Digital Literacy and Communicative Competence among Academic Leaders: Post-COVID-19 Study

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ABSTRACT

Communicative competence represents an academic leader's ability to use language effectively. However, to date, communicative competence among academic leaders is not as effective as expected. This research aims to explore the affective factors hindering the academic leaders' communicative competence, identify the cultural factors affecting their communicative competence, and investigate the impact of using technology in developing communicative competence during the Covid-19 pandemic. This qualitative study employed semi-structured interviews with nine academic leaders from different universities in Iraq. It adopts four theories: communicative competence, leadership competence, communication and planned behaviour for the basis and guidance for data collection, data analysis, and interpretation. The qualitative data were transcribed and analysed using thematic analysis. It was found that the following Key factors, such as digital literacy became crucial during lockdown because of COVID-19. All meetings and conferences adopt online mode instead of physical appearance. In such a situation, majority respondents mentioned that communicative competence has proven helpful in problem-solving and developing critical skills. The respondents have proposed a framework for developing academic leaders' communicative competence for digital literacy post-Covid -19. Such as training to use digital tools for language usage, monitoring the electronic examination process more efficient and initiatives for communication competence.

Keywords: Communicative competence; academic leaders; post-Covid-19; digital literacy; sociolinguistic competence

INTRODUCTION

Most universities currently demand academic leaders who are ready to work with their subordinates to change, build a vision via inspiration, and implement changes consistent with the university's mission and vision. Academicians at universities encounter communication problems, especially leaders' communication competence, which refers to a learner's ability to use language to communicate successfully. Canale and Swain (1980) defined it as composing competence in four areas: Words and rules, Appropriacy, Use of communication strategies, and Cohesion and coherence, which impacts university educational achievement in Iraq (Ahmed Waham et al., 2020; Al-Husseini & Elbeltagi, 2016; Mohammed et al., 2020). Communication allows the leader and employee to monitor progress in meeting organisational goals (Abdul Halim & Razak, 2014). Ansarimoghaddam et al. (2017) stated that few studies are comparing learner-learner interaction on the wiki and face-to-face collaboration at different stages of writing (i.e., planning, drafting, and revising) to determine the appropriateness of collaborative techniques used in the three stages of writing. However, the abovementioned studies highlighted the importance of communicative competence in different dimensions, such as collaborative academic activities. This research identified a lack of research on communicative competence, especially from the Iraq perspective. Secondly, the role of training to enhance communicative competence is also lacking, and this research will fill the gap. Thirdly, a situation like the COVID-19 pandemic and the importance of communicative competence is also highlighted by this research.

Similarly, Mahmud (2017) showed that communication plays a crucial role in teaching the English language because communication failure leads to a fruitless process. Kusairi et al. (2021) stated that Information and Communications Technology (ICT) and the role of Malaysian local wisdom called "Ugahari" in managing Work-Life Balance (WLB) during COVID-19. The study found related them could play a role in maintaining communication and managing work and personal life boundaries In the behaviour that adapts to ICT. Even so, ICT encourages individuals and Ugahari behaviour limits this so that it is not excessive.

The communicative competence of university leaders focuses on acquiring the necessary skills to communicate and emphasise functions, role-playing and actual practice in the learning process. The concept of communicative leadership is used in organisations that analyse and develop the leader's communication competence (Mukhtar et al., 2020). Communicative competence development through technology among university leaders focuses on their efforts and skills on technology sets, which include existing practice, planning, curriculum, resources, staff issues, communications, support, difficulties, staff development, and implementation. In this manner, the academic leaders need to understand the capacities of the new technologies, to have a personal proficiency in their use, which encourages exploration of new techniques in teaching, learning, and management (Banwart, 2020; Cunningham et al., 2020). Alternatively, Abdul Razak et al. (2020) identify ICT as perceived skills and report that these skills significantly affect teachers' leadership styles. Therefore, universities need academic leaders to facilitate innovation and support the learning community.

Academic leaders in most universities in Iraq need to develop communicative competence by promoting their ICT skills and assisting them in leading their colleagues to bring positive changes in pedagogy. Unfortunately, however, no existing empirical studies examine the role of communicative competence development among faculty leaders in universities in Iraq.
This study aims to explore the communication factors that hinder communicative competence among academic leaders, identify the cultural factors affecting communicative competence among

academic leaders, and investigate the impact of technological applications in developing communication skill competence during the Covid-19 Pandemic.

