



Students' and Instructors' Views of an Online Graduate Program of TEFL: Contribution of Motivation, Readiness, and Barriers to Satisfaction

Adib Ahmadi Mahjoub¹, Mahboubeh Taghizadeh^{2*}

¹ M.A. in TEFL, Department of Foreign Languages, Iran University of Science and Technology, Tehran, Iran, adib.mahjub061@gmail.com

^{2*} Assistant Professor in TEFL, Department of Foreign Languages, Iran University of Science and Technology, Tehran, Iran, mah_taghizadeh@iust.ac.ir

Article Info

ABSTRACT

Article Type:

Research Article

Received:

05/09/2020

Accepted:

26/10/2020

Satisfaction of online students is one of the important issues of online education, and identifying the predictors of satisfaction can improve the effectiveness and success of online education. This study thus aimed to investigate online students' and instructors' perceptions of the influential factors such as motivation, e-readiness, and barriers for online satisfaction and to determine the contribution of these factors to satisfaction. The participants were 114 online graduate students of TEFL and 5 online instructors at Iran University of Science and Technology. Four questionnaires on learning barriers, motivation, e-readiness, and satisfaction along with 4 open-ended questions were administered in this descriptive study. The results revealed that most of online students were satisfied with the online graduate program of TEFL as online instructors provided students with lesson summary and class material prior to the session, had interaction with students through social networks, and held the online classes after office hours. The results also showed that online students' motivation was mostly instrumental, and some were not completely ready for online education. The results of multiple regression analysis also indicated that the contribution of motivation to satisfaction was higher than that of readiness and barriers. Online instructors need to solve students' educational problems to make them ready for online instruction and to foster students' motivation, which are influential in enhancing their satisfaction with online learning programs.

Keywords: Barriers, Online Learning, Online Motivation, Readiness, Satisfaction

Cite this article: Ahmadi Mahjoub, A., Taghizadeh, M. (2022). Students' and instructors' views of an online graduate program of TEFL: Contribution of motivation, readiness, and barriers to satisfaction. *Journal of Modern Research in English Language Studies*, 9(1), 73-95. DOI: 10.30479/jmrels.2020.14020.1725.

©2022 by the authors. Published by Imam Khomeini International University. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY 4.0) <https://creativecommons.org/licenses/by/4.0>



1. Introduction

The development of technology, especially the Internet resulted in the easy access of people to educational resources and the emergence of online education, which could enhance the interaction between instructors and students around the world (Carey, 2012; Casey, 2008) and the development of a more cost-effective mode of education (Dibiase, 2000). Given the advantages of online education, such as the flexibility of time and creating the chance to work and study simultaneously, adult students have become the main users of online education (Perry & Pilati, 2011; Young & Norgard, 2006). Flexibility and potential opportunities of online education have also increased students' interest for continuing their higher education (Moore et al., 2011), and satisfaction of these students is one of the important issues of online education, which is found to be influenced by various factors, including level of motivation (Chute et al., 1999), readiness for online education (Choy et al., 2002), barriers to online education (Kim et al., 2005), instructor of the online course (Neumann, 1994; Williams & Ceci, 1997), timely response and accessibility of instructors to students (Hiltz, 1993), efficacy beliefs of online students (Hodges, 2008; Pintrich & De Groot, 1990), and students' access to reliable facilities (Belanger & Jordan, 2000). Accordingly, the focus of this study was to investigate the influential factors, including barriers, motivation, and readiness for online students' satisfaction.

It is also argued that students' motivation is the most essential determinant of their outcomes, affecting their satisfaction with online course (Svanum & Aigner, 2011). According to Hegarty (2011), the number of dropouts can be decreased by considering students' motivation and designing online instruction in accordance with their needs and interest. Readiness for online education as another factor influencing learner satisfaction is referred to as the ability in the utilization of technologies on which the quality of online program and the success of students is dependent (Choucri et al., 2003). In addition, adult learners may be found dissatisfied and demotivated for further education due to some barriers such as feeling deprived of educational opportunities (Goulding, 2013), bad experiences at school and low self-esteem (Whitnall & Thompson, 2007), low motivation (Eilers, 1989), conflict between work and family commitments (Evans, 1994), and financial issues (Bird & Morgan, 2003). Given the literature on factors contributing to online satisfaction, it seems there is no study focusing on the satisfaction of Iranian online graduate students of TEFL and identifying the elements contributing to their satisfaction. The objectives of this study were thus to determine online students' and instructors' perceptions of influential factors, such as barriers, motivation, and e-readiness for online satisfaction and to determine the correlation and contribution of these factors to learner satisfaction. Accordingly, the following research questions were formulated in this study.

1. What are perceptions of graduate students and instructors of TEFL for online satisfaction, motivation, readiness, and barriers?
2. To what extent do barriers, motivation, and e-readiness correlate to satisfaction of online students?
3. To what extent do barriers, motivation, and e-readiness of online students contribute to their satisfaction?

2. Literature Review

2.1. Satisfaction with Online Learning

Online students' satisfaction is one of the important issues of online education, which results in the formation of a community of practice to evaluate social, cognitive, and teaching presence in online education (Garrison & Vaughan, 2008). According to Cocea and Weibelzahl (2006), success of an online program can be determined based on the level of learner satisfaction. It is also argued that students who are satisfied with their learning experience are more likely to be successful in continuing their education (Chang & Smith, 2008) as their satisfaction positively impacts the effective learning and could increase students' competence, ensuring their appropriate performance (Muyllé et al., 2004).

Online students' satisfaction is found to be influenced by a number of factors: level of students' familiarity and the suitability of course content (Beqiri et al., 2010), interaction between instructor and students (Marks et al., 2005), instructor's performance, namely timely response and accessibility to students (Hiltz, 1993; Neumann, 1994), and access to reliable facilities as well as familiarity with applied technology in the course (Belanger & Jordan, 2000). Beqiri et al. (2010) found that the satisfaction level of graduate students was higher than that of undergraduate students. On the other hand, Rodriguez Robles (2006) showed that students' educational level and their satisfaction are not related to each other and that educational level cannot be considered a predictor of students' satisfaction for adult online learners. It was also found that the potential flexibility of class schedule is one of the other important factors affecting learner satisfaction (Seaberry, 2008). According to Dabbagh (2007), students' performance can be enhanced by sufficient and appropriate instructional methods, support, course structure, and design.

2.2. Motivation for Online Learning

Since motivation represents the commitment, engagement, and success of students, some researchers (e.g., Guay et al., 2008; López-Pérez et al., 2011) have stressed its significance in learning contexts. It is recommended that online instructors should obtain a vivid understanding of the motivation and reason for online students' participation (Fryer et al.,

2014) as motivation is the most essential determinant of students' learning outcomes (e.g., Hegarty, 2011; López-Pérez et al., 2011), course persistence (Hegarty, 2011), and satisfaction with instruction (Svanum & Aigner, 2011).

