



Research Article

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Received: 12 September 2020 / Accepted: 11 February 2021 / Published: 10 May 2021

The Use of Social Media as a Platform in Education: Ramifications of COVID-19 in Iraq

Dr. Alaa Makki

University of Sharjah,
University City Rd, University City,
Sharjah, United Arab Emirates

Dr. Ahmed Omar Bali

University of Human Development, Iraq

DOI: <https://doi.org/10.36941/ajis-2021-0093>

Abstract

Social media applications have become a vital tool for human daily communication and are widely used in the education process worldwide. Regardless of the use of social media by some instructors as a personal initiative, in Iraq, social media's use for educational purposes has been neglected. The outbreak of the COVID-19 pandemic pushed the world to implement online teaching using varying technology applications including social media as an essential tool in the learning process. This shifted the Iraqi government's understanding of social media's role in education to the extent that they formally recommended that the educational departments, schools, universities use social