**Ease of Use and Perceived Usefulness As a mediating Factor Between ICT Competencies and EFL University Lecturers’ Motivation**

**Abstract**

The study's goal is to look at ease of use and perceived utility as a mediating factor in the relationship between ICT competencies and motivation among EFL professors. The TAM sample theory is used to investigate the primary criteria, "perceived ease of use & perceived usefulness." The study used exploratory, descriptive, and survey methods to analyze data. The participants are currently enrolled in King Khalid University. The goal is to choose areas where the researchers want to disclose significant facts about the study's purpose. The data-gathering tool was a 5-point Likert scale-based questionnaire. Furthermore, investigate the barriers and strategies for overcoming these issues. The findings show that there is a statistically significant association between obstacles, ease of use, and sense of interest. Moreover, there is a statistically significant association between ease of use and intentions. However, no statistical relationship exists between barriers, intentions, and trends. The study recommended that EFL professors be kept up to date on rapid technological advances and that motivation be activated at universities to assess ease of use and perceived utility.

*Keywords:* EFL lecturers; Ease of use; perceived usefulness; Technology competencies

**Introduction**

One of the main goals of bringing information and communication technologies (ICTs) into university classrooms is to assist teachers in learning new and creative ways to use ICTs. This is partly because teachers must enhance their knowledge and teaching skills to effectively use modern ICT tools in the classroom, such as flipped classrooms, mobile apps, clickers, interactive multimedia, audio devices, the internet, telephones and VoIP, mobile gadgets, instructional television, computer games, teaching machines, interactive whiteboards, programmed instruction, and more. Digital competence refers to the proficient utilization of digital technology in diverse contexts (Baartman et al., 2011). The improvement of digital skills among lecturers is the first step in dealing with the challenges brought by technological progress. The next step is creating teaching activities that help students gain important digital skills needed to succeed today. Billett et al. (2018) and Okoro (2013) say that competence includes the knowledge, skills, and behaviors someone needs to meet certain performance standards. Competency can also mean the traits or abilities that let a person carry out specific tasks properly. It shows what someone can do in their job, so when the job requires certain actions to achieve goals, the person uses their inner qualities to respond effectively (Nzilano, 2013).

A substantial body of research from Saudi Arabia has examined the perceptions of English as a Foreign Language (EFL) lecturers regarding the integration of technology in lecture halls (Al-Ahdal & Alharbi, 2021; Al-Ahdal & Shariq, 2019; Allam et al., 2016). (Elstad & Christophersen, 2017) and (Nugroho & Mutiaraningrum, 2020) indicate a discrepancy between the self-perceived competence of EFL lecturers and their real proficiency in utilizing technology. Given this information deficit, the principal objective of the research is to evaluate the technological proficiency of Saudi English as a Foreign Language (EFL) lecturers, considering factors such as their training and the obstacles they faced.

There is a critical view that lecturers’ digital abilities are lacking compared to adults in other industries. For example, lecturers are not as good at addressing problems in technology-rich environments (TRE) as adults in other fields. Still, it's important to keep in mind that lecturers’ proficiency with technology is distinct from their competence in digital classroom instruction, albeit this critical notion. According to Colbert et al.(2008) when trying to figure out if technology helps students learn, we need to think about "the impact of students' linguistic and cultural backgrounds on technology use, variables that facilitate or impede language acquisition, and the enhancement of language competence" (p. 6-7).As a result of technological advancements, EFL lecturers should employ less traditional classroom practices. Teaching English as a foreign language in Saudi Arabia requires educators to master the use of technology to meet the needs of their students and help them achieve their learning objectives. This is demonstrated by the fact that most Saudi English as a Foreign Language (EFL) lecturers are unprepared to serve as role models when it comes to using technology. This discordance in ICT usage is indicative of a large gap between the private and public spheres of technology use among EFL educators.

The study was conducted to investigate the ease of use and perceived utility in the relationship between ICT abilities and university teachers' motivation, specifically at King Khalid University. The study focuses primarily on the hurdles to properly implementing ICT in teaching and learning within lecture halls. The questionnaire categorizes barriers such as ICT literacy, knowledge, ICT ease of use, perceived utility, trends, and intention to utilize ICT technologies for EFL university teachers. Thus, the study attempts to determine lecturers' ease of use and perceived utility in employing information technology in lecture halls. Furthermore, the study focuses on the perceived utility of lecturers acquiring appropriate abilities, as well as positive attitudes and confidence in professional growth or training to employ integrated technology in university teaching. Furthermore, the study aims to identify the rational factors that hinder the development of technological competence.

**Questions and the Hypotheses of the Study**

1. What is the ease of use and perceived usefulness possessed by the lecturers in teaching at King Khalid University?
2. Do EFL University lectures be motivated to implement changes in their teaching habits based on information technology?
3. What hinders the acquisition of EFL lecturers’ technology competence at King Khalid University?

Moreover, the study has drawn hypotheses to emphasize the mediating role in relationships between ICT competencies and the EFL university lecturers’ motivation in the barriers, ease of use, intentions, knowledge, and trends. The researchers suggested the following hypotheses as below:

* Ease of use mediates the relationship between Knowledge and Trends.
* Ease of use mediates the relationship between Knowledge and Intention.
* Ease of use mediates the relationship between ITF and Trends.
* Ease of use mediates the relationship between ITF and Intention.
* Ease of use mediates the relationship between Barriers and Trends.
* Ease of use mediates the relationship between Barriers and Intention.
* Perception of Interest mediates the relationship between knowledge and Trends.
* Perception of interest mediates the relationship between Knowledge and Intention.
* Perception of Interest mediates the relationship between ITF and Trends.
* Perception of Interest mediates the relationship between ITF and Intention.
* Perception of Interest mediates the relationship between Barriers and Trends.
* Perception of Interest mediates the relationship between Barriers and Intention.

