

Factors Impacting the Uptake of Innovative Open and Distance Learning (ODL) Programmes in Teacher Education

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Abstract

The exponential growth of technology and funding for internet-based digital communication has opened new avenues for teachers and teacher-trainees in distance education. The use of the ODL systems in teachers' Continuous Professional Development (CPD) is gaining popularity, yet many teachers do not remain active, or they only use the ODL systems for their mandatory teacher education programmes such as Bachelor of Education (B.Ed.) using a second-generation mode of delivery i.e., Correspondence and Multimedia models of ODL in third world countries like Bangladesh. This study aims to uncover the reasons for these two issues by identifying the significant factors influencing teachers' intention to continue using the ODL systems (continuance intention) as well as their behavioural intention to try new functions of the ODL system. The study finds the gap in current research regarding teachers' intention to try new ODL functions for CPD to enhance the quality of the ODL systems.

Keywords: *Behavioural Intention, Continuance Intention, CPD, Innovative, ODL*

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Introduction

Quality education is a critical component of social life as multiple facets of human life are impacted by the sociocultural, technological, and political world's shifts and developments in the twenty-first century. Open and Distance Learning (ODL) and English Language Teaching are separately elaborate and critically significant fields of education. Distance learning and teacher education together have the potential to improve education and to make access as broad as possible to disadvantaged and underprivileged learners. Open and distance learning has changed in a fast progression and has adopted a changing combination of technologies (Perraton, 2012).

Similarly, teacher education in ELT has been a significant area of study for some time, but less attention has been paid to the use of technology to provide programmes, despite the fact that distance teacher education is not a new educational phenomenon (Motteram, 2019). To provide inclusive and equitable quality education and to promote opportunities for lifelong learning for all, a sufficient supply of qualified teachers is needed, and continuing professional development should be a prerequisite for teacher education. As Edge (2000) comments, "CPD has much in common with motherhood and apple pie, in a sense you will be unlikely to find anyone who will speak against it." Teachers who are mindful of and actively pursue the values of professionalism should self-identify as professionals. CPD is "the total of formal and informal learning experiences throughout one's career from pre-service teacher education to retirement" (Fullan, 2007). However, Baron et al. assert that the volume of research on teacher professional development remains limited and that without sufficient high-quality research on teacher education as it happens in CPD classes, educators and policymakers would be unable to create successful programmes (Baron, Sklarwitz, Bang, & Shatara, 2019). Recent years have seen a substantial increase in and focus on the use of educational technologies. Now, a more inclusive concept of professional learning requires the use of technologies to support teacher progress. As a result, it is widely accepted that a bachelor's degree will not be sufficient for continuing teaching practice. Previous research shows that ODL, along with its new functions like MOOCs (Massive Open Online Courses) and the use of LMS (Learning Management Systems), can be an effective means for EFL teachers' professional development.

Continuous Professional Development (Cpd) In Teacher Education

While the concept of CPD is not new and has existed for a long period of time, it has only gained significant traction among ELT practitioners in the last decade. As there is international recognition that enhancing teacher quality is essential to improving learning outcomes for students and CPD is the most effective way of improving the standard of teaching (BC, 2016), teachers are expected to develop their knowledge and skills through CPD. Professional teacher development refers to a teacher's daily professional and personal growth, a long, continuous process that begins during one's preparation for the profession and continues until one's death, a process that is realised in a variety of ways, including the training of teachers with new knowledge, skills, and strategies in their respective areas of

competence and use (Jovanova-Mitkovska, 2010). Teachers are at the heart of every country's efforts to develop, strengthen, and change its educational programmes. Around the globe, there is a sense of crisis surrounding the teaching profession's prospects. Teacher education and preparation is a critical problem in the Global South, especially in Bangladesh, where the state has largely failed to provide basic education to its population. In Bangladesh, however, less attention has been paid to the area of quality teacher education (Nur & Short, 2019).

