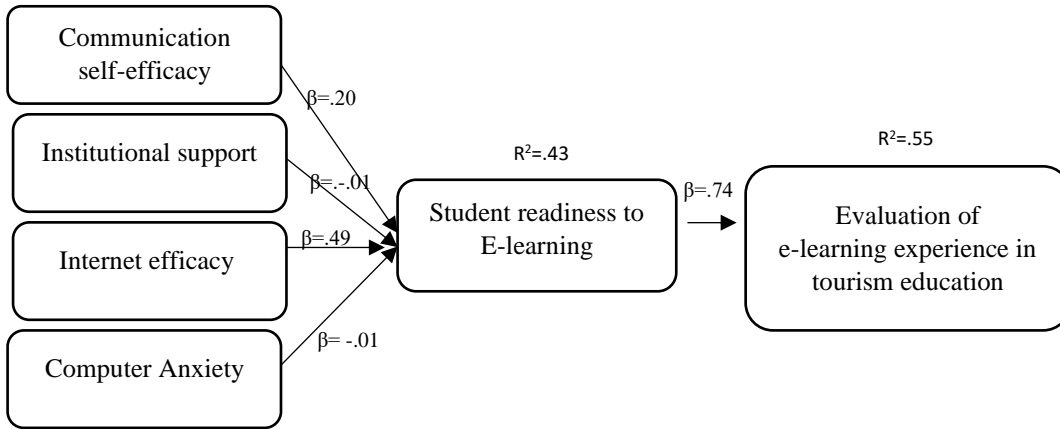
4.3 Structural Model

It is revealed from figure (2) that Internet efficacy is positively affecting the student's readiness to e-learning ($\beta_{IE \rightarrow SR} = 0.49$ and $P < .01$) (H1 is supported), communication self-efficacy is positively affecting the students readiness to e-learning ($\beta_{CSE \rightarrow SR} = 0.20$ and $P < .01$) (H2 is supported). Both Computer ($\beta_{CA \rightarrow SR} = -0.01$ and $P > 0.05$) and Institutional support ($\beta_{IS \rightarrow SR} = -0.01$ and $P > .05$) have no significant effect on readiness and therefore the third and fourth hypotheses are not supported.

To sum up, the four constructs in the model (Internet efficacy, communication self-efficacy, Computer Anxiety, Institutional support) explain 43 % of variance in student's readiness. In turn, student's readiness to e-learning has a significant effect on evaluation of e-learning experience in tourism education ($\beta_{SR \rightarrow ET} = 0.74$ and $P < 0.1$) (H5) is supported, student's readiness explains 55% of variance in evaluation of e-learning experience in tourism education

Fig. 2

The Structural Research Model



5. Discussion of Finding

Critically analyzing the revealed findings, it is clear that internet self-efficacy is the highest factor affecting student readiness to e-learning. This is in line with previous studies by Hung, (2016) and Rafique, et al., (2020) who found that ISE is considered an important dimension that affects the extent of students' readiness for e-learning. This revealed that students can deal with various computer programs such as Microsoft Office and Adobe Acrobat, which is agreed with (Hung, 2010). In addition, Students can work in a group for studies online. This is in line with Rafique, et al., (2020). Then, it is found that students can perform homework and online educational activities (participate in classroom forums - download assignments.etc). This finding is consistent a previous with the study of Hung, (2010). Students can interact quickly and efficiently with e-learning techniques. This finding is consistent with previous studies specifying the importance of internet self-efficacy such as Hung, (2016); and Hung, (2016 a). Next, E-learning platforms are easy to use. This is in line with an extant study explaining the advantages of using platforms (Khan, et al., 2020).

One of the most important factors in research contribution to student e-learning readiness is communication self-efficacy (CSE). Students clarified that they are confident when utilizing e-learning tools to efficiently connect with others. This finding is in line with the study of Hung, (2016). In addition, they thought that they are confident in using e-learning tools. This finding is consistent a previous with the study of Shen, et al., (2013).

As for the computer anxiety, the present study has not revealed a significant effect of computer anxiety on student readiness to e-learning. As a result of the COVID-19 outbreak, lecturers and undergraduates has find themselves adopted on e-learning (Mishra, et al.,

2020). Hence, Egyptian universities has been worked on transferring traditional educational curricula's (Hammad & Zohry, 2020), to internet by using online portals and Video conferencing platforms such as Zoom, Microsoft Teams, Google meet, Google Classroom, Skype and Webex Blackboard (Mukhtar, et al., 2020, Shahzad, et al., 2020). Besides, using social media applications like Whatsapp, Facebook, Twitter, Instagram. Thus, these ICT applications have reduced the anxiety as they are available on smartphones and laptops and are also characterized by flexibility and ease using which enable tourism students to achieve better educational results (Mishra, et al., 2020). In addition, according to Sam, et al., (2005) the higher level of computer skills undergraduate students has, the lower computer anxiety.

Another important factor in the present study is institutional support which has not revealed a significant effect on student readiness to e-learning. This is due to some of the negatives that hinder the smooth implementation of e-learning in some tourism and hotel faculties, such as lack of awareness about the importance of e-learning, and insufficient preparedness, (e.g., the absence of e-learning units, and inadequate training and workshops provided to faculty members and students about e-learning and its various applications, and poor Internet service in some places (Hammad & Zohry, 2020; Fox, et al., 2020). Furthermore, Mukhtar, et al., (2020) explained that faculty members and students are not able to perform practical work.

6. Conclusion and Recommendations

The present study has investigated the effect of self-efficacy in internet and communication, Computer Anxiety, and Institutional support on the readiness of tourism and hotels students in the Egyptian

universities, subsequently, evaluating the experience of using e-learning tools in tourism education during COVID-19, it is found that the Egyptian government offered supplementary electronic services to the educational process. E-learning has become very substantial where educational institutions have faced significant challenges of keeping the learning process running smoothly while ensuring benefit. The present study contributes to theory as it is the first study, to the author's knowledge so far, exploring the e-learning readiness and evaluating the experience of using e-learning in Egyptian tourism and hotels faculties. The study adds to the knowledge in e-learning in tourism education. In addition, the present study contributes to practice. It is useful for policymakers who wish to do their best to improve E-learning process. Where the education institutions could improve its policies, strategies and systems in terms of E-learning. Through, the need for a unified educational platform, commensurate with the characteristics of the professional and practical tourism sector and meet the changes occurring in. In addition to supporting the basic ICT infrastructure and periodically training technical support staff to use ICT tools effectively. In the light of the theoretical framework of the study and through the findings of the empirical results, some recommendations can be developed:

- Focusing on recognizing the different learning styles of struggling students
- Simplifying educational content to suit students' individual differences and their skills in using technology and educational materials
- Continuously supporting institutions of higher education for the infrastructure of universities
- Providing training workshops on a regular basis for students and lecturers on how to use modern technological tools
- Providing software and electronic devices at reasonable prices for use at home for all students.

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