**Literature review**

**Digital Competence**

According to Janssen et al. (2013) who explained the difference between "digital literacy" and "competency," the former is more commonly used in educational settings, while the latter is more commonly utilized in European policies and initiatives pertaining to e-inclusion. Furthermore, they argued that competency involves a broader educational understanding that incorporates understanding, proficiency, and perspective on digital technology. They argued that the term "digital competency" is more commonly used in educational settings than "digital literacy," and that the former is more commonly used in European policy and e-inclusion initiatives. They went on to say that competence necessitates a more holistic understanding of education that encompasses digital technology knowledge, abilities, and attitudes.

**Technology Acceptance Model**

Davis (1986) proposed the technology acceptance model (TAM) as a framework for information systems to forecast whether consumers will embrace new systems. Two key factors—perceived usefulness and perceived ease of use—determine the acceptability of an information system. A system's perceived utility is the extent to which an individual thinks it will enhance his performance. The degree to which an individual anticipates that a system will be user-friendly is known as its perceived ease of use. According to this paradigm, an individual's attitude toward the system's use and his sense of its usefulness affect behavioral intention, which in turn determines the system's use. Davis argues that the potential influence on an individual's performance is just one of many factors that influence how he uses a system. This information is sourced from Nagadeepa and Mohan (2019).

**Ease of Use**

The utilization of electronic information resources encompasses the processes of searching, evaluating, retrieving, and contextualizing these resources to address various informational requirements. This utilization represents a method of leveraging information across multiple disciplines that has been obtained to fulfill the specific needs of academic faculty members effectively. The efficacious employment of such resources depends entirely upon their alignment with faculty members' professional responsibilities. The emergence of electronic information resources has substantially transformed the professional activities of academic staff into the domains of pedagogy, instruction, and scholarly inquiry, primarily due to their capability to disseminate current research findings and facilitate remote access without geographical limitations. Through this advancement, electronic information resources have achieved significant importance and become essential instruments for propelling higher education institutions forward. These resources now represent substantial investments across numerous universities, particularly given that the Nigerian Universities Commission mandates their availability as a prerequisite for program accreditation. To maximize the benefits derived from electronic information resources, faculty members must possess competencies in operating the information and communication technology devices through which these resources are accessed and utilized (Iroaganachi & Izuagbe, 2018).Kpolovie and Awusaku (2016) underscored that all individuals, including academic staff, must demonstrate effectiveness and efficiency in information and communication technology usage, as genuine achievement in today's intensely competitive environment relies upon such knowledge and capabilities. This suggests that faculty members' proficiency in utilizing electronic information resources depends fundamentally on their mastery of information and communication technology tools, which serve as contemporary mechanisms for accessing these resources to enhance their scholarly endeavors.

**Perceived Usefulness**

In conventional terminology, electronic information resources constitute informational materials that exist in digital formats and are retrieved through electronic platforms including computers, CD-ROM technology, internet networks, and additional digital infrastructures. documented electronic books, electronic journals, web-based databases, CD-ROM databases, electronic conference proceedings, electronic theses and dissertations, and electronic newspapers and magazines are primarily accessible to most academic faculty members. These resources afford lecturers informational content that extends beyond their institutional boundaries. The conventional constraints of geographical proximity and temporal limitations have been eliminated through the introduction of electronic information resources, thereby facilitating worldwide information accessibility and scholarly discourse among academics from both industrialized and developing countries globally. In substantiating this assertion, the authors noted that electronic information resources have progressively emerged as an indispensable component in educational practices, research endeavors, pedagogical activities, and learning processes. The imperative to establish the mediating influence of perceived utility and perceived accessibility within information communication technology and its practical implementation among educators motivated this investigation. Perceived utility and perceived accessibility were designated as mediating variables. The findings indicate the following: a statistically significant positive correlation exists between information communication technology support and its utilization, educators' attitudes toward information communication technology adoption and implementation predict actual usage patterns, and perceived utility and perceived accessibility function as positive partial mediators between information communication technology support and its practical application (Nicholas and Obichukwu, 2021).

**Lecturers’ ICT Preparations & Challenges**

Professional development in technology-enhanced pedagogy should constitute a fundamental component of faculty preparation initiatives to ensure more systematic integration of technological tools across disciplinary boundaries. Academic institutions have adopted varied approaches, embedding technological discourse within specialized methodological coursework. Despite this methodology's superior capacity to address technology integration within discipline-specific curricula, limitations persist regarding the opportunities available for candidates to implement technology-based instruction in classroom settings. Undoubtedly, no universal approach exists for preparing prospective educators to incorporate technology effectively into their pedagogical practice. Teacher educators frequently encounter difficulties in their endeavors to design, demonstrate, and implement optimal combinations of digital experiences throughout faculty preparation programs (Dexter et al., 2006). Academic staff members occupy a crucial position in the integration of information and communication technology within their instructional methodologies. Faculty members face the challenge of adapting traditional pedagogical approaches through the utilization of information and communication technology tools as instructional media. The greater the extent to which an educator employs instructional technology within the classroom environment, the less instructor-centered the learning environment becomes (Erben et al., 2008), while simultaneously fostering interactive classrooms and promoting learner-centered education. Conversely, educators who belong to different generational cohorts than their students may function as immigrants in contemporary digital environments, potentially developing negative attitudes toward information and communication technology usage. Dudeney and Hockly (2007) contended that a substantial portion of the adverse attitudes faculty members harbor toward technology typically stems from insufficient confidence, inadequate facilities, or limited training, culminating in an inability to recognize the advantages of implementing technologies within educational contexts.