According to Lim and Kim (2003), when students are able to promote their ability or when there are some motivating forces for their endeavors, such as score and instructional feedback, they become motivated. Deci and Ryan (1985), however, emphasized the significance of self-determination for motivation, suggesting that individuals need to feel they have the right to select among their favorite learning activities, which are related to their intrinsic motivation (Cheng & Yeh, 2009). Another factor influencing motivation is the age of online students. Chyung (2007) showed that older learners have higher motivation compared to younger ones; however, Ke and Xie (2009) found that students' age was not an effective indicator for adult online students' satisfaction and performance.

It was found that online students' motivation and satisfaction are significantly interrelated with each other (Lim, 2004), and in the online learning environment, motivation has a crucial role in student participation and overall academic experience (Xie & Huang, 2014). Likewise, Topal (2016) notes that if learners have high readiness and motivation, then their satisfaction would also be high. According to Bekele (2010), motivation and learner satisfaction can be influenced by success factors, such as technology, course, and support.

2.3. Readiness for Online Learning

Success in online education is dependent on the notion of e-readiness, which refers to the ability to make use of the required technology and multimedia of learning management system to increase the learning quality (Choucri et al., 2003). According to Smith (2005), online learning readiness can also be described as students' ability in time management, management of their own learning, having intrinsic motivation, as well as knowing the styles and experiences of self-learning. In addition, students' readiness is comprised of their preferences for learning, learning style, learning strategies, earlier learning experience, technological knowledge, and interest in course material (Eastmond, 1994). Wang et al. (2009) argue that readiness is the most significant factor for successful online learning, which can be evaluated by assessing the technical knowledge of students and their ability in using computer (Schreurs et al., 2008). Students' readiness can be measured by estimating two other variables, which are technology and attributes of students (Dray et al., 2011).

The online students' readiness was found to be influenced by learners' satisfaction with their learning experience (Gunawardena & Duphorne, 2000); learning experience and comfort in using online education (Fogerson,

2005); and social and emotional development and self-control (Davis, 2006). It is also argued that online students' readiness can positively impact their perceived learning and interaction with their instructors and peers (Demir, Kaymak, & Horzum, 2013), academic motivation and collaborative learning (Leigh & Watkins, 2005), and experience, learning satisfaction, and self-esteem (Fogerson, 2005).

2.4. Barriers to Online Learning

Cross (1981) classified student barriers into situational, institutional, and dispositional barriers. Situational barriers are defined as a wide range of conditions that make a sort of obstructions in the ability of adult learners in the process of continuing their education (MacKeracher et al., 2006). Adult students may face various situational barriers related to their expenses, family life, wellbeing, work struggle, and transportation (Goto & Martin, 2009). Another type of barrier is institutional barrier, which is related to the techniques institutions apply to plan, deliver, and implement learning activities (MacKeracher et al., 2006), resulting in adult students' emotional damage (Osam et al., 2017).

Dispositional barriers, on the other hand, are related to attitudes and feelings of students about their ability and capacity to enroll, participate, and finish learning activities successfully (MacKeracher et al., 2006). The most frequent types of dispositional barriers are found to be low self-confidence, negative feelings about being an adult student or being too old, too busy, too sick, not savvy enough, being poor, having limited time, having no interest for higher education, lack of sufficient language abilities, and getting bored with program (MacKeracher et al., 2006).

3. Methods

3.1. Participants

The participants of this study included 114 Iranian online graduate students at Iran University of Science and Technology (IUST). They were 98 female and 16 male students whose age range were 22 to 50 years. All participants were native speakers of Persian and were studying TEFL at MA level and were selected from the online enrollees of 2016 to 2018. In addition, five instructors teaching online graduate courses at the e-learning campus of IUST were also the other participants of this study. Approval from the e-learning campus was obtained to conduct the research and to collect the required data from online students.

3.2. Instruments

The first instrument used in this study was a scale on the satisfaction of online students developed by Wang (2003). This scale consisted of 17

items on four dimensions: learner interface (4 items), learning community (4 items), content (4 items), and personalization (4 items). The second instrument was a scale on online motivation developed by Yoo and Huang (2013), which consisted of 12 items with four dimensions, including intrinsic (3 items), short-term extrinsic (3 items), long-term extrinsic (3 items), and willingness to learn new technologies (2 items). The third instrument was a questionnaire on the readiness of online students developed by Hung, Chou, Chen, and Own (2010) with 18 items on five dimensions, including self-directed learning (5 items), learner control (3 items), motivation for learning (4 items), computer/Internet self-efficacy (3 items), and online communication self-efficacy (3 items).

The fourth instrument developed by Wang et al. (2017) was the elder learning barriers scale consisting of 37 items with five dimensions of barriers, including dispositional (items 1-9), informational (items 10-16), physical (items 17-23), situational (items 24-32), and institutional (items 33-37). It should be noted that all items of the scales were based on a 5-point Likert scale with values ranging from 1 = strongly disagree to 5 = strongly agree. In addition to the questionnaires, four open-ended questions on satisfaction, motivation, readiness, and barriers were administered to online students, and the same questions were also asked from the online instructors in a semi-structured interview.

3.3. Procedure

This study was conducted in June 2018 at the e-learning campus of IUST. Reviewing the literature, the researchers first selected the questionnaires on barriers, motivation, readiness, and satisfaction with online learning. After that, the instruments were translated into participants' first language, and then back translation was conducted to check the accuracy of the Persian versions of the instruments. In addition, the instruments were piloted with 20 online graduate students, and based on their feedback, the wording of some sentences was modified.

The questionnaires were administered through an online survey tool (i.e., see [googleforms.com](https://www.google.com/forms)). Prior to their administration, the researchers provided the required information to the participants. Then, the survey link was sent to the students through WhatsApp. To increase students' response rate, the survey was available for a month in an online survey and follow-up emails and messages were sent to the students as a reminder. An interview with four questions was also conducted with five online instructors.

The reliability coefficients for the scales were elder learning barriers ($\alpha = .88$), motivation ($\alpha = .83$), readiness ($\alpha = .843$), and satisfaction ($\alpha = .91$). The reliability coefficients for categories of each questionnaire were as follows: elder learning barriers (dispositional barriers = .728, informational

barriers = .853, physical barriers = .733, situational barriers = .645, & institutional barriers = .795); motivation (intrinsic motivation = .925, short-term extrinsic motivation = .659, long-term extrinsic motivation = .673, & willingness to learn new technologies = .727); readiness (computer/internet self-efficacy = .827; self-directed learning = .627; learner control = .605; motivation for learning = .664; & online communication self-efficacy = .754); and readiness (learner interface = .84, learning community = .84, content = .80, & personalization = .82).