THEORETICAL FRAMEWORK

How communicative competence factors of academic leaders affect digital literacy posy-Covid -19.A theoretical model was formulated based on four theories, namely communicative competence theory (Hymes 1972; Canale and Swain 1980), leadership competence ((McClelland 1970,1980; Clerk 2016), communication theory (Pearson & Nelson 2000): and planned behaviour theory. (Ajzen 1985). Moreover, concerning the Theory of Planned Behaviour, subjective norms (the influence of peers and colleagues) and managerial attitudes may influence their use of ICT and social media for language learning and communicative competence development (Ajzen, 1985)

According to Dell Hymes (1972) and Canale and Swain (1980), the concept of communicative competence (a term coined by Dell Hymes in 1972) grew out of resistance against the concept of linguistic competence introduced by Noam Chomsky. Linguistic competence is considered to be part of communicative competence. Canale and Swain (1980) defined it as composing competence in four areas: Words and rules, Appropriacy, Use of communication strategies, and Cohesion and coherence. Communication competence refers to a learner's ability to use language to communicate successfully. Also, Communicative competence, as reinforced by leadership competence ((McClelland 1970,1980; Clerk 2016), comes with four major frameworks, namely (a) Personal skill, (b) Required skill, (c) knowledge, and (d) abilities. Leadership competencies refer to leadership skills and behaviours.

To achieve communication competence (Person & Nelson, 2000), academic leaders should uphold six principles- source, message, channel, receive, feedback and context. Communication competence is effective and appropriate interaction through which a communicator's goals are achieved.

Moreover, the Behavioural/Technology competence application to the communicative competence model is used in this study according to Ajzen (1985) based on four elements which are (a) Attitude, (b) Behavioral Intention, (c) Subjective norms, (d) Perceived, and (e) Behavioral control. These are harmonious with the theory of planned behaviour (TPB) based on the premise of TPB, a behavioural achievement that relies on motivation (i.e., intention) and ability (i.e., behavioural control). TPB has successfully been applied to technology acceptance and usage. Ajzen (1985) moderates this theory by dividing it into three primary constructs: attitude toward behaviour, subjective norms, and perceived behavioural control. This study uses all of the frameworks to lay a solid foundation for the study and guide the data collection, analysis, and interpretation procedure, which are discussed subsequently.

METHODS

This qualitative research adopted two sampling methods, purposive and snowballing, where semi-structured interviews were conducted (Creswell 2012). The respondents of this research consist of nine academic leaders who are either lecturers or administrators with a minimum of three years of experience from different Iraqi universities. They were selected using two sampling techniques: purposive and snowballing for the qualitative study, where semi-structured interviews were conducted, respectively. Purposive sampling, also known as judgmental, selective, or subjective sampling, is a form of non-probability sampling and snowballing is a term for purposeful sampling, often done after a study has begun, in which the researcher asks participants to recommend another

person for the sample . Researchers rely on their judgment when choosing members of the population to participate in their study (Creswell & Poth, 2016).

DATA COLLECTION AND DATA ANALYSIS

The data were collected through online interviews with respect to the nine respondents. The results of this interview were then transcribed and analysed using the analysis method adopted from Hatch (2002), such as the method of typological and thematic analysis. After identifying the typologies, the data were marked and coded to explore the patterns' associations and find the relevant themes.

FINDINGS

The primary objective of this qualitative phenomenology research is to investigate communicative competence development among Iraqi university leaders. In answering the research questions, this research used a phenomenology qualitative research method using the data collected through interviews with the nine respondents. Table 1 presents the demographic details of the respondents; five males and four females. Selected through purposive sampling, the respondents are academic leaders of language faculties from several universities in Iraq. The criterion stipulated is that the lecturers or administrators have been in service for more than three years. The rationale for selecting university leaders in the language department/faculty is based on the condition that they are required to or supposed to develop communicative competence to perform well at faculty in line with the university's mission and vision to meet the global standard.