Professional learning for teachers is changing with the use of modern ICTs in conjunction with ODL. The dramatic and swift advancements in ICT seem to correspond to advances in our perception of how learning works. With the introduction of emerging technology, the paradigm change toward networked awareness creation and insights into how adults partake in and self-direct their learning can now be explained, facilitated, and researched. According to Danaher and Umar (2010), teachers in technologically advanced countries are increasing their familiarity with accessible social networking platforms and web-based services, while also increasing their awareness of the cultures to which they have access and can contribute. Teachers in technologically impoverished or developing countries are increasingly relying on mobile devices to build communities and communicate with others, supporting the communication and sharing of ideas, information, and knowledge enabled by these devices. Certain conditions will continue to present difficulties for teachers seeking to improve professionally with the use of new ICT and resources in ODL. Although certain conventional approaches are still necessary for many situations and places, new doors are constantly opening.

The EVOLUTION of OPEN and DISTANCE LEARNING (ODL)

The digital transformation has changed the appearance of open learning and distance education (Zawacki-Richter & Qayyum, 2019). There is some variation between the words 'open education' and 'distance education,' and the terms open learning and distance education are often used colloquially or interchangeably. However, free learning is not always online or distance learning is not always open (Simpson, 2002).

Open learning is a term that refers to a provision aimed at expanding access to educational opportunity by eliminating limitations and constraints, such as course admission criteria and attendance requirements, and allowing learners to study at a time, location, and speed that is suitable for their circumstances and circumstances. In other words, open learning aims to include learning opportunities that accommodate students' varied learning preferences, objectives, needs, and methods (Marland, 2005).

On the other hand, distance education is a term that refers to a systematic training method that is institutionally oriented and in which learners and tutors are somewhat isolated (in place and in time). It makes use of specially developed research materials and instructional methods, as well as innovative innovations to promote teaching and learning and to link students, tutors, and institutions providing distance education. However, as emerging educational technologies become more prevalent, it becomes critical for distance education services to experience a transformative transformation and implement new methods for incorporating those approaches into distance education. For instance, the emergence of

Virtual Learning Environments (VLEs) and the proliferation of Social Networking platforms call into question established definitions of distance education (Simonson, Smaldino, & Zvacek, 2015).

The terms open and distance education (ODE) or open and distance learning (ODL) refers to the fusion of two distinct educational models, namely open learning and distance education. The ODL system "represents approaches that focus on opening access to education and training provision, freeing learners from constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners"(Buyuk, Kocdar, & Bozkurt, 2017).

Open learning and distance education are both terms that refer to a structured teaching experience or instructional design in which learners and teachers are geographically apart. According to UNESCO, distance education is a learning method and educational method in which instruction is delivered without regard for the learners' physical location or time constraints (Buyuk et al., 2017). The ODL system includes organised preparation, well-designed workshops, teaching procedures, and a collaboration system that utilises a variety of media and information and communication technologies. The ODL system's approach to information and communication through print or electronic media is extensive, with a variety of options. For example, the mediums of communication (computer, television, and radio); the essence of instruction (workshop, lecture, certificate-diploma-degree programmes, tutorial sessions); institutional settings; and support and services (face to face, online, blended) (Burns, 2011).

MOOCs are courses that involve a large population of learners and are offered exclusively online through a platform that has brought revolution and transformations in the field of distance education(Qayyum & Zawacki-Richter, 2018). An LMS is a new function in ODL that enhances the efficiency and effectiveness of education, and it is used as an IS resource to support open and distance learning(Zawacki-Richter & Qayyum, 2019).

ODL institutions have already been pioneers in incorporating innovative and evolving innovations, as distance instructional media have been used to cross the divide between students and teaching institutions, as well as between learners (Zawacki-Richter & Qayyum, 2019). The development of emerging technology has been followed by an examination of the possible importance of enhancing educational access, opportunity, and efficiency. Each emerging technology has been evaluated for its potential utility in education, studying, and training. The use of emerging technology creates new opportunities, and the challenge for providers of distance education and open universities is to maximise the educational value of these new technologies. The advent of technology has had a profound effect on the growth and expansion of distance education. According to Moore and Kearsley (2012), distance education is in its fifth generation.