3.4. Data Analysis

To investigate online students' views of satisfaction, motivation, readiness, and barriers, descriptive statistics of the categories and items of the questionnaires were run. To determine the relationship between satisfaction and motivation, readiness, and barriers of online students, Pearson product-moment correlation was performed. In addition, multiple regression analysis was run to investigate the contribution of motivation, readiness, and barriers to satisfaction of online students. Finally, content analysis was done on students' and instructors' responses to the open-ended questions; that is, patterns in their responses were identified, and then quantitative analysis was conducted to indicate the frequency and percentage for each pattern.

4. Results and Discussion

4.1. Results

4.1.1. Learners' Satisfaction with Online Education

Considering learners' responses to the satisfaction scale, the highest agreements were obtained by the following statements, respectively: 'The e-learning system enables me to learn the content I need' (73.6%); 'The e-learning system is easy to use' (71.9%); 'The e-learning system provides useful content' (70.2%); 'The e-learning system provides up-to-date content' (68.5%); 'The e-learning system is user-friendly' (63.2%); and 'The e-learning system makes it easy for us to access the shared content from the learning community' (59.7%). On the contrary, students disagreed more with the following statements: 'The operation of the e-learning system is stable' (50.9%); 'The e-learning system provides sufficient content' (35.8%); 'The e-learning system enables me to choose what I want to learn' (34.7%); and 'The e-learning system makes it easy for me to share what I learn with the learning community' (21.1%). The descriptive statistics of the categories of learner satisfaction scale are provided in Table 1.

Table 1*Descriptive Statistics of Categories of Satisfaction Scale (N = 114)*

Categories	Min	Max	M	SD
Learner Interface	1.00	5.00	3.39	.83
Learning Community	1.50	5.00	3.22	.82
Content	2.00	5.00	3.72	.72
Personalization	2.00	5.00	3.45	.71

As indicated in Table 1, the highest mean was 3.72, which was related to the 'content category', whereas the category of the 'learning community' received the lowest mean ($M = 3.22$). Table 1 also shows that the responses to the 'personalization' were the most homogeneous ($SD = .71$), while those to the 'learner interface' category were the most heterogeneous ($SD = .83$).

An open-ended question, 'Are you satisfied with studying graduate program of TEFL online? What factors can influence your satisfaction with this program?' was administered to the participants whose responses are hierarchically presented as follows: very satisfied ($n = 4$, $\% = 6.55$), satisfied ($n = 41$, $\% = 67.21$), somewhat satisfied ($n = 12$, $\% = 19.67$), and not satisfied ($n = 3$, $\% = 4.91$). The responses to the second part of the question are as follows: 'the possibility to work and study simultaneously' ($n = 43$, $\% = 70.49$), 'saving time' ($n = 29$, $\% = 47.54$), 'archived files of classes' ($n = 26$, $\% = 42.62$), 'no need for physical attendance' ($n = 25$, $\% = 40.98$), 'saving expenses' ($n = 13$, $\% = 21.31$), 'appropriate class schedule' ($n = 10$, $\% = 16.39$), 'interaction with instructors' ($n = 8$, $\% = 13.11$), 'convenient education' ($n = 6$, $\% = 9.83$), 'knowledgeable instructors' ($n = 5$, $\% = 8.19$), 'lower educational content' ($n = 4$, $\% = 6.55$), 'being motivated by instructors' ($n = 4$, $\% = 6.55$), 'summary of the lessons' ($n = 3$, $\% = 4.91$), 'no need for dormitory' ($n = 3$, $\% = 4.91$), 'instructor feedback' ($n = 2$, $\% = 3.27$), 'having education without stress' ($n = 2$, $\% = 3.27$), 'environmental support' ($n = 2$, $\% = 3.27$), 'use of L1' ($n = 2$, $\% = 3.27$), 'quality of classes' ($n = 1$, $\% = 1.63$), and 'higher level of learning' ($n = 1$, $\% = 1.63$).

An interview question, 'What are the factors that result in the satisfaction of online students? What are your actions for the satisfaction of the students?' was asked from the five online instructors. The responses of the instructors are hierarchically presented as follows: 'less materials for study' ($n = 4$, $\% = 80$), 'understanding students' problems and getting along with them' ($n = 3$, $\% = 60$), 'simple and understandable content' ($n = 3$, $\% = 60$), 'less assignments' ($n = 2$, $\% = 40$), 'holding classes after office hours' ($n = 2$, $\% = 40$), 'Use of L1' ($n = 2$, $\% = 40$), 'sample questions' ($n = 2$, $\% = 40$), 'lenient evaluation' ($n = 1$, $\% = 20$), 'giving high scores' ($n = 1$, $\% = 20$), and 'punctuality' ($n = 1$, $\% = 20$).

The responses of the five instructors about their actions to promote students' satisfaction are as follows: 'providing students with books, pamphlets, pdf, and PowerPoint related to syllabus' (n = 4, % = 80), 'providing students with lesson summary' (n = 4, % = 80), 'simplifying the content' (n = 4, % = 80), 'using L1' (n = 4, % = 80), 'uploading the class material prior to beginning of the session or semester' (n = 3, % = 60), 'keeping in touch with students through social networks' (n = 3, % = 60), 'getting along with students and understanding them' (n = 2, % = 40), 'having an adjustable syllabus' (n = 2, % = 40), 'working on one book' (n = 2, % = 40), 'answering students' comments and questions and providing them with feedback' (n = 2, % = 40), 'defining the course objectives clearly' (n = 1, % = 20), 'providing students with exam's sample questions' (n = 1, % = 20), 'taking teacher assistant' (n = 1, % = 20), and 'scaffolding and supporting students' (n = 1, % = 20).

4.1.2. Learners' Motivation for Online Education

With regard to the items of the motivation scale, the highest agreements were obtained by the following statements, respectively: 'I want to apply what I learn in my job' (98.3%); 'I enjoy learning how to use new technologies' (87.7%); 'The online learning experience would be useful for my job' (78.9%); 'I expect to create or expand my professional network in the field through the online program' (78.9%); 'Online learning might be a pleasant experience for me' (77.2%); 'Online learning would improve my performance in the job' (73.7%); 'I might enjoy online learning' (70.2%); and 'The advantages of online learning outweigh its disadvantages' (70.1%). However, the students disagreed more with the following statements, respectively: 'I expect to have a career change after earning a degree from the online program' (31.6%), 'I am tech-savvy' (29.8%), 'It might be fun to take online courses' (26.5%), and 'I have a concrete career plan for what I will do after earning a degree from the online program' (26.1%). The descriptive statistics of the categories of online learning motivation are provided in Table 2.