 **ICT Competency at Saudi Universities**

In comparison to other Gulf State higher education institutions, Saudi Arabian universities encounter numerous challenges in the effective implementation and utilization of Information and Communication Technology. Through survey methodology and interview techniques, data were collected from students, faculty members, and administrative personnel across 10 Saudi universities and 5 Gulf States universities. The participant cohort comprised 142 faculty members, 121 staff and administrative personnel, and 511 students, as documented in previous research. The findings demonstrate that Gulf States universities derive substantially greater advantages from Information and Communication Technology than their Saudi counterparts, despite comparable financial allocations, shared cultural frameworks, and adequate infrastructural foundations across all participating nations. Consequently, numerous Saudi universities continue to rely on paper-based procedures that result in operational delays and generate additional complications. For instance, academic staff members spend considerable time executing instructional responsibilities including assessment activities, lecture preparation, and administrative tasks, while simultaneously encountering communication difficulties. Additionally, students confront multiple obstacles related to registration processes, faculty interaction, technological familiarity, and various other concerns. Furthermore, administrative staff demonstrate insufficient competencies for addressing technological challenges, with evidence indicating that Saudi university personnel possess limited or absent qualifications for Information and Communication Technology utilization and lack understanding of their professional responsibilities and obligations. Additional problems manifest as consequences of systemic institutional issues including inadequate Information and Communication Technology infrastructure, insufficient training programs, limited motivation, and deficient leadership structures (Alturise, 2024).

**Methods**

## 3.1 Research Design

Research design is a framework of methods and techniques that a researcher selects to integrate the various components of research in a logical manner, thereby ensuring that the research problem is efficiently addressed. It provides helpful tips on the "how" of conducting research using a specific methodology. Each researcher has a list of research queries that require evaluation. This endeavor is feasible through the implementation of research design (Khanday & Khanam, 2019). The present study examines the ease of use and perceived utility as a mediating factor between ICT competencies and the motivation of lecturers at Saudi universities. The researchers aim to identify these obstacles and establish groundwork for potential solutions that will enable lecturers to effectively integrate ICT tools and programs into their teaching processes in lecture halls. The issue of ICT competencies barriers for lecturers has been the subject of numerous studies, which have also examined the challenges of perceived utility and ease of use. Consequently, the investigation illuminates these regions to elucidate the issue and identify solutions. However, this section focuses on the methods used to conduct the study. The section also furnishes details about the study's population, the sampling technique, and the research design. Other topics that are addressed include the validity and reliability of the instrument, the sources of data collection, the method of data collection, and the method of data analysis that was employed in the study. The data was collected using a survey approach in the research. This procedure entails the acquisition of data from primary and secondary sources by means of questionnaires and the review of pertinent literature. Descriptive, exploratory, and survey methodologies will be implemented to execute the pursuit.

## 3.2 Population & Sampling

The population of the study is 100 participants’ males & females who distributed at King Khalid university campuses. The demographic information presents gender, teaching experience and qualification degree from bachelor up to doctorate degree. Most responses were tracked by those who obtained doctorate degrees. The sample of the study’s response is 93 participants , 89 is valid for analysis EFL lecturers teaching English syllabii integrated with technology. The purposive sample used a selective sample which is a non-probability sampling method where the researchers intentionally select individuals who are most likely to provide relevant, rich, and meaningful data based on the purpose of the study and determined the sample size for research by the scholars (Krejcie & Morgan,1970) from the given sample. The researchers ensured that participants were chosen in such a way that diverse regions where the University has its colleges found representation in the study. Formal consent was sought from the participants and due clearance obtained from the University’s ethics committee. All responses were measured using five-point scale elements, ranging from "1 = Strongly Disagree" to "5 = Strongly Agree."

*3.2.1 The Questionnaire*

The questionnaire was designed to gather data on investigating the ICTs competencies in relationship to ease of use and perceived usefulness for EFL university lecturers’ motivation. It has four dimensions. Each dimension has sub areas. The first dimension is technical competencies which have three areas: knowledge, information technology and barriers to use. The second dimension is ease of use and perceived usefulness which has areas such as ease pf use, perception of interest and the last one is trends. The third dimension is trends towards lecturers’ principles on using ICTs. The fourth dimension is intention to adopt the use of ICTs in teaching English. The questionnaire was planned by google forms as URL and sent via social network app “WhatsApp”. It took roughly three months to be analyzed.

## 3.3 Data Analysis

*3.3.1 Construct reliability, indicator reliability, and convergent validity*

Ockey and Choi (2015) state that factor loadings (FL) are the starting point for the fitness assessment utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM). According to Hair et al. (2019), we view FL values greater than 0.7 as positive. All FL values were greater than 0.7, as shown in Figure 1 and table 1, proving that the study's results were correct.