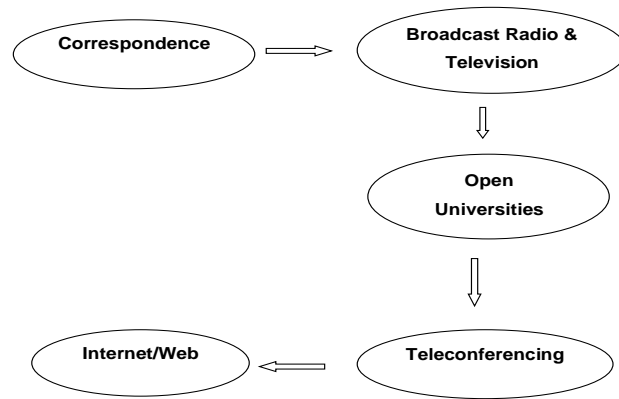


FIGURE 1: *The evolution of distance learning (Moore & Kearsley, 2012)*

Simonson et al. (2015) discuss the different generations of ODL that have arisen as a result of technological advances. The innovations mentioned in Table 1 have enriched the sense of education, engagement, the formal classroom, and evaluation.

Table 1: *Generation of ODL (Simonson et al., 2015)*

Generation	Model	Delivery Technology
First Generation	The Correspondence Model	Print
Second Generation	The Multi-media Model	Print, audiotapes, videotapes, computer-based learning (e.g. CML, CAL, IMA), interactive video, disk and tape
Third Generation	The Tele-learning Model	Audio teleconferencing, videoconferencing, audio-graphic communication, broadcast TV and radio
Fourth Generation	The Flexible learning model	Interactive multimedia (IMM) online, Internet-based access to www resources, computer-mediated communications
Fifth Generation	The Intelligent Flexible Learning Model	Interactive multimedia (IMM) online, Internet-based access to www resources, computer-mediated communications, using automated response systems, campus portal access to institutional process and resources

The growing proliferation of smartphones has created a major delivery channel for distance education content.

Table 2: *Models of Distance Education (Burns, 2011)*

Types of Distance Education	Examples
Correspondence model	<ul style="list-style-type: none"> • Print • Broadcast: IRI
Audio-based models	<ul style="list-style-type: none"> • Narrowcast: IAI (via audiotape or CDs) • Two-way radio • Audio conferencing and telephone

Televisual models	<ul style="list-style-type: none">• Broadcast radio• Broadcast television (educational and instructional)• Videoconferencing• Video• Interactive video (disc and tape)
Computer-based multi-media models	<ul style="list-style-type: none">• CD-ROMs• Digital videodiscs (DVDs/VCDs)• Interactive multimedia• Computer-mediated communication
Web-based models	<ul style="list-style-type: none">• Internet-based access to World Wide Web resources• Online courses (e-learning)• Online conferences (webcasts and webinars)• Virtual classes/schools (cyber schools) and universities• Hand-held devices• Portable media players (podcasting)
Mobile models	<ul style="list-style-type: none">• Cell phones and smartphones• Tablets• E-readers

The EXTANT LITERATURE about the ODL SYSTEMS

Teachers face a difficult task in the twenty-first century: equipping themselves with technological skills. Teachers' education is undergoing a scientific transition. There is a transition occurring from e-learning 1.0 (online education) to e-learning 2.0 (online education). To e-Learning, 2.0 (Twitter, Facebook) 3.0 (Semantic Web), which encompasses anything from content to culture to AI. From web-1 to web-2 to web-3, there is a rapid transition. Open education, open courseware, open materials, and open science have also been initiated. There have been plans for e-teaching. There is an emerging trend toward smart classrooms, which include e-learning and e-testing. The terms e-Book, e-Newsletter, e-Reader's webinar, digital lesson designs, and e-Portfolios have been widely used.

Several articles have been analysed in order to provide insight into the current research. To face the 21st century's demands, classroom instruction for teacher-learners must be prepared in such a manner that it can adapt to shifting conditions and technological advances. Since the idea of open and distance learning became a reality, educators have been concerned about it and have attempted to include and apply different techniques in the area. The theoretical approaches by Sewart (1980), emphasised the institution's ongoing commitment to providing high-quality service to students as the foundation for Open Universities' assertion of high course completion rates. The institution's position and consideration for the learners have been highlighted in this section. The majority of educators dealing with inclusive and distance learning discuss student assistance and counselling. Careful student service and counselling programmes have been viewed as one of the most critical components of the distance education environment. Rekkedal (1981) investigated the teacher's role in the improvement of procedures and the learner. There does not seem to be a common factor that

contributes to non-participation; however, individual student traits and life factors appear to have the largest influence on participation (Kerka, 1986).