Table 2

Descriptive Statistics for Categories of Online Motivation Scale (N = 114)

Types of Motivation	Min	Max	M	SD
Intrinsic	1.50	5.00	3.90	.87
Short-Term Extrinsic	3.00	5.00	4.25	.56
Long-Term Extrinsic	2.00	5.00	3.79	.68
Willingness to Learn New Technologies	1.00	5.00	3.65	.86

With regard to different categories of motivation scale, the highest mean was 4.25, which was related to the 'short-term extrinsic', whereas the category of the 'willingness to learn new technologies' received the lowest

mean ($M = 3.65$). Table 2 also indicates that responses to the ‘short-term extrinsic’ were the most homogeneous ($SD = .56$), while those to ‘intrinsic’ category were the most heterogeneous ($SD = .87$).

An open-ended question, ‘Who chooses online courses to continue education? What are their goals and motivation for getting a master degree using online courses?’ was administered to online students whose responses are hierarchically presented as follows: ‘employed students’ ($n = 57$, $\% = 93.44$), ‘students not having enough time to attend face to face classes’ ($n = 30$, $\% = 49.18$), ‘students living in other cities’ ($n = 20$, $\% = 32.78$), ‘married students’ ($n = 18$, $\% = 29.50$), ‘students getting low score on university entrance exam’ ($n = 14$, $\% = 22.95$), ‘those having personal problems’ ($n = 8$, $\% = 13.11$), ‘elderly individuals’ ($n = 6$, $\% = 9.83$), and ‘disabled individuals’ ($n = 2$, $\% = 3.27$). The students’ responses to their goals are hierarchically presented as follows: ‘job promotion’ ($n = 30$, $\% = 49.18$), ‘enhancing knowledge’ ($n = 25$, $\% = 40.98$), ‘continuing education at PhD level’ ($n = 15$, $\% = 24.59$), ‘convenient type of education’ ($n = 13$, $\% = 21.31$), ‘saving time and expenses’ ($n = 11$, $\% = 18.03$), ‘having work and education at the same time’ ($n = 10$, $\% = 16.39$), ‘learning English’ ($n = 8$, $\% = 13.11$), ‘personal interest’ ($n = 4$, $\% = 6.55$), ‘finding more job opportunities’ ($n = 4$, $\% = 6.55$), ‘improving listening and writing skills’ ($n = 3$, $\% = 4.91$), ‘immigration’ ($n = 2$, $\% = 3.27$), ‘efficient use of time’ ($n = 2$, $\% = 3.27$), and ‘force of family’ ($n = 1$, $\% = 1.63$).

Another question, ‘Who chooses the online education? What are the goals and motivation of these students?’ was asked from the five online instructors to highlight the motivation of online students. The responses of the instructors are hierarchically presented as follows: ‘employed and busy students’ ($n = 5$, $\% = 100$), ‘elderly students’ ($n = 3$, $\% = 60$), ‘those who could not get the required score for face to face classes’ ($n = 3$, $\% = 60$), ‘those who are in need of a quick and unproblematic degree’ ($n = 1$, $\% = 20$), ‘married students’ ($n = 1$, $\% = 20$), and ‘students with personal problems’ ($n = 1$, $\% = 20$). The responses of the instructors about the goals and motivation of online students are hierarchically presented as follows: ‘job promotion’ ($n = 5$, $\% = 100$), ‘getting a university degree’ ($n = 4$, $\% = 80$), ‘retirement with higher salary’ ($n = 4$, $\% = 80$), ‘continuing education at PhD level’ ($n = 4$, $\% = 80$), and ‘social competition’ ($n = 2$, $\% = 40$).

4.1.3. Learners’ Readiness for Online Education

Considering learners’ responses to items of the readiness scale, the highest agreements were obtained by the following statements, respectively: ‘I improve from my mistakes’ (98.3%); ‘I feel confident in expressing myself (e.g., emotions and humor) through text’ (98.3%); ‘I like to share my ideas with others’ (93%); ‘I set up my learning goals’ (87.7%); ‘I carry out my own study plan’ (80.7%); ‘I feel confident in my knowledge and skills of how to

manage software for online learning' (80.7%); and 'I feel confident in performing the basic functions of Microsoft Office programs (e.g., MS Word, MS Excel, and MS PowerPoint)' (79%). However, the highest disagreements were found with the following statements: 'I feel confident in using online tools to effectively communicate with others' (31.6%); 'I manage time well' (29.8%); 'I seek assistance when facing learning problems' (24.1%); and 'I feel confident in using the Internet to find or gather information for online learning' (23.6%). The descriptive statistics for the categories of online learning readiness scale are provided in Table 3.

Table 3

Descriptive Statistics for Categories of Readiness Scale (N = 114)

Categories	Min	Max	M	SD
Computer/Internet Self-Efficacy	2.33	5.00	3.86	.49
Self-Directed Learning	2.60	4.80	3.74	.66
Learner Control	1.67	4.67	3.94	.80
Motivation for Learning	3.00	5.00	4.32	.56
Online Communication Self-Efficacy	2.33	5.00	3.90	.60

As shown in Table 3, the highest mean was related to 'motivation for learning' ($M = 4.32$), while the 'self-directed learning' received the lowest mean ($M = 3.74$). Table 3 also indicates that the responses to the 'computer/Internet self-efficacy' were the most homogeneous ($SD = .49$), while the responses to 'learner control' category were the most heterogeneous ($SD = .80$).

An open-ended question, 'Do you consider yourself ready for online education? What are the actions that the university can do to increase your e-readiness?' was administered to students and their responses are hierarchically presented as follows: 'completely ready' ($n = 4$, $\% = 6.55$), 'somewhat ready' ($n = 41$, $\% = 67.21$), and 'not ready' ($n = 15$, $\% = 24.58$). Their responses to the second part of the question are as follows: 'holding workshop to increase students' computer literacy' ($n = 21$, $\% = 34.42$), 'determining the readiness of students at the beginning of the program' ($n = 17$, $\% = 27.86$), 'providing students with answers to frequently asked questions (FAQ)' ($n = 15$, $\% = 24.59$), 'informing students of the possible problems and giving them solutions' ($n = 14$, $\% = 22.95$), 'offering technical support' ($n = 14$, $\% = 22.95$), 'teaching students how to work with learning management system (LMS)' ($n = 12$, $\% = 19.67$), and 'solving students' problems by knowledgeable professors' ($n = 5$, $\% = 8.19$).