**Table 1**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Barriers | Ease of use | ITF | Intention | Knowledge | Perception of Interest | Trends |
| Barriers2 | 0.750 |   |   |   |   |   |   |
| Barriers4 | 0.802 |   |   |   |   |   |   |
| Barriers6 | 0.719 |   |   |   |   |   |   |
| Ease\_of\_use1 |   | 0.751 |   |   |   |   |   |
| Ease\_of\_use2 |   | 0.903 |   |   |   |   |   |
| Ease\_of\_use4 |   | 0.837 |   |   |   |   |   |
| ITF1 |   |   | 0.747 |   |   |   |   |
| ITF2 |   |   | 0.784 |   |   |   |   |
| ITF3 |   |   | 0.842 |   |   |   |   |
| ITF4 |   |   | 0.724 |   |   |   |   |
| ITF5 |   |   | 0.840 |   |   |   |   |
| Intention1 |   |   |   | 0.904 |   |   |   |
| Intention2 |   |   |   | 0.926 |   |   |   |
| Intention4 |   |   |   | 0.830 |   |   |   |
| Knowledge1 |   |   |   |   | 0.754 |   |   |
| Knowledge2 |   |   |   |   | 0.788 |   |   |
| Knowledge3 |   |   |   |   | 0.854 |   |   |
| Perception\_of\_Interest1 |   |   |   |   |   | 0.812 |   |
| Perception\_of\_Interest2 |   |   |   |   |   | 0.850 |   |
| Perception\_of\_Interest3 |   |   |   |   |   | 0.901 |   |
| Perception\_of\_Interest4 |   |   |   |   |   | 0.841 |   |
| Trends1 |   |   |   |   |   |   | 0.875 |
| Trends2 |   |   |   |   |   |   | 0.907 |
| Trends3 |   |   |   |   |   |   | 0.906 |
| Trends4 |   |   |   |   |   |   | 0.812 |

The researchers used Cronbach's alpha (CA) values to examine for internal consistency, aiming for thresholds above 0.7 as recommended. According to Table 1, every single structure managed to surpass this mark. We suggest evaluating composite reliability (CR) and Rho alpha in addition to CA because we are worried about its possible underestimation. Both CR and Rho alpha need to be higher than 0.7 for the validation to be considered. All the constructions meet the criteria, as shown in Table 1. In addition, when the average variance extracted (AVE) is bigger than 0.5, convergent validity is achieved (Hair et al., 2019). Convergent validity assesses the link between a measure and related conceptual measures.

**Table 2**

 *Construct reliability and validity*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Cronbach's alpha | Composite reliability (rho\_a) | Composite reliability (rho\_c) | Average variance extracted (AVE) |
| Barriers | 0.627 | 0.629 | 0.801 | 0.574 |
| Ease of use | 0.775 | 0.775 | 0.871 | 0.693 |
| ITF | 0.852 | 0.897 | 0.891 | 0.622 |
| Intention | 0.864 | 0.866 | 0.918 | 0.788 |
| Knowledge | 0.719 | 0.729 | 0.841 | 0.640 |
| Perception of Interest | 0.873 | 0.877 | 0.913 | 0.725 |
| Trends | 0.898 | 0.899 | 0.929 | 0.767 |

*3.3.2 Discriminant validity of constructs*

To ascertain the distinctiveness of the constructs within the model, multiple tests were performed at the completion of the measurement model evaluation. Discriminant validity (DV) denotes the extent to which a certain construction is distinct from other constructs (Duarte & Raposo, 2012). Multiple techniques can be utilised to verify discriminant validity, one of which is the Heterotrait-Monotrait (HTMT) ratio.

**Table 3**

 *Discriminant validity using the Heterotrait-Monotrait ratio (HTMT).*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Barriers | Ease of use | ITF | Intention | Knowledge | Perception of Interest | Trends |
| Barriers |   |   |   |   |   |   |   |
| Ease of use | 0.716 |   |   |   |   |   |   |
| ITF | 0.540 | 0.516 |   |   |   |   |   |
| Intention | 0.774 | 0.640 | 0.261 |   |   |   |   |
| Knowledge | 0.669 | 0.477 | 0.840 | 0.420 |   |   |   |
| Perception of Interest | 0.808 | 0.549 | 0.223 | 0.874 | 0.276 |   |   |
| Trends | 0.642 | 0.550 | 0.290 | 0.836 | 0.372 | 0.811 |   |

*3.3.3 Coefficient of determination*

A statistic known as the coefficient of determination (R²) assesses the predictive potential of a model by quantifying the proportion of variance in the outcome variables that is accounted for by the predictors.(Towbes & Cohen, 1996) categorised R² values into three categories: small (R² = 0.20), medium (R² = 0.50), and large (R² = 0.80). The R² values from our investigation are presented in the subsequent table (see Table 10).

|  |  |  |
| --- | --- | --- |
|  | R-square | R-square adjusted |
| Intention | 0.640 | 0.618 |
| Trends | 0.559 | 0.532 |

*3.4 Effect size*

The F2 statistics clarify the unique contributions of each predictor to the variance explained in the outcome variables (Towbes & Cohen, 1996) classification categories F2 values into three distinct levels: weak (F2 = 0.02), moderate (F2 = 0.15), and large (F2 = 0.35). The analysis of the results in Table 5 indicates that this study encompasses a range of effect sizes. Consequently, It is concluded that the impact of individual predictors on the variance explained in the outcome variables is diverse and intricate.