Garrison (2020) points out that the lines between distance education and formal education have become increasingly blurred as a result of emerging networking technology. If inferred, this appearance can result in the resolution of different problems. Disappointments caused by contact breakdowns between students and academic institutions are considerations that distance education planners should consider. Distance learners expect and require a high level of support in terms of enrolment, delivery of course materials and tests, and short turnaround times for grading exams and assignments (Edge, 2000). The need for high-quality service has been identified for learners in a variety of areas of open and distance education. Teachers with greater aspiration and success will use new methods to enhance their knowledge and teaching efficiency, as well as integrate modern innovations to become more creative.

Bishop and Spake (2003) report that policymakers face a slew of choices when it comes to planning ODL, including facilities, student support, institutional support for their evolving position as distance educators, and expense. Distance education delivery is undergoing improvements, such as the transition from correspondence-based delivery to open access and technology-enhanced learning, in an age of relentless technological advancement. Stella and Gnanam (2004) express dissatisfaction with the direction taken by the transparent and distance learning method. Valk, Rashid, and Elder (2010) sought potential solutions to these problems; much hope has been found in emerging information and communication technology (ICTs), such as cell phones. They view ICT as a critical component of resolving transparent and distance learning issues. Due to the rise of distance education and technology-enhanced learning, distance education and ODL are critical subjects for educational planners, managers, researchers, and policymakers.

STUDIES on USERS' INTENTION to ADOPT THE ODL SYSTEMS

A review of previous models or theories used and previously identified predictors of ODL adoption in this research area facilitates the selection of the most relevant models or approaches for this study. There are three ICT adoption models or theories that have been often used as the theoretical bases to study the intentions to adopt open and distance learning system, e.g., MOOCs and LMS (Song, Cheung, & Prud'Homme, 2017). These are the Theory of Planned Behaviour (TPB), the Technology Acceptance Model, and the Unified Theory of Acceptance and Use of Technology (UTAUT). To gain a deeper understanding of determinants of ODL adoption intention, several previous studies have innovatively integrated different models or theories (as shown in Table 3, which includes the studies along with the most significant constructs of each, the countries they took place).

Table 3: *Research on Users' Behavioural Intention of the ODL System*

No.	Author	Theory/Model	Significant Constructs	Country
1	Lakhal, Khechine, and Pascot, (2013).	Unified Theory of Acceptance and Use of Technology (UTAUT)	Performance Expectancy, Facilitating Conditions, Social Influence	Canada

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2	Alharbi, and Drew, (2014).	Technology Acceptance Model (TAM)	Perceived Ease of Use, Perceived Usefulness, Attitude towards Usage	Saudi Arabia
3	Chang, and Tung, (2008).	Innovation Diffusion Theory (IDT) and TAM	Compatibility, Perceived Usefulness, Perceived Ease of Use, Perceived System Quality	Taiwan
4	Jambulingam, (2013).	UTAUT	Performance Expectancy, Affordability	Malaysia
5	Muhideen, Yen, Iddrisu, Amin, and Bertha, (2019)	Theory of Planned Behaviour (TPB)	Attitude, Subjective Norms, Perceived Behavioural Control, Enabling Environment	Africa
6	Mtebe, and Raisamo, (2014).	UTAUT	Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions	East Africa
7	Abu-Al-Aish, and Love, (2013)	UTAUT	Performance Expectancy, Effort Expectancy, Influence of Lectures, Quality of Service	England
8	Park, Nam, and Cha, (2012)	TAM	Attitude, Subjective Norms	South Korea
9	Binyamin, Rutter, and Smith, (2019)	TAM	Perceived Usefulness, Perceived Ease of Use	Saudi Arabia
10	Venter, van Rensburg, and Davis, (2012)	TAM and TAM2	Perceived Usefulness	South Africa
11	Almarashdeh, Sahari, Zin, and Alsmadi, (2010)	TAM	User Satisfaction	Malaysia
12	Azam, Quaddus, and Lubna, (2013)	TAM	Perceived Usefulness, Perceived Ease of Use	Bangladesh
13	Amin, Akter, and Azhar, (2016)	TAM	Perceived Usefulness, Perceived Ease of Use, Attitude towards Using	Bangladesh