The third question, 'Do you consider the online students ready for online education? What actions can be done to increase the online students' readiness?' was asked from the online instructors whose responses were as follows: 'ready' ($n = 3$, $\% = 60$), and 'unready' ($n = 2$, $\% = 40$). Their responses to the second part of the question are hierarchically presented as

follows: ‘offering technical support’ (n = 3, % = 60), ‘holding workshop to increase their computer and the Internet literacy’ (n = 2, % = 40), ‘instructors’ guidance’ (n = 2, % = 40), ‘providing students with FAQ’ (n = 1, % = 20), and ‘providing students with a CD, including problems and their solutions’ (n = 1, % = 20).

4.1.4. Learners’ Barriers to Online Education

In order to determine which barriers received more positive replies, and which ones received few positive replies, the percentage of students’ agreement and disagreement about each barrier in the questionnaire was calculated. The highest frequencies were obtained by the following barriers, respectively: ‘occupying with home responsibilities’ (80.7%); ‘lack of time’ (75.5%); ‘too much information to choose for learning’ (49.1%); and ‘inappropriate class time’ (43.9%). However, the students did not consider the following items as their barriers: ‘nothing I want or need to learn’ (100%); ‘being afraid to be too old to learn’ (94.7%); ‘not enjoying learning’ (91.2%); ‘not good at learning’ (91.2%); ‘mobility problems caused by negative health condition’ (91.2%); ‘suffering from chronic illness’ (86%); ‘bad learning experience in the past’ (82.5%); ‘refusing learning how to do activities because of physical insensitivity’ (82.4%); ‘suffering from failing eyesight’ (79%); ‘being tired of going to university’ (77.2%); ‘poor academic achievement in school’ (73.7%); and ‘no encouragement from family members’ (68.4%). The average of the replies to items of each category was used to determine the mean for each category. The descriptive statistics for the categories of elder learning barriers scale are provided in Table 4.

Table 4

Descriptive Statistics of Categories of Learning Barriers Scale (N = 114)

Types of Barriers	Min	Max	M	SD
Dispositional Barriers	1.00	3.22	1.87	.51
Informational Barriers	1.29	5.00	2.86	.78
Physical Barriers	1.00	4.00	2.03	.60
Situational Barriers	1.00	3.78	2.67	.54
Institutional Barriers	1.00	5.00	2.67	.80

Table 4 shows that the highest mean was obtained by the ‘informational barriers’ ($M = 2.86$), while ‘dispositional barriers’ received the lowest mean ($M = 1.87$). Table 4 also indicates that the responses to the ‘dispositional barriers’ were the most homogeneous ($SD = .51$), while those to the ‘institutional barriers’ were the most heterogeneous ($SD = .80$).

An open-ended question, ‘What are your problems with online education? What actions can instructors do to solve these problems?’ was administered to highlight students’ problems with online learning. The students’ responses are hierarchically presented as follows: ‘technical

problems' (n = 28, % = 45.90), 'lack of interaction between instructors and students' (n = 25, % = 40.98), 'incomplete uploaded files' (n = 18, % = 25.90), 'frequent change of class time' (n = 15, % = 24.59), 'time-consuming mode of interaction and participation (i.e., typing)' (n = 9, % = 14.76), 'mandatory attendance for final exams' (n = 8, % = 13.11), 'high university fee' (n = 8, % = 13.11), 'no problem' (n = 8, % = 13.11), 'inappropriate announcement of class or exam date' (n = 7, % = 11.47), 'too many educational resources' (n = 7, % = 11.47), 'too many classes a week' (n = 6, % = 9.83), 'instructors' absenteeism and unpunctuality' (n = 6, % = 9.83), 'teacher-centered classes' (n = 6, % = 9.83), 'postponement of make-up sessions' (n = 6, % = 9.83), 'receiving late or no reply from instructors' (n = 5, % = 8.19), 'having average above 17 for getting thesis' (n = 5, % = 8.19), 'interference between class and work time' (n = 4, % = 6.55), and 'lack of skillful instructors for online classes' (n = 3, % = 4.91).

Students' responses to instructors' roles in solving their problems are hierarchically presented as follows: 'considering more time for question and answer sessions' (n = 20, % = 32.78), 'holding more face to face sessions' (n = 18, % = 29.50), 'uploading class files prior to beginning of the semester' (n = 17, % = 27.86), 'using teacher assistant for online classes' (n = 15, % = 24.59), 'offering training programs for teaching online courses' (n = 14, % = 22.95), 'using social network to compensate for limited online interaction' (n = 14, % = 22.95), 'setting advice time by instructors for online students' (n = 13, % = 21.31), 'allowing students to speak in the class' (n = 13, % = 21.31), 'giving more time for assignments' (n = 12, % = 19.67), 'holding some workshops on online education and computer use' (n = 12, % = 19.67), 'technical support' (n = 12, % = 19.67), 'holding online classes after office hours' (n = 11, % = 18.03), 'providing online students with feedback' (n = 10, % = 16.39), 'making appropriate announcements about class or exam dates' (n = 5, % = 18.19), 'clarifying objectives of online courses' (n = 3, % = 4.91), and 'giving some scores for class attendance and participation' (n = 1, % = 1.63).

The last question, 'What are online graduate students' problems? What measures do you take to solve these problems?' was asked from the online instructors whose responses are hierarchically presented as follows: 'lack of time' (n = 5, % = 100), 'financial problem' (n = 2, % = 40), 'lack of technological knowledge' (n = 2, % = 40), 'lack of face to face interaction' (n = 2, % = 40), 'family problems' (n = 2, % = 40), 'students' boredom' (n = 1, % = 20), 'holding classes during office hours' (n = 1, % = 20), 'lack of content' (n = 1, % = 20), 'low language level' (n = 1, % = 20), 'high age' (n = 1, % = 20), 'no familiarity with learning strategies' (n = 1, % = 20), 'old infrastructure' (n = 1, % = 20), 'frequent change of class time' (n = 1, % = 20), and 'materialistic vision of policymakers' (n = 1, % = 20). Instructors'

responses to their roles in solving students' problems are hierarchically presented as follows: 'teaching learning strategies' (n = 2, % = 40), 'answering all students' questions' (n = 2, % = 40), 'keeping in touch with students' (n = 2, % = 40), 'simplifying the content' (n = 1, % = 20), 'highlighting important points' (n = 1, % = 20), 'enhancing instructors' technical knowledge' (n = 1, % = 20), 'multi-tasking ability of instructor' (n = 1, % = 20), 'using various tasks, content, and evaluation methods' (n = 1, % = 20), and 'providing students with summary' (n = 1, % = 20).

4.1.5. Contribution of Barriers, Motivation, and Readiness to Online Satisfaction

To determine the relationship between online satisfaction, barriers, motivation, and readiness, Pearson-product-moment correlation was conducted. To ensure no violation of the assumptions (i.e., normality, linearity, and homoscedasticity) related to this statistical analysis, preliminary analyses were conducted. The results are indicated in Table 5.