**Table 6**

*Effect sizes of the latent variables.*

|  |  |  |
| --- | --- | --- |
|  | Intention | Trends |
| Barriers | 0.008 | 0.001 |
| Ease of use | 0.071 | 0.029 |
| ITF | 0.016 | 0.000 |
| Knowledge | 0.039 | 0.022 |
| Perception of Interest | 0.626 | 0.580 |

*3.5 Path collinearity*

Common Method Bias, or Variance Inflation Factor (VIF) values, were checked to confirm that they were less than 3.3 in the study. Uneven collinearity and common method bias can be the causes of elevated VIF values. According to Table 6, the VIF values that were assessed were within the permitted range, which means that the study model was free from pathological contamination and common procedural bias. This conclusion proves that the structural models and measurements are accurate (Kock, 2015).

**Table 7**

*Variance Inflation Factor (VIF)*

|  |  |  |
| --- | --- | --- |
|  | Intention | Trends |
| Barriers | 1.956 | 1.956 |
| Ease of use | 1.546 | 1.546 |
| ITF | 1.959 | 1.959 |
| Knowledge | 1.936 | 1.936 |
| Perception of Interest | 1.650 | 1.650 |

*3.6 Structural model assessment*

The evaluation of the structural model entailed analysing the interrelations across conceptions, using established literature (Hair etal.,2019). In the study's model, direct impacts are specifically conceptualised. To evaluate these direct effect hypotheses,5000 subsamples are utilised with bias-corrected bootstrapping, yielding 95% confidence intervals. For additional information (Table 3 and Figure 1)

**Figure 1**

*3.6.1 Assessment of the Structural Model*

The structural model was evaluated to test the hypotheses. The results, as illustrated in Figure 1 and detailed in tables, pertain to the testing of the direct effects.

**Table 4**

*Path coefficients*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Original sample (O) | T statistics (|O/STDEV|) | P values |
| Barriers -> Ease\_of\_use | 0.398 | 4.161 | 0.000 |
| Barriers -> Intention | 0.078 | 0.766 | 0.444 |
| Barriers -> Perception\_of\_Interest | 0.626 | 6.848 | 0.000 |
| Barriers -> Trends | -0.034 | 0.352 | 0.725 |
| Ease\_of\_use -> Intention | 0.200 | 2.270 | 0.023 |
| Ease\_of\_use -> Trends | 0.142 | 1.895 | 0.058 |
| ITF -> Ease\_of\_use | 0.260 | 2.212 | 0.027 |
| ITF -> Intention | -0.102 | 1.289 | 0.197 |
| ITF -> Perception\_of\_Interest | -0.017 | 0.151 | 0.880 |
| ITF -> Trends | -0.003 | 0.025 | 0.980 |
| Knowledge -> Ease\_of\_use | 0.013 | 0.100 | 0.921 |
| Knowledge -> Intention | 0.148 | 1.575 | 0.115 |
| Knowledge -> Perception\_of\_Interest | -0.049 | 0.392 | 0.695 |
| Knowledge -> Trends | 0.127 | 1.074 | 0.283 |
| Perception\_of\_Interest -> Intention | 0.610 | 5.721 | 0.000 |
| Perception\_of\_Interest -> Trends | 0.650 | 8.210 | 0.000 |

Table 4's path coefficients illustrate the hypotheses in detail. The hypothesis about barriers to ease of use is supported by the results, which show that barriers do make it easier to use (estimate = 0.398, p < 0.001). However, the estimated influence of the hypothesis on barriers to intention is insignificant, at 0.078 (p = 0.444). Therefore, the hypothesis lacks support. In reference to the hypothesis on barriers to the perception of interest, the results imply a positive impact of barriers on the perception of interest (estimate = 0.626, p < 0.001). We support the hypothesis. The study focuses on the perception of interest. The results address a positive impact of barriers on the perception of interest with roughly 0.626 (p < 0.001).

The results of the hypotheses have displayed a positive impact on the hypotheses that support them. Regarding the hypothesis on perception of interest is estimated to 0.626, p < 0.001), while the hypothesis on ITF to ease of use is estimated to 0.260, p = 0.027). Regarding the hypothesis on ease of use to intention is estimated to 0.200, p = 0.023). Conversely, the results of all the following hypotheses not only indicate a non-significant impact on them but also lack support. Hypothesis on barriers to trends is estimated to -0.034, p = 0.725.) when hypothesis on ease of use to trends is estimated to 0.142, p = 0.058). Regarding hypothesis on ITF to intention is estimated to -0.102, p = 0.197). Moreover, hypothesis on ITF to intention, which is estimated to -0.102, p = 0.197). adding, hypothesis on ITF to perception of interest that is estimated to -0.017, p = 0.880). In addition to hypothesis on ITF to trends is estimated to -0.003, p = 0.980). Further, the hypothesis on ITF to trends is estimated to -0.003, p = 0.980) and the hypothesis on Knowledge to ease of use is estimated to 0.013, p = 0.921are also included. The estimation for the Knowledge to ease-of use hypothesis is 0.013, with a p-value of 0.921. The estimation for the hypothesis on knowledge to intention is 0.148, with a p-value of 0.115. and hypothesis on Knowledge to Perception of Interest is estimated to -0.049, p = 0.695). Lastly, the hypothesis on Knowledge to perception of interest is estimated to -0.049, p = 0.695) and the hypothesis on Knowledge to trends is estimated = 0.127, p = 0.283).