TABLE 1. Demographics of Respondents

Code	Academic Qualification	Gender	Academic position	Department	Administrative Designation
R1	PhD	Male	Asst. Prof	English Department	Coordinator
R2	PhD	Female	Asst. Prof.	English Department	Coordinator
R3	PhD	Female	Prof.	English Department	Assistant Dean
R4	PhD	Male	Prof	English Department	Head of Department
R5	PhD	Female	Asst. Prof.	English Department	Head of Department
R6	PhD	Male	Prof	English Department	Dean
R7	PhD	Female	Prof.	English Department	Head of Department
R8	PhD	Male	Asst. Prof.	English Department	Head of Department
R9	PhD	Male	Asst. Prof.	English Department	Head of Department

A theoretical model was formulated based on communicative competence theory (Canale & Swain, 1980; Hymes, 1972), leadership competence (Clark, 2016; McClelland, 1973), and communication competence (Pearson & Nelson, 2000). Moreover, concerning the Theory of Planned Behaviour, subjective norms (the influence of peers and colleagues) and managerial attitudes may influence their use of ICT and social media for language learning and communicative competence development (Ajzen, 1985). The model identified patterns that address how communicative competence factors of academic leaders affect digital literacy posy-Covid -19.

MAIN FACTORS AND THEMES OF CODING

The following are the main themes and categories that were identified from the results of the data analysis. Three main factors are listed as follows:

1. Communication factors affecting communicative competence among academic leaders.
2. Cultural factors affecting communicative competence among academic leaders.
3. Technological applications in developing communication skills during the Covid-19 Pandemic
4. Training role in developing communicative competence of the academic leaders .

Table 2 presents theme coding and findings under the main factors.

TABLE 2. Main Factors and Key Findings

Theme/ Factor	Findings	Coding
Communication factors	• To interact with international students	• Interact electronically with international students
	• To interact with colleagues from other countries	• Electronic communication
	• To manage academic staff	• Solve problems via email at an international conference and in the publication process
Cultural factors	• Fluent in the English Language	• Awareness of the electronic communication
Technology applications affect communicative competence during the pandemic	• Positive affect	• Improve digital literacy
		• Communication for teaching and learning
		• Keep in Contact
		• Problem Solving
		• Enhance Performance
		• Develop Advance Skills
		• Develop Critical Thinking
	• Negative affect	• A face-to-face meeting is Lacking
		• Students' performance decreased
		• Lack of digital expertise
		• Online meetings are affected due to internet speed.
Training role in developing Communicative competence	• Provide Training to Adopt Digital Literacy Mode	• Organise Training for Academic Leaders for efficient usage of Digital tools
	• Training for Assessment	• Organise Proper Training for Academic Leaders to deal with Electronic Examinations

Based on the interview, the participants demonstrated that the Covid-19 Pandemic had caused an inevitable upsurge in the application of digital technologies owing to the norms of social distancing and countrywide lockdowns. One of the significant findings is that post-Covid-19 supports the usage of technology for communicative competence, where academic leaders need higher digital literacy and expertise. In this section, the researcher presents the results and discusses the four main factors and their other themes and findings of the data analysis.

COMMUNICATION FACTORS

One academic leader stated that his communicative competency enables him to find resources related to research topics and interest in the materials when doing research easily and quickly through electronic communication. R5 stated:

> *"Nowadays, conducting research is done through electronic sources; whenever I need an article or a research paper related to a subject of my interest or a topic I am working on, I do not find any difficulty in contacting those researchers to get electronic copies of their work." (R5, transcript E, 19 May 2021, line 28)*

Academic leader R8 also agrees that his effective English communication helps him go abroad, find contemporary references related to his research topics, and use the internet to do research. As R8 stated:

> *"It helps me go abroad and search about contemporary issues regarding research, references and recent topics." Communicative competence helps me find the appropriate books and references for my research topics. It also helps me use the internet and seek the necessary topics I need for my research". (R8, transcript H, 5 June 2021, lines 15 &27)*

Academic leader R7 stated that her communicative competence in English helps her communicate or interact with colleagues and international students electronically. As R7 stated: "*I communicate with my colleagues abroad and international students by email and messenger.*" (R7, transcript G, 25 May 2021, line 10).