Table 5

Pearson Product-Moment Correlation among Variables of This Study

Variables	1	2	3	4
1. Satisfaction	–	-.495**	.702**	.623**
2. Barriers		–	-.415**	-.378**
3. Motivation			–	.959**
4. Readiness				–

As indicated in Table 5, considering students' satisfaction, the highest correlation was obtained between satisfaction and motivation ($r = .702$), while the lowest correlation was found between satisfaction and barriers ($r = -.495$). Table 5 also shows a high, positive correlation between readiness and motivation ($r = .959$). Multiple regression analysis was used to determine the extent to which barriers, motivation, and readiness could predict satisfaction with online education. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, homoscedasticity, linearity, and multicollinearity. The results of this technique are provided in Table 6.

Table 6

Summary of Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	SD. The error of the Estimate
1	.755 ^a	.571	.559	.42064

a. Predictors: (Constant), Readiness, Barriers, Motivation

b. Dependent Variable: Satisfaction

As Table 6 indicates, readiness, barriers, and motivation contributed to the model, explaining 57 percent of the variance in the satisfaction of

online students. To assess the statistical significance of these results, an ANOVA was conducted. The result is shown in Table 7.

Table 7

ANOVA Results of Readiness, Motivation, and Barriers to Satisfaction of Online Students

Model		Sum of Squares	df	Mean Square	F	p
1	Regression	25.862	3	8.621	48.721	.000 ^b
	Residual	19.463	110	.177		
	Total	45.325	113			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Readiness, Barriers, and Motivation

As shown in Table 7, the contribution of predictors (i.e., readiness, barriers, and motivation) was statistically significant, producing $R^2 = .571$, $F(3, 110) = 48.721$, $p = .000$. To investigate the relative contribution of each predictor to satisfaction, the coefficients of the predictors were calculated, and the results are provided in Table 8.

Table 8 shows that the contribution of barriers to satisfaction was 21%, while that of motivation and readiness to satisfaction was 32% and 16%, respectively. Of these three variables, motivation indicated the most significant contribution (beta = 1.166, $p = .000$), while readiness (beta = -.583, $p = .010$) and barriers (beta = -.232, $p = .001$) contributed less to satisfaction, respectively.

Table 8

Coefficients of Contribution of Readiness, Barriers, and Motivation to the Satisfaction of Online Students

Model	Unstandardized Coefficients		Standardized Coefficients	t	p	95.0% Confidence Interval for B		Correlations		Collinearity Statistics			
	B	Std. Error				Lower Bound	Upper Bound	Zero order	Partial	Part Tolerance	VIF		
(Constant)	2.240	.519		4.317	.00	1.212	3.269						
1	Barriers	-.327	.097	-.232	-3.37	.00	-.519	-.135	-.49	-.306	-.21	.823	1.21
	Motivation	1.330	.258	1.166	5.16	.00	.819	1.840	.702	.442	.322	.077	13.06
	Readiness	.816	.311	.583	2.62	.01	1.432	.201	.623	.243	.164	.079	12.62

a. Dependent Variable: Satisfaction of Online Students

4.2. Discussion

The findings of this study showed that online students had more motivation for updating their information and applying theoretical aspects they learn in online classes in their teaching practice. The second influential factor for their high level of motivation was related to technology

enhancement, which makes learning an interesting experience, allowing them to continue their education easily without need for physical presence. The highest mean was related to short-term extrinsic motivation, which might be due to students' instrumental motivation for job promotion or retirement with higher salary. On the contrary, the category of willingness to learn new technologies received the lowest mean, which can be justified by students' high age and lack of digital literacy and technical knowledge to utilize technology for their learning.

The contribution of motivation to satisfaction supported the findings of a number of studies (e.g., Guay et al., 2008; Lopéz-Pérez et al., 2011; Schunk et al., 2008), indicating that motivation is a powerful construct, which can influence all parts of education, including students' satisfaction. Moreover, the results are in line with those of other researchers (e.g., Bird & Morgan, 2003; Muilenburg & Berge, 2005; Simonson et al., 2006) who have found that low students' motivation resulted in dissatisfaction with online education.

The results revealed that learners considered themselves ready for sharing their ideas with others, which can be related to their teaching experience as they think their experience is valuable and for which they can receive compliment from their instructors. With regard to different categories of readiness scale, the highest mean was related to motivation for learning, which can be explained by the high motivation of students' high motivation for achieving various educational goals. On the contrary, self-directed learning category received the lowest mean, which can be due to students' past experience with traditional methods of education and no experience with online self-directed learning strategies and their implementation for their learning.

A positive correlation was found between readiness and online satisfaction and motivation. This might be due to the fact that when students know what they want and what they need, they would be motivated to learn new content and try to achieve their educational goals. This finding supports that of Kaymak and Horzum (2013), who found that online students' readiness can directly influence their attendance, dropout, and satisfaction. Likewise, this finding supports that of other studies (e.g., Boeglin & Campbell, 2002; Fogerson, 2005; Gunawardena & Duphorne, 2000; Haverila, 2010; Horzum et al., 2015; Bird & Morgan, 2003), indicating that students' readiness is correlated with their satisfaction.

The results of the study showed a negative correlation between satisfaction and barriers of online students, since if the barriers in online education reduce, then the satisfaction can increase. The most frequent problems of online students were found to be occupying with home responsibilities and not having enough time, which might be due to the fact that most online students are married and responsible for their family; hence,

home responsibilities have priority for them compared to education. In addition, since these students are busy with their jobs, they do not have enough time to study their courses deeply. This finding is in line with that of some studies (e.g., Haber & Mills, 2008; Maguire, 2005; Schifter, 2002) in which participants mostly addressed the barrier of time commitment in online education. Technical problem was also the most cited problems in students' responses, which is related to their high age and their lack of technical knowledge, which is a prerequisite for online education. In addition, most students considered instructors' late reply to their questions and emails as another problem, which can be considered as another reason for the lack of interaction between students and teachers.

The results of the study revealed that online students were most satisfied with the content offered to them, which can be related to up-to-date materials, educational clips, and summary of the books provided by the instructors. In contrast, the category of learning community received the lowest mean, which might be related to the traditional teaching methods online instructors use and the lack of interaction among students. For instance, sending email which could be a good way for communication is replied late by instructors due to lack of time and their heavy workload, resulting in less learner satisfaction with interaction in online classes.