**Table 4**

*indirect Path coefficients*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Original sample (O) | T statistics (|O/STDEV|) | P values |
| Barriers -> Perception\_of\_Interest -> Trends | 0.407 | 4.674 | 0.000 |
| Barriers -> Ease\_of\_use -> Intention | 0.080 | 1.755 | 0.079 |
| Knowledge -> Perception\_of\_Interest -> Intention | -0.030 | 0.399 | 0.690 |
| ITF -> Perception\_of\_Interest -> Trends | -0.011 | 0.146 | 0.884 |
| ITF -> Ease\_of\_use -> Intention | 0.052 | 1.583 | 0.114 |
| Barriers -> Ease\_of\_use -> Trends | 0.056 | 1.589 | 0.112 |
| Knowledge -> Perception\_of\_Interest -> Trends | -0.032 | 0.383 | 0.701 |
| Knowledge -> Ease\_of\_use -> Intention | 0.003 | 0.091 | 0.928 |
| ITF -> Ease\_of\_use -> Trends | 0.037 | 1.363 | 0.173 |
| Knowledge -> Ease\_of\_use -> Trends | 0.002 | 0.094 | 0.925 |
| Barriers -> Perception\_of\_Interest -> Intention | 0.382 | 4.305 | 0.000 |
| ITF -> Perception\_of\_Interest -> Intention | -0.010 | 0.152 | 0.879 |

Table 4 in direct path coefficients demonstrates the hypotheses in full. Regarding the outcomes of all the following hypotheses, note that the indirect effect is not significantly distinct from zero. Therefore, support for the possibilities could not be established. Barriers to the intention hypothesis mediated by ease of use is estimated to be 0.080, p = 0.079. The hypothesis that knowledge influences intention is mediated by the perception of interest in that intention, which has an estimated value of -0.030 and a p-value of 0.690. The hypothesis that ITF influences trends is mediated by the perception of interest, which has an estimated value of -0.011 and a p-value of 0.884. The hypothesis concerning the correlation between ITF and intention, mediated by ease of use, yields an estimate of 0.052 with a p-value of 0.114. Barriers to the trends hypothesis, mediated by ease of use, are estimated to be 0.056, p = 0.112). Thus, the hypothesis regarding Knowledge trends is mediated by the perception of interest, which is evaluated at -0.032, p = 0.701. The hypothesis that Knowledge influences Intention is mediated by ease of use, with an estimate of 0.003 and p = 0.928. The hypothesis of ITF about trends is mediated by ease of use, evaluated at 0.037, p = 0.173. Furthermore, the hypothesis regarding Knowledge trends is mediated by ease of use, which is evaluated at 0.002, p = 0.925. Moreover, the hypothesis regarding barriers to intention is mediated by the sense of interest, which is assessed at 0.382, p < 0.001. The hypothesis of the ITF posits that Intention is mediated by Perception of Interest, with a calculated value of -0.010 and p = 0.879.

**Discussion**

Subsequently, the questions and the hypotheses were attempted to investigate the alignment of the study with the analysis of data. Table 4 is inserted below to present clear results that are made from the hypotheses and responded questions of the study.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Original sample (O) | T statistics (|O/STDEV|) | P values |
| Barriers -> Ease\_of\_use | 0.398 | 4.161 | 0.000 |
| Barriers -> Intention | 0.078 | 0.766 | 0.444 |
| Barriers -> Perception\_of\_Interest | 0.626 | 6.848 | 0.000 |
| Barriers -> Trends | -0.034 | 0.352 | 0.725 |
| Ease\_of\_use -> Intention | 0.200 | 2.270 | 0.023 |
| Ease\_of\_use -> Trends | 0.142 | 1.895 | 0.058 |
| ITF -> Ease\_of\_use | 0.260 | 2.212 | 0.027 |
| ITF -> Intention | -0.102 | 1.289 | 0.197 |
| ITF -> Perception\_of\_Interest | -0.017 | 0.151 | 0.880 |
| ITF -> Trends | -0.003 | 0.025 | 0.980 |
| Knowledge -> Ease\_of\_use | 0.013 | 0.100 | 0.921 |
| Knowledge -> Intention | 0.148 | 1.575 | 0.115 |
| Knowledge -> Perception\_of\_Interest | -0.049 | 0.392 | 0.695 |
| Knowledge -> Trends | 0.127 | 1.074 | 0.283 |
| Perception\_of\_Interest -> Intention | 0.610 | 5.721 | 0.000 |
| Perception\_of\_Interest -> Trends | 0.650 | 8.210 | 0.000 |

*Note : if p values below 0.05 hypotheses are accepted otherwise it is rejected.*

**Q1: What is the ease of use and perceived usefulness possessed by the lecturers in teaching at King Khalid University?**

To ascertain whether university lecturers possess sufficient competence to integrate technology into their lessons, the results of the questionnaire that were addressed in Table 4 above were considered. These factors are known as ease of use and perceived usefulness. The hypothesis's dependent and independent variables, which relate to obstacles and usability, have a statistically significant relationship. The result with a p-value of 0.000 proves it. This issue was supported by the review of literature. There is a discrepancy between EFL instructors' perceived competency and their actual ability when it comes to implementing technology, according to Elstad & Christophersen (2017) and Nugroho & Mutiaraningrum (2020). This suggests a disparity between EFL instructors' actual technological ability and their self-perceived competency. In addition, students criticize EFL instructors to address the critical thought. He insisted that they should do away with more traditional methods of instruction. He went on to say that professors in Saudi Arabian universities must be technologically savvy to cater to their students' demands and assist them in achieving their learning goals.

**Q2:** **Do EFL University lecturers be motivated to implement changes in their teaching habits based on information technology?**

The third dimension of the questionnaire presents trends towards technology in teaching and learning. There is not a statistically significant relationship between the dependent and independent variable of the hypothesis which relates between ITF and trends towards implementing using technology in teaching. Lecturers have awful attitudes towards implementing the technology in their lecture halls and the students have struggled to connect with their lecturers. As Dudeney& Hockly(2007) claimed that issue which consequently demotivated lecturers to change their teaching habits either for the lack of confidence , attitude or training. However, results indicated that a non-significant impact of Information Technology Facilities (ITF) on Intention to integrate technology in teaching.