Academic leader R7 mentioned that her communicative competence makes her adopt technology as problems can be easily managed and solved with technological tools, such as telegram, emails and the like, for research activities and publications. As R7 stated:

> *"That affected the performance through the participation in the conferences via email and gave him good ability to solve any problem that happened email telegram. This also shows the importance of knowing the academic leader to use ICT to solve the problem. Also, doing research and participating in international conferences using the email and solving the problems that happen during the publishing process using the email or telegram application." (R7, transcript G, 25 June 2021, line 8)*

Academic leader R8 highlighted that fluency in English and Awareness of electronic communication are important. As R8 stated:

> *"Academic leaders must be communicatively competent. They must be fluent English speakers because the English language is universally used and understood. It is the basic language of the internet, media, advertisement, and politics. Thus, academic leaders must be aware of it. (R8, transcript H, 5 June 2021, line 37)*

CULTURAL FACTORS

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THE IMPACT OF USING TECHNOLOGY IN DEVELOPING COMMUNICATION COMPETENCE

Academic leader R1 explained his use of ICT to improve digital literacy. As an academic leader, R1 illustrated: *"I usually use* ICT *every day to improve my communicative competence, especially at night."* (R1, transcript A, 1/29 January 2021, line 25).

Similarly, academic leader R2 highlighted the importance of daily ICT usage for digital literacy, and R2 explained that he has been using ICT continuously. As R2 stated: "*I keep using ICT every day to improve my communicative competence". (*R2, *transcript B*, 4 February 2021, line 23).

R3 indicated that increased ICT communication could improve his digital literacy by engaging in real-life situations. Thus, R3 uses ICT every day, as R3 stated: "*I think ICT currently is important to enhance communicative competence through engaging in real-life situations to increase our experience. Hence, I often use ICT every day*." (R3, *transcript C,* 27 January 2021, line 24).

Academic leader R4 explained how he uses social media most of his time to communicate with faculty members and explore new techniques to improve communication skills with students through online lectures and tests. As R4 stated:

> *"Using the social media has a relation with the faculty English teachers use social media more than the others most of the time I am in touch with the social media looking for the new techniques to improve our online lectures and tests." (R4, transcript D, 23 January 2021, line 23)*

According to academic leader R5, ICT is an essential tool for getting information and communicating, as it is 'indispensable', as R5 stated: "They are indispensable to me.*"* (R5, transcript E, 19 May, line 30).

Academic leader R6 explained positive usage of social media that *"in using social media in teaching" keeping in touch with any new* workshop to improve ICT for the digital literacy skills, as R6 Indicated: "*I used to enrol in every ICT workshop to improve my skills in using social media in teaching. Sometimes, I listen to videos in English on YouTube."* (R6, transcript F, 23 June 2021, line 27).

Another academic leader, R7, explained that social media is used in all academic activities. As R7 mentioned:

> *"I have several ways to communicate with my colleagues via social media like a group on the WhatsApp and Facebook and sometimes use the zoom to hold meetings, discussions, or contests among our students. Even our symposium and conference were held using the zoom." (R7, transcript G, 19 May, line 8)*

Academic leader R7 also indicated that she uses social media all the time to communicate and keep in touch with both students and colleagues to resolve any problem faced; as R7 said: *"I use the social media all the time to be always in touch with my students and colleagues and be ready to give them help and solve their problems."* (R7, transcript G, 19 May 2021, line 14).

Academic leaders R8 highlighted the importance of the daily usage of social media and the internet on performance. R8 stated:

> *"I usually use social media to improve my own communicative competence. It is, in my opinion, a good supportive method for improving my linguistic performance, and it adds a lot to my general knowledge and understanding. Social media is an unavoidable source of knowledge for me. I sometimes rely on it to convey messages to my colleagues and learners. I sometimes advise them to get tips (such as videos, articles, etc.) from social media. This helps in supporting my relationship with my students as well as my colleagues inside or outside my university. We cannot avoid the fact that we are living in the era of the internet; thus, the needs, topics, and facilities are definitely from those of other pastimes. We must cope and be in touch with these media whenever and wherever possible." (R8, transcript H, 5 June 2021, line 30)*

Academic leader R9 clarified that using technology does not facilitate the development of communicative efficacy, as communication through virtual situations moves away from creativity compared to face-to-face communication. As R9 mentioned: *"I do not use this technique to improve my communicative competence. I believe that direct communication and interaction give more realism to the situation than the hypothetical situations applied in electronic education.*" (R 9, transcript I, 9 June 2021, line 17).