5. Conclusion and Implications

This study aimed to investigate the factors contributing to satisfaction of online graduate program of TEFL in the e-learning campus of IUST. The findings revealed that most students were satisfied with this program and stated some reasons, such as having the opportunity for both work and study, saving time and expenses, appropriate class schedule, convenient form of education, and no need to commute to university for their satisfaction with online graduate program of TEFL. Among the three variables investigated in this study, motivation was found to have the most contribution to online students' satisfaction. Students' motivation was also found to be mostly instrumental as they preferred job promotion or retirement with higher salary, although some were really interested in continuing their education and aimed to increase their knowledge about teaching English language. In addition, most students did not consider themselves completely ready for online education and lacked the required Internet skills, which were found to be removed by providing appropriate technical support as well as teaching students how to work with LMS.

Online students' satisfaction was mostly related to their motivation and less related to their readiness and barriers. Therefore, much effort should be made to motivate online students to promote their satisfaction level. It can also be stated that the decrease in students' barriers can result in an increase

in their satisfaction with online instruction. To enhance online learning community, the instructors should also design appropriate collaborative learning tasks and activities and in order to reduce their dissatisfaction with online education, factors, such as barriers, motivation, and e-readiness, which contribute to online satisfaction should not be neglected. The results of this study can help online instructors to solve online students' problems through holding more face to face sessions, uploading the class files sooner to give more opportunity for prestudy; using social networks to keep in touch with the students to answer their questions, holding classes after the office hours, and not changing the class time fixed at the beginning of the semester. To increase the readiness of online students, policymakers and administrators can determine the e-readiness level of students at the beginning of the program and based on the results, each student can then be provided with the required instruction. To enhance students' satisfaction, online instructors are suggested to provide feedback to students' comments, use their first language or give more explanation when the contents are vague, and define the course objectives clearly at the beginning of the program.

More research is required on online students' demographic characteristics, including age and gender to discover the possible effect of these factors on online satisfaction, barriers, motivation, and readiness. In addition, to investigate online students' satisfaction, other variables, namely self-regulation, self-directed learning, and Internet self-efficacy can be considered. Another study can explore the satisfaction of undergraduate students with online general English courses. Instead of open-ended questions, future researchers can conduct an interview with students and policymakers about factors contributing to online satisfaction, gaining more insight into the roadblocks to online students' success.

References

- Bekele, T. A. (2010). Motivation and satisfaction in internet-supported learning environments: A review. *Educational Technology & Society, 13*(2), 116-127.
- Belanger, F., & Jordan, D. H. (2000). *Evaluation and implementation of distance learning: Technologies, tools, and techniques*. Idea Publishing Group.
- Beqiri, M. S., Chase, N. M., & Bishka, A. (2010). Online course delivery: An empirical investigation factors affecting student satisfaction. *Journal of Education for Business, 85*(2), 95-100.
- Bird, J., & Morgan, C. (2003). Adults contemplating university study at a distance: Issues, themes and concerns. *The International Review of Research in Open and Distance Learning, 4*(1), 1-17.
- Carey, K. (2012). Into the future with MOOCs. *Chronicle of Higher Education, 58*(32), 60-68.
- Casey, D. (2008). A journey to legitimacy: The historical development of distance education through technology. *TechTrends, 52*(2), 45-51.
- Chang, S. H., & Smith, R. A. (2008). The effectiveness of personal interaction in a learner-centered paradigm distance education class based on student satisfaction. *Journal of Research on Technology in Education, 40*(4), 407-426.
- Cheng, Y. C., & Yeh, H. T. (2009). From concepts of motivation to its application in instructional design: Reconsidering motivation from an instructional design perspective. *British Journal of Educational Technology, 40*, 597-605.
- Choucri, N., Maugis, V., Madnick, S., & Siegel, M. (2003). *Global e-readiness for what?* MIT School of Management.
- Choy, S., McNickle, C., & Clayton, C. (2002). *Learner expectations and experiences: An examination of student views of support in online learning*. Australian National Training Authority.
- Chute, A. G., Thompson, M. M., & Hancock, B. W. (1999). *The McGraw-Hill handbook of distance learning*. McGraw-Hill.
- Chyung, Y. S. (2007). The invisible motivation of online adult learners during contract learning. *The Journal of Educators Online, 4*, 1-22.
- Cocea, M., & Weibelzahl, S. (2006). Motivation: Included or excluded from E-learning. In K. Kinshuk, D. Sampson, J. Spector, & P. Isaias (Eds.), *Cognition and exploratory learning in digital age* (pp.435-437). IADIS Press.
- Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning*. Jossey-Bass publishing.
- Dabbagh, N. (2007). The online learner: Characteristics and pedagogical implications. *Contemporary Issues in Technology and Teacher Education, 7*(3), 217-226.

- Davis, T. S. B. (2006). *Assessing online readiness: Perceptions of distance learning stakeholders in three Oklahoma community colleges* (Unpublished doctoral dissertation), Oklahoma State University, Stillwater, Oklahoma.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum.
- Dibiase, D. (2000). Is distance education a Faustian bargain? *Journal of Geography in Higher Education*, 24(1), 130-136.
- Dray, B. J., Lowenthal, P. R., Miskiewicz, M. J., Ruiz-Primo, M. A., & Marczyński, K. (2011). Developing an instrument to assess student readiness for online learning: A validation study. *Distance Education*, 32(1), 29-47.
- Eastmond, D. V. (1994). Adult distance study through computer conferencing. *Distance Education*, 15(1), 128-152.
- Eilers, M. L. (1989). Older adults and computer education: Not to have the world a closed door. *International Journal of Technology and Aging*, 2(1), 56-76.
- Evans, T. N. (1994). *Understanding open and distance learners*. Kogan Page.
- Fogerson, D. L. (2005). *Readiness factors contributing to participant satisfaction in online higher education courses* (Doctoral dissertation). The University of Tennessee, Knoxville.
- Fryer, L., Bovee, N., & Nakao, K. (2014). E-learning: Reasons students in language learning courses don't want to. *Computers & Education*, 74, 26-36.
- Garrison, D., & Vaughan, N., D. (2008). *Blended learning in higher education: Framework, principles and guidelines*. Jossey-Bass.
- Goto, S. T., & Martin, C. (2009). Psychology of success: Overcoming barriers to pursuing further education. *The Journal of Continuing Higher Education*, 57, 10-21.
- Goulding, A. (2013). Older people learning through contemporary visual art: Engagement and barriers. *The International Journal of Art & Design Education*, 32(1), 18-32.
- Guay, F., Ratelle, C. F., & Chanal, J. (2008). Optimal learning in optimal contexts: The role of self-determination in education. *Canadian Psychology*, 49(3), 233-240.
- Gunawardena, C. N., & Duphorne, P. L. (2000). Predictors of learner satisfaction in an academic computer conference, *Distance Education*, 21(1), 101-117.
- Haber, J., & Mills, M. (2008). Perceptions of barriers concerning effective online teaching and policies: Florida community college faculty. *Community College Journal of Research and Practice*, 32(4-6), 266-283.