**Q3: What hinders the acquisition of EFL lecturers’ technology competence at King Khalid University?**

The questionnaire has taken the first-dimensional barriers to use. Viewing the hinders through the barriers to ease of use, barriers to intention and barriers to trends. Table 4 clarifies that there is a statistically significant relationship between the dependent and independent variable of the hypothesis of the study through the same p values for barriers to use and trends while is controversial with barriers to intention with (p value 0.725). Colbert et al. (2008) cited the challenges for lecturers from acquiring technology and using it effectively in their teaching classroom. The above challenges were interpreted by Alturise (2024) claimed that ICT support is not supported though it is available in many universities.

**Conclusion**

The instrument effectively addressed all the research questions; the literature review and data analysis of the questionnaire provided by the researchers with compelling evidence to support the study's hypotheses. The purpose of this inquiry was to ascertain the lecturer's perceived usefulness and ease of use in utilizing information technology, as well as to determine whether lecturers have positive attitudes and confidence in incorporating technology into their teaching at universities.

 The results of the hypothesis have shown that positive impact of barriers on ease of use for ITF (information technology facilities) at universities with an estimated figure 0.398. Further, it has been emphasized by the Q (3) of the study regarding the hinders the acquisition of EFL lecturers’ technology at King Khalid University. Hinders are illustrated such as managerial personnel deficiency skills to deal with technological matters and a lack of training, resulting in an inability to see the benefit of using technologies in the lecture halls. Regarding EFL lecturers’ motivation and intention to incorporate technology in their teaching habits, this issue has been assured by the hypotheses on ease of use to intention which indicated a considerable discrepancy between ease of use and perceived usefulness. However, information technology facilities are available at universities. In reference to Q2 of the study which has taken thorough intention and motivation factor to implement the ICTs in teaching and learning. The trends of the questionnaire` tracks the positive impact of the lecturers adopting information technology in their teaching and students’ learning. Another factor, most Saudi universities adopt less traditional methods in lecturing, marking and the time wasted to deliver feedback for the students.

It is evident from all trends that researchers have drawn recommendations for further studies. To start with, EFL lecturers should be updated with the rapid changes of ICT to deliver high standards of tuition. In addition, the ease of use and perceived usefulness should be assessed by ICT dept. at universities to train and evaluate EFL lecturers’ ICT competencies for facing challenges. Lastly, lecturers’ motivation should have priority to incorporate technology into their teaching habits.

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**Disclosure Statement**

The authors reported no potential conflicts of interest.

**Declaration**

The work in question is completely unique and has neither been published nor is it being considered for publication elsewhere.

 **References**

Al-Ahdal , A. A. M. H., & Shariq, M. (2019). MALL: Resorting to Mobiles in the EFL Classroom. *The Journal of Social Sciences Research*, 90-96. <https://doi.org/10.1177/2158244021999062>

Al-Ahdal, A. A. M. H., & Alharbi, M. A. (2021). MALL in Collaborative Learning as a Vocabulary-Enhancing Tool for EFL Learners: A Study Across Two Universities in Saudi Arabia. *SAGEOpen*, *11*(1). <https://doi.org/10.1177/2158244021999062> (Original work published 2021)

Ali, J., & Bin-Hady, W. (2019). A Study of EFL Students' Attitudes, Motivation and Anxiety towards WhatsApp as a Language Learning Tool. *Arab World English Journal (AWEJ)*, 10pages. [https://doi.org/http://dx.doi.org/10.2139/ssrn.3431782](https://doi.org/http%3A//dx.doi.org/10.2139/ssrn.3431782)

Allam, M., & Elyas, T. (2016). Perceptions of Using Social Media as an ELT Tool among EFL Teachers in the Saudi Contex. *English Language Teaching*, *Vol. 9, No. 7 (2016)*, 1-9. <https://doi.org/10.1177/2158244021999062> (Allam & Elyas, 2016)

Alturise, F. (2024). ICT Strategies in Saudi Universities: Problems and Solutions for Effective Use. *International Journal of Learning and Teaching*, *10, No. 3, 2024*, 1-9. <https://doi.org/10.18178/ijlt.10.3.389-397>

Baartman, Liesbeth , K. J., & De Bruijn, E. (2011). Integrating Knowledge, Skills and Attitudes: Conceptualising Learning Processes towards Vocational Competence. Educational Research Review, v6 n2 P125-134 2011. <https://eric.ed.gov/?id=EJ927338>

Billett, S., Harteis, C., & Gruber, H. (2018). Developing occupational expertise through everyday work activities and interactions. In K. A. Ericsson, R. R. Hoffman, A. Kozbelt, & A.