On the impact of Covid-19 and digital literacy, academic leader R2 indicated that electronic communication is needed to improve his communicative competence and solve communication problems. As R2 explained:

> *"In fact, it improves my communicative competence. As a teacher, the problem I face while teaching my students was the traditional method, but during and after Covid-19, I prefer using E-Learning with my students." (R2, transcript B, 4 February 2021, line 25)*

Along the same line, academic leader R3 said that electronic communication is required during the Covid-19 Pandemic.

> *"Covid-19 affected all fields of life. Using ICT may be a good option to know what is around and to be in touch with the outer world. Friends, colleagues and other people are inaccessible in face-to-face interaction." (R3, transcript C, 27 January 2021, line 26)*

Academic leader R3 explained that the advantage of post-Covid-19 is that academic leaders are using Information and Communications Technology (ICT) to communicate with international friends and colleagues, and the problems could be resolved by digital literacy. As R3 explained: *"We can solve the problem through sharing our positive ideas. With colleagues and students, we can share workshops, scientific and sociable activities." (*R3, *transcript C,* 27 January 2021, line 27).

Furthermore, academic leader R4 indicated ICT's positive impacts on digital literacy due to Covid-19. As R4 argued: "*The positive effect, teachers were obliged to use the new techniques in teaching. They found difficulty at the beginning, but later, teachers succeeded in doing their job successfully."* (R4, *transcript D,* 23 January 2021, line 42).

According to academic leader R6, the positive effect of Covid-19 on them is the development of communication skills through digital literacy, including workshops, seminars and conferences via Google Meet, Zoom and FCC. As R6 said: *"I think that Covid-19 has a positive effect as it enabled us to develop new means of communication through the use of technology in teaching online, using Google Meet, Zoom and FCC, even in seminars, conferences, and symposiums."* (R6, transcript F, 23 June 2021, line 29).

R7 indicated that post-Covid-19 made him concentrate most of his time communicating with colleagues and students using online applications in teaching and learning via Google

Classroom, Google Meet, and Edmodo and these online tools also can be used for resolving issues being faced by the students during online classes, as R7 said:

> *"During the quarantine and then I concentrated much of the time using social media to communicate with my students and colleagues, trying to advise them with solutions to address the problems they face. I used new applications to teach and meet my students, like Google Classroom, Google Meet, and Edmodo." (R7, transcript G, 19 May 2021, line 16)*

Academic leader R8 explained the positive impacts of the Covid-19 Pandemic in enhancing digital literacy among academic leaders and embracing web-based activities **** such as holding a meeting, seminars, conferences, and solving problems in relation to teaching and learning as well as participating in training sessions. As R8 stated:

> *"It was very important in holding meetings, seminars, conferences, and training courses. To solve any problem that may arise, I find it necessary to participate in training sessions or lessons. I sometimes ask my colleagues for help because I must be able to employ ICT in the best manner to help my learners get the required knowledge as easily and perfectly as possible. Learners are the core of the overall learning process; thus, we must do our best to help them overcome any problem." (R8, transcript H, 5 June 2021, line 33)*

Despite the positive feedback from the academic leaders, some show concerns about the negative impact of post-Covid-19 on them. Academic leader R4 mentioned that teachers lost face-to-face interaction and communication with students, which is no doubt important, as R4 said: *"Teachers are unable to have lectures in the colleges. Teachers lost the direct contact with the students' which affects learning in general."* (R4, transcript D, 23 January 2021, line 41). Academic leader R4 also added the bad impacts of digital or electronic communication because it encourages students to cheat. As R4 mentioned: *"But we have teachers who are not satisfied with electronic teaching, especially with the electronic tests because of cheating*." (R4, transcript D, 23 January 2021, line 38).