STUDIES on USERS’ CONTINUANCE INTENTION of the ODL SYSTEMS

In contrast to the abundance of research on initial adoption in existing literature, only a few researchers have discussed the continuance intention of the ODL system (Dai, Teo, Rappa, & Huang, 2020). The expectation confirmation model (ECM), proposed by Bhattacharjee (2001), is a milestone in the research area by separating the user acceptance of an IS from continuance behaviours. The ECM offers theoretical support for researchers to study the continued usage of IS. Some researchers have applied this model to study the continued usage of ODL technologies (see Table 4), such as MOOCs (Dai et al., 2020; Ouyang et al., 2017), E-learning (Amin, Akter, & Azhar, 2016; J. Zhou, 2017) and LMS (Binyamin, Rutter, & Smith, 2019; Sultana, 2020). Table 4 summarises the major models that have been used to study continuance intention, along with their significant constructs, countries of study.

Table 4: *Research on Users’ Continuance Intention of the ODL System*

No.	Author	Theory/Model	Significant Constructs	Country
1	Dai, Teo, Rappa, and Huang (2020)	Expectation Confirmation Model (ECM)	Confirmation, Satisfaction, Attitude	China
2	Amin, Rahman, Khan, and Karim, (2018)	UTAUT	Effort Expectancy, Facilitating Conditions	Bangladesh
3	Mohamad, and Rahim, (2018)	Self-developed model	Usefulness, Enjoyment, Interactivity, Openness	Malaysia
4	Islam, Onik, and Azad, (2013)	TAM, UTAUT	Perceived Compatibility, Satisfaction, Perceived Usefulness	Finland
5	Sultana, (2020)	UTAUT	Performance Expectancy, Effort Expectancy, Self-management Learning	UK
6	Tseng, Lin, Wang, and Liu, (2019)	UTAUT2	Performance Expectancy, Social Influence, Facilitating Conditions, Price Value	Taiwan
7	Ouyang, Tang, Rong, Zhang, Yin, and Xiong, (2017).	ECM, Task-Technology Fit (TTF)	Perceived Usefulness, Satisfaction, Task-Technology Fit	China
8	Zhou, (2017)	ECM	Satisfaction, Confirmation, Perceived Usefulness	China

MAJOR THEORIES in RESEARCH on USERS’ CONTINUANCE and BEHAVIOURAL INTENTIONS

Expectation Confirmation Model (ECM)

Information systems (IS) usage behaviours can be categorized into pre-adoption behaviours and post-adoption behaviours, where continued IS usage or IS continuance belongs to the latter. In recent years, as studies on information systems keep evolving, a growing number of researchers have been shifting their attention to the research area of IS continuance behaviours because continuance determines the long-term viability and eventual success of an IS (Bhattacharjee, 2001).

The expectation confirmation theory (ECT) was originally used in marketing analysis to examine customer loyalty and post-purchase behaviour. The ECT theory states that users' initial expectations are established prior to their actual buying behaviour. If an order is made and consumers begin to use the service or product, they increasingly develop expectations of the product's or service's results. It is then compared to their original expectations to ascertain the degree to which their expectations have been validated. Consumers measure satisfaction based on their preferences and confirmation thresholds, which has an impact on their decision to repurchase. Bhattacharjee (2001) maintains that consumers' decision to use a particular information system reliably is comparable to their buying decisions. Both decisions are made after the original decision, which is affected by the initial user experience. Additionally, these decisions can result in results that are diametrically opposed to the users' initial choice. Hence, Bhattacharjee (2001) applies ECT, which was suggested for the study of customer behaviour in the field of marketing science, to the study of IS continuity in the field of information systems research.

With the theoretical framework of ECT and a literature review of previous research about IS continuance, Bhattacharjee (2001) proposes a post-acceptance model (PAM), or the expectation confirmation model (ECM) (Bhattacharjee, 2001). The findings show that perceived utility and customer satisfaction influence users' decision to continue. User satisfaction is influenced by user confirmation of expectations based on previous use of the information system and expected usefulness. Additionally, assumed utility is influenced by the degree to which consumers confirm. The ECM paradigm is based on continued use of information systems, which enables the comprehension of consumer behaviours that cannot be clarified by initial adoption theories. Additionally, the ECM indicates that users' original preferences shift following actual use, as a post-adoption expectation is established based on presumed utility. This is in addition to the ECT.