Colbert, J. A., Boyd, K. E., Clark, K. A., Guan, S. ,., Harris, , J. B., Kelly , M. A., & Thompson , A. D. (2008). Handbook of technological pedagogical content knowledge (TPCK) for educators (pp. 1-340). New York : Routledge for the American Association of Colleges for Teacher Education. <https://archive.org/details/handbookoftechno0000unse/page/n3/mode/2up>

Davis, F. D. (1985). A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results. Massachusetts Institute of Technology. <http://hdl.handle.net/1721.1/15192>

Dexter, S., Doering, A., & Riedel, E. (2006). Content area specific technology integration: A model for educating teachers. *Journal of Technology and Teacher Education*, 325-345. <https://www.researchgate.net/publication/277823589_Content_Area_Specific_Technology_Integration_A_Model_and_Resources_for_Educating_Teachers>

Duarte, P.O., Raposo, M.B. & Alves, H.B. Using a Satisfaction Index to Compare Students’ Satisfaction During and After Higher Education Service Consumption. *TertEduc Manag* 18, 17–40 (2012). <https://doi.org/10.1080/13583883.2011.609564>

Dudeney, G., & Hockly, N. (2007). *How to Teach English with Technology* (1st ed., p. 192pages). Pearson Education, 2007. <https://books.google.com.qa/books/about/How_to_Teach_English_with_Technology.html?id=ZItHMwAACAAJ&redir_esc=y>

Elstad, E., & Christophersen, K.-A. (2017). Perceptions of Digital Competency among Student Teachers: Contributing to the Development of Student Teachers’ Instructional Self-Efficacy in Technology-Rich Classrooms. *Education Sciences*, *7*(1), 27. <https://doi.org/10.3390/educsci7010027>

 Erben, T., Ban, R., & Castañeda, M. (2008). *Teaching English Language Learners through Technology* (1st ed.). New York. <https://doi.org/10.4324/9780203894422>

 Ericsson, K. A., Hoffman, R., & Kozbelt,, A. (2018). *The Cambridge Handbook of Expertise and Expert Performance* (p. pp.105–126).). Cambridge University Press. <https://doi.org/10.1017/9781316480748>

 Eze, N. U., Obichukwu, P. U., & Kesharwani, S. (2021). Perceived Usefulness, Perceived Ease of Use in ICT Support and Use for Teachers. *IETE Journal of Education*, *62*(1), 12–20. <https://doi.org/10.1080/09747338.2021.1908177>

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019) When to Use and How to Report the Results of PLS-SEM. *European Business Review, 31, 2-24.* <https://doi.org/10.1108/EBR-11-2018-0203>

 Iroaganachi, M.A. & Izuagbe, R. (2018). A Comparative Analysis of the Impact of Electronic Information Resources Use Towards Research Productivity of Academic Staff in Nigerian Universities. *Library Philosophy and Practice (e-journal).* Retrieved March 24, 2018, from <https://digitalcommons.unl.edu/libphilprac/1702>

Janssen , J., Toyanov, S., Ferrari , A., Punie, Y., Pannekeet, K., & Sloep, P. (2013). Experts' views on digital competence: Commonalities and differences. *Science Direct ElSEVIER*, *Volume 68*, 473-481. <https://doi.org/10.1016/j.compedu.2013.06.008>

Khanday, S. A., & Khanam, D. (2019). THE RESEARCH DESIGN. *Journal of Critical Reviews*, *Volume 06*, 367-374. <https://scholar.google.com/citations?view_op=view_citation&hl>

Kock, N. (2017). Common method bias: A full collinearity assessment method for PLS-SEM. *Partial Least Squares Path Modeling*, 245-257. <https://doi.org/10.1007/978-3-319-64069-3_11>

Kpolovie, P.J. & Awusaku, O.K. (2016). ICT Adoption Attitude of Lecturers. *European Journal of Computer Science and Information Technology.* 4(5), 9-57. Retrieved February 23, 2018, from <http://www.eajournals.org/wp-content/uploads/ICT-> Adoption-Attitude-of-Lecturers.pdf

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement,*, *30(3)*, 607–610. <https://psycnet.apa.org/record/1971-03263-001>

Nagadeepa c., & Mohan, R. (2019). Technology acceptance model (TAM) and Digital Technology usage: An empirical study among Teachers and Students. <https://www.researchgate.net/publication/332874070_Technology_acceptance_model_TAM_and_Digital_Technology_usage_An_empirical_study_among_Teachers_and_Students_1>

Nugroho, A., & Mutiaraningrum, I. (2020). EFL teachers' beliefs and practices about digital learning of English. *Edu Lite Journal of English Education Literature and Culture*, 303-321. <https://doi.org/10.30659/e.5.2.304-321>

 Nzilano, J. L. (2013). Pre-service Teachers’ Teaching Competencies: The Experience of Practising Teaching in Secondary Schools and Teacher Colleges. *African Journal of Teacher Education, Vol. 3 No. 1 (2013*). <https://doi.org/10.21083/ajote.v3i1.2030>

Ockey, G. J., & Choi, I. (2015). Structural equation modeling reporting practices for language assessment. *Language Assessment Quarterly, 12*(3), 305 319. [https://doi.org/10.1080/15434303.2015.1050101](https://psycnet.apa.org/doi/10.1080/15434303.2015.1050101)

Okon E, A., Patrick, N., & Bosire, O. (2015). Perceived Effect of Accessibility and Utilization of Electronic Resources on Productivity of Academic Staff in Selected Nigerian Universities. *SAGE Journals*, 1-7. <https://doi.org/10.1177/2158244015607582>

Okoro, J. (2013). Assessment of accounting competencies possessed by postgraduate University business education students to handle entrepreneurship business challenges in Nigeria. *World Journal of Education*, *4*(1), 1-10. <https://doi.org/10.5430/wje.v4n1p1>

Towbes, L. C., & Cohen, L. H. (1996). Chronic stress in the lives of college students: Scale development and prospective prediction of distress. *Journal of Youth and Adolescence*, *25,*, 199-217. <https://doi.org/10.1007/BF01537344>