Academic leader R9 mentioned the negative impacts of post-Covid-19 on teaching and learning as some students may not be ICT literate, which affects their motivation in learning. Hence, returning to traditional face-to-face teaching and learning is necessary. As R9 stated:

> *"It is natural that the period following the Corona pandemic has impacted the path of teaching and communicating with students, which requires the use of information literacy in the communication process. However, these matters because we want to end with the end of the pandemic because it caused us problems in the weak scientific level of students and that returning to direct education has a good impact on the level of interactive students. Because I think the students of these days, especially third world students, and unfortunately, I say it, they do not have the motivation to learn except what is rare of them". (R9, transcript I, 9 June 2021, line 18)*

Moreover, academic leader R9 added the usage of digital platforms in education just served the students' goal of getting a certification. He also expressed that students use the ICT tools to cheat when they feel embarrassed, which weakens education. As R9 stated:

> *"The use of technological methods in education due to the Corona pandemic has served many students whose goal is only to obtain the certificate without knowledge by following many methods, including cheating and exploiting." (R9, transcript H, 9 June 2021, line 20)*

Furthermore, academic leader R9 added that digital literacy weakens the level of education because students try to avoid communication when they feel embarrassed by giving different reasons, and the teacher cannot evaluate the student's level. R9 mentioned:

> *"The disappearance behind the screen and when it is embarrassing not to know the answer to a question that is deliberately leaving the educational program and claiming the Internet is out, and this causes problems for the teacher by not giving him a sufficient basis to assess the students' levels." (R9, transcript I, 9 June 2021, line 22)*

TRAINING ROLE IN DEVELOPING COMMUNICATIVE COMPETENCE OF THE ACADEMIC LEADERS

The academic leaders mentioned many suggestions for developing communicative competence of the academic leaders. Academic leader R1 suggested various training programmes for communication, especially with native English speakers. As R1 stated:*" In order to be communicative, we require various training programmes that can help us upgrade our knowledge of the ways and techniques for interacting with other people, including native speakers." (*R1, transcript A, 29 January 2021, line 29).

Similarly, R6 suggested courses in relation to digitalised assessments, as R6 stated*: "I think that I need more courses about electronic tests." (*R6, transcript F, 23 June 2021, line 13). This respondent's suggestion on training for those involved in electronic tests is indeed a constructive suggestion as, to date, such training is lacking.

DISCUSSION

The findings show that most academic leaders highlighted that their English language communicative competency helps them bring innovation and conduct research. According to the respondents, English communicative competency can help academic leaders to value the opportunity they get from conducting research. Therefore, it can also help them to explore multiple resources and different dimensions of research. Based on respondents' opinions on English communicative competence, it can be stated that it has some benefits, such as the opportunity to interact electronically with international colleagues and students in the research.

Person & Nelson (2000) explain that communication competence enables leaders to deliver information in person, in writing, and the digital world. In terms of global involvement, according to academic leaders in this study, communicative competence can help academic leaders to participate in conferences as individuals and collaborative researchers from different countries, especially in their specific fields. It also enables them to find valuable sources for their research. In this way, academic leaders can also improve their teaching methods in the classroom. Thus, the finding confirms this theory that communicative competence can help academic leaders improve their communication skills and find ways to improve their research skills and teach English as a foreign language.

Furthermore, according to academic leaders, when dealing with interaction, English communicative competency can be helpful in communication and interaction with international students, colleagues, and researchers specialising in digital communication. Academic leaders may also discover topics dealing with specific and general subjects considering their international students. These findings are partially consistent with previous studies (O'Dowd, 2018; Rienties et al., 2020), showing that leaders' communicative competence and ICT are closely related. The recent worldwide emergency due to the COVID-19 pandemic has led to a broader acceptance of

using ICT for teaching and learning. Gyimah (2020) reported that technological innovation has proven helpful in e-learning practice after COVID-19. Similarly, Ting et al. (2020) reported that after Covid-19, technology supports communicative competence, requiring higher digital literacy as a standard and new challenge among academic leaders. Rienties et al. (2020) examined how 622 pre-service teachers developed technology pedagogical content knowledge and their perceptions of foreign language competence in 23 virtual exchanges in 34 institutions from 16 countries. The study found that technology pedagogy content knowledge influenced teachers' development of foreign language competency. O'Dowd (2018) reported that educators use online learning networks and communities to provide students with first-hand experiences of online cross-cultural collaboration and exchange.