Users' post-adoption standards for an IS's real success are based on their impressions of its utility in ECM. However, users' perceptual preferences are affected by more than just their views of success (Venkatesh, Thong, Chan, Hu, & Brown, 2011). More specifically, the users' expected performance of the IS is found to be important for the acceptance of many information technologies (Venkatesh, Morris, Davis, & Davis, 2003). Yet, it is not necessarily the most important influencing factor (Venkatesh, 1999). In other words, there are other influencing factors beyond perceived usefulness impacting users' technology acceptance, which needs further exploration.

The Unified Theory of Acceptance and Use of Technology (UTAUT)

Venkatesh et al. developed a combined paradigm that reflects on both creativity and user adoption; this theory is referred to as the unified theory of acceptance and use of technology (UTAUT)(Venkatesh et al., 2003).

According to the UTAUT theory, four variables, namely encouraging circumstances, social impact, effort expectancy, and success expectancy, are direct predictors of behavioural purpose and, eventually, behaviour, and these variables are affected by age, gender, voluntariness, and user experiences. The critical portion of this model includes what are believed to be the primary determinants of intention to use and adopt new technology; these include facilitating conditions, social influence, effort expectancy, and performance expectancy.

This theory was developed by the synthesis and examination of eight major models and theories. These theories and models are the Technology Acceptance Model (TAM), Innovation Diffusion Theory (IDT), the Model of PC Utilization, a combined TBP/TAM, Social Cognitive Theory (SCT), the Theory of Planned Behaviour (TPB), the Motivational Model, and Reasoned Action (TRA) (Venkatesh et al., 2003). These models and hypotheses have been successfully and systematically used in prior research on innovation or technology recognition and implementation across a variety of fields, including management, social science, marketing, and information systems.

Task-Technology Fit (TTF)

The UTAUT model relies on explaining users' perceptions of technology. In contrast, the task-technology fit model proposed by Goodhue and Thompson (1995) (see Figure 2.4) has been used to extend the UTAUT model e.g.,(Zhou, Lu, & Wang, 2010); (Afshan & Sharif, 2016). The TTF model considers how task affects the use of technology (Zhou et al., 2010). In other words, acceptability is dictated not only by the way technology is perceived but also by the task-technology fit. The TTF is determined by mission and technology characteristics, which has an effect on efficiency and utilisation. According to the TTF model, a person can only use technology if it satisfies the requirements of the current role and increases task efficiency with better outcomes.

The TTF model is often used when being integrated with other models, for example, TAM and UTAUT, to meet various research objectives, such as interpreting the adoption intention of an IT. For instance, Zhou et al. (2010) innovatively integrated TTF and UTAUT to develop a new, improved model on mobile banking adoption (Zhou et al., 2010). They reached the conclusion that task-technology fit, performance expectancy, social influence, and facilitating conditions impacted users' intention of adopting the service. Following that, Zhou et al. (2010), Cidral, Oliveira, Di Felice, and Aparicio (2018) and Afshan and Sharif (2016) integrated UTAUT and TTF models with the initial trust model (ITM) to study the initial adoption of mobile banking, and they found that initial trust also has effects on the behavioural intention of mobile banking. Thus, the TTF theory is a preferred choice when researchers consider improving existing models, such as ITM and UTAUT in order to examine the factors affecting user adoption of technology. By combining users' perception of technology and the fit between task requirements and the functionalities of technology

through UTAUT and TTF, respectively, this research provides a better explanation for the continued usage of the ODL system.

As the TTF model focuses on the fit between users' task requirements and a technology's functionalities, it enables this study to investigate how the tasks and technologies affect users' perception of their task-technology fit and how that fit affects users' intention to continue using the ODL system. By combining and extending the three models (UTAUT, ECM, and TTF), one can get more explanatory power.

MAJOR CONSTRUCTS in RESEARCH on USERS' CONTINUANCE and BEHAVIOURAL INTENTIONS

The following constructs or variables have been used in the existing literature on users' continuance and behavioural intentions of the ODL systems.