- Haverila, M. (2010). Factors related to perceived learning outcomes in an undergraduate e-learning course. *International Journal of Knowledge and Learning*, 6(4), 308-328.
- Hegarty, N. (2011). Adult learners as graduate students: Underlying motivation in completing graduate programs. *The Journal of Continuing Higher Education*, 59, 146-151.
- Hiltz, S. R. (1993). Correlates of learning in a virtual classroom. *International Journal of Man-Machine Studies*, 39, 71-98.
- Hodges, C. (2008). *The form of class and representative actions in European legal systems: A new framework for collective redress in Europe*. Oxford: Hart Publishing.
- Horzum, M. B., Kaymak, Z. M., & Gungoren, O. C. (2015). Structural equation modeling towards online learning readiness, academic motivations, and perceived learning. *Educational Sciences: Theory & Practice*, 15(3), 759-770.
- Hung, M., Chou, C., Chen, C., & Own, Z. (2010). Learner readiness for online learning: Scale development and student perceptions. *Computers & Education*, 55, 1080-1090.
- Kaymak, D. A., & Horzum, M. B. (2013). Relationship between online learning readiness and structure and interaction of online learning students. *Educational Sciences: Theory and Practice*, 13(3), 1792-1797.
- Ke, F. F., & Xie, K. (2009). Toward deep learning for adult students in online courses. *Internet and Higher Education*, 12, 136-145.
- Kim, K. J., Liu, S., & Bonk, C. J. (2005). Online MBA students' perceptions of online learning: Benefits, challenges, and suggestions. *The Internet and Higher Education*, 8(4), 335-344.
- Leigh, D., & Watkins, R. (2005). E-learner success: Validating a self-assessment of learner readiness for online training, Research-to-Practice Conference Proceedings, Midwest United States.
- Lim, D. H. (2004). Cross-cultural differences in online learning motivation. *Educational Media International*, 41(2), 163-173.
- Lim, D. H., & Kim, H. J. (2003). Motivation and learner characteristics affecting online learning and learning application. *Journal of Educational Technology Systems*, 31, 423-439.
- López-Pérez, V., Pérez-López, C., & Rodríguez-Ariza, L. (2011). Blended learning in higher education: Students' perceptions and their relation to outcomes. *Computers & Education*, 56(3), 818-826.
- MacKeracher, D., Suart, T., & Potter, J. (2006). *State of the field report: Barriers to participation in adult learning*. Canadian Council of Learning.

- Maguire, L. L. (2005). Literature review: Faculty participation in online distance education: Barriers and motivators. *Online Journal of Distance Learning Administration*, 8(1), 67-83.
- Marks, R. B., Sibley, S. D., & Arbaugh, J. B. (2005). A structural equation model of predictors for effective online learning. *Journal of Management Education*, 29, 531-563.
- Moore, J. L., Dickson-Deane, C., & Galyen, K. (2011). E-learning, online learning, and distance learning environments: Are they the same? *Internet and Higher Education*, 14, 129-135.
- Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, 26(1), 29-48.
- Muyllle, S., Moenaert, R., Despontin, M. (2004). The conceptualization and empirical validation of website user satisfaction. *Information & Management*, 41(5), 543-560.
- Neumann, F. E. (1994). Course work characteristics and students' satisfaction with instructions. *Journal of Instructional Psychology*, 21(2), 14-19.
- Osam, E. K., Bergman, M., & Cumberland, M. D., (2017). An integrative literature review on the barriers impacting adult learners' return to college. *The Journal of Adult Learning*, 28(2), 54-60.
- Perry, E. H., & Pilati, M. L. (2011). Online learning. *New Directions for Teaching & Learning*, 128, 95-104.
- Pintrich, R. R., & DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, 33-40.
- Rodriguez Robles, F. M. (2006). Learner characteristic, interaction and support service variables as predictors of satisfaction in web-based distance education. *Dissertation Abstracts International*, 67(7), 187-196.
- Schifter, C. (2002). Perception differences about participating in distance education. *Online Journal of Distance Learning Administration*, 5(1), 76-94.
- Schreurs, J., Sammour, G., & Ehlers, U. (2008). E-learning readiness analysis (ERA): An e-health case study of e-learning readiness. *Knowledge and Learning*, 4(5), 496-508.
- Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2008). *Motivation in education: Theory, research, and applications*. Pearson Prentice Hall.
- Seaberry, B. J. (2008). *A case study of student and faculty satisfaction with online courses at a community college* (An unpublished doctoral dissertation). University of California, Oakland, California.
- Simonson, M., Smaldino, S., Albright, M., & Zvacek, S. (2006). *Teaching and learning at a distance: Foundations of distance education*. Pearson Prentice Hall.

- Smith, P. J. (2005). Learning preferences and readiness for online learning. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 25(1), 3-12.
- Svanum, S., & Aigner, C. (2011). The influences of course effort, mastery and performance goals, grade expectancies, and earned course grades on student ratings of course satisfaction. *British Journal of Educational Psychology*, 81, 667-679.
- Topal, A. D. (2016). Examination of university students' level of satisfaction and readiness for e-courses and the relationship between them. *European Journal of Contemporary Education*, 15(1), 38-49.
- Wang, Q., Zhu, Z., Chen, L. & Yan, H. (2009). E-learning in China. *Campus-Wide Information Systems*, 26, 47-61.
- Wang, R., Donder, D. L., De Backer, F., Shihua, L., Honghui, P., Thomas, V., & Lombaerts, K. (2017). Development and validation of the elder learning barriers scale among older Chinese adults. *The International Journal of Aging and Human Development*, 1(18), 157-171.
- Wang, Y. S. (2003). Assessment of learner satisfaction with asynchronous electronic learning systems. *Information & Management* 41, 75-86.
- Whitnall, A., & Thompson, V. (2007). *Older people and lifelong learning: Choices and experiences*. Economic and Social Resource Council.
- Williams, W. M., & Ceci, S. J. (1997). How'm I doing? Problems with student ratings of instructors and courses. *Change*, 29, 12-23.
- Xie, K., & Huang, K. (2014). The role of beliefs and motivation in asynchronous online learning in college-level classes. *Journal of Educational Computing Research*, 50(3), 315-341.
- Yoo, S. J., & Huang, W. D. (2013). Engaging online adult learners in higher education: Motivational factors impacted by gender, age, and prior experiences. *The Journal of Continuing Higher Education*, 61(3), 151-164.
- Young, A., & Norgard, C. (2006). Assessing the quality of online courses from the students' perspective. *Internet and Higher Education*, 9, 107-115.