In line with the present study's findings, using ICT to keep in touch with diverse people will improve intercultural relationships and communication skills. Raman and Shariff (2017) showed a positive correlation between technology leadership, competence and commitment, ICT facilities, and the effectiveness of teachers' management duties in using ICT in schools. Likewise, the study by Vaganova et al. (2020) revealed that students could develop interaction skills such as critical thinking, teamwork and problem-solving for both the professional sphere and personal activities through technology and communicative competence. Further, the use of ICT increases the efficiency of the usage of the ICT, which assists in improving digital communication and communicative competence. Furthermore, it showed that social media such as WhatsApp, Facebook, and Zoom are used to organise online meetings, discussions, symposiums and conferences, which are crucial to access information, knowledge, skills, and competence. While social media such as YouTube can be leveraged to improve English language competence, especially English native speakers can be listened to and interact via these media.

Similarly, Ting et al. (2020) found the significance of information communication technology on communication among leaders, while Argenti (2020) recommended the need to adopt ICT to improve communication activities among leaders. However, the present studies focused on academic leaders in the university context. They found that information communication technology is crucial to access updated and reliable information about the organisation and academic activities, enhance constant interaction, conduct exams, and teach students (especially post-COVID-19) irrespective of location. Also, online interaction will improve academic leaders' relationships and communicative competence. Rababah (2020) study, though focused on university students, but the study is relevant to the present study. The study revealed the significance of effective training and accessibility of ICT in the academic environment. By relating these findings to the present study, a lack of effective training and ICT accessibility can affect the use or adoption of information communication technologies among academic leaders. Therefore, bearing in mind the Iraqi perspective, this study suggests initiating ICT workshops and training to assist academic leaders in improving their skills in using social media for teaching activities.

It can be concluded that most of the respondents under the factor Covid-19 pandemic on communicative competence pointed out that the role and importance of ICT and digital literacy for communication have increased. According to the respondents, using ICT for communication during the Covid-19 pandemic provides usage of multiple digital platforms. On the contrary, some academic leaders indicated the negative impacts of Covid-19 on communicative competence. For instance, they have lost face-to-face meetings and classroom teaching, which has affected students' learning outcomes. In addition, one of the academic leaders pointed out a substantial negative impact of the Covid-19 pandemic on digital communication, which may cause cheating in the online test system. It may damage the student's performance. Furthermore, one of the academic

leaders added the negative impact of digital literacy on creativity. According to him, it is the reason for the decline of creativity because the students depend on electronic tools, while face-to-face communication and classroom teaching and learning enhance and enlighten the creativity among students and academic leaders.

CONCLUSION

The major goal of this research is to find out how post-Covid-19 has affected communicative competence concerning digital literacy. It may be stated that digital literacy has a distinct influence on the communication competency of academic leaders in Iraq's various universities. According to this research, the Covid-19 pandemic has had sound effects on digital literacy, for instance, the ability to use digital platforms to communicate with students and colleagues via multiple online applications, participating in international conferences and seminars, and attending research publications workshops online. Furthermore, mastering digital literacy enhances the Awareness of electronic communication among academic leaders and students, which is helpful in teaching and learning. On the contrary, this study also listed the negative impacts of post-Covid-19 on communicative competence due to ICT usage. First and foremost, there is a lack of face-to-face communication, which ultimately affects students' performance. Most respondents recommended organising training for academic leaders to efficiently use digital tools and monitor the electronic examination process.

This research also concludes that academic leaders need to engage the government in developing a policy framework for improving the minimum wage. Academic facilities, including ICT, collaborative learning and cultural adaption, will ultimately improve communicative competence among academic leaders and learning quality in various universities in Iraq. Finally, most respondents recommended a framework for developing academic leaders' communicative competence for digital literacy post-Covid -19, such as organising training for academic leaders to use digital tools and monitoring the electronic examination process efficiently. Therefore, to improve communicative competence among academic leaders, there is a need to organise ICT workshops and training (to assist academic leaders in improving their skills in using social media for teaching activities), digital literacy programmes, language programmes, and leadership training programmes.

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