Facilitating conditions (FC)

Facilitating Conditions refers to "the degree to which an individual believes that organisational and technical infrastructure exists to support the use of the system" (Venkatesh et al., 2003). FC is mostly determined by considerations such as a system's prospect and compatibility. This variable integrates constructs, such as perceived behavioural control from TPB (Theory of Planned Behaviour) and compatibility from IDT (The Integrated Diffusion Theory). It is used to measure the degree to which a user perceives the facilitating effects from the support of a technology or a system.

Performance expectancy (PE)

Performance Expectancy (PE) refers to "the degree to which an individual believes that using the system will help him or her to attain gains in job performance" (Venkatesh et al., 2003). Different from the simple variable perceived usefulness of TAM (the Technology Acceptance Model), PE adds more factors, such as extrinsic motivation of MM (the Motivational Model), the relative advantage of IDT and job-fit of MPCU (the Model of PC Utilization), into the perceived usefulness (Venkatesh et al., 2003). PE is used to measure the degree to which technology or system helps a user.

Task-Technology Fit (TTF)

Task-technology fit (TTF) is defined as the degree of consistency between a technology and a task from a rational perspective. The higher the consistency, the more likely the technology can contribute to optimising the accomplishment of a task (Oliveira, Faria, Thomas, & Popovič, 2014). This variable is determined by "the nature of the task and practicality of the technology to complete the task" (Oliveira et al., 2014). It is used to identify the consistency between a user's expectation for technology to meet the task requirements and the actual functions of the technology.

Teacher Satisfaction (TS)

Teacher Satisfaction (TS) is defined as the sum of psychological states of a user's consumption experience and the pre-consumption expectations (Sewart, 1980). It is a variable that measures the level of satisfaction based on the comparison between the initial expectation for a product/technology or system and the psychological states after the actual

usage. In this study, TS is applied to measure the overall psychological state of a teacher after adopting the ODL service.

Effort expectancy (EE)

Effort Expectancy (EE) is “the degree of ease associated with the use of the system” (Venkatesh et al., 2003), which should be differentiated from perceived ease of use in the Technology Acceptance Model (TAM). EE integrates three previous constructs, namely, the perceived ease of use from TAM, complexity from MPCU, and ease of use from IDT. This variable is used to quantify the commitment required by consumers to adopt a technology or system.

Social influence (SI)

The UTAUT model defines social influence as “the degree to which an individual perceives that important others believe he or she should use the new system”(Venkatesh et al., 2003). Social Influence in the UTAUT model integrates previous constructs, including social norms from TRA (the Theory of Reasoned Action), social factors of MPCU, and image from IDT. It is used to determine the extent to which social groups affect users.

Continuance Intention (CI)

Continuance Intention (CI) is defined as a subjective tendency of a user to choose a certain technology/product or system (Bhattacharjee, 2001). It is a construct that can be used to predict behavioural intention and continuance behaviour. Specifically, it can be applied to investigate teachers’ intention to keep using the ODL system after their first user experience.

Behavioural Intention (BI)

Consumers' Behavioural Intention is characterised as a certain behaviour or inclination toward a particular product or brand (Venkatesh, Thong, & Xu, 2012). Behavioural Intention is used to measure whether a consumer would actually carry out actions with a certain product or technology. In this current study, Behavioural Intention is identified as secondary EFL teachers’ intention to try new functions of ODL that they have never used before. It can be used to measure the degree to which a teacher would like to try new functions of ODL services that they have not used before.

Conclusions

Numerous scholars have examined the primary determinants of the initial adoption of the ODL systems (Amin et al., 2016);(Binyamin et al., 2019). It is observed that the TTF theory is a preferred choice when researchers consider improving existing models like TAM and UTAUT in order to realise specific research goals e.g., (Zhou et al., 2010);(Afshan & Sharif, 2016; Oliveira et al., 2014). None of the existing studies has assessed new function adoption from the perspective of the roles of technology perception and task-technology fit.

In contrast to the abundant research on initial adoption, little research has been done about continuance intention (Zhou et al., 2010). The ECM is an effective model that offers theoretical support for researchers to study continuance usage towards an information system, and previously published research has used this approach to examine the continuing use of various ODL resources, such as the MOOC setting (Dai et al., 2020), understanding of MOOCs (Ouyang et al., 2017) and e-learning platform (Islam, Onik, & Nasreen, 2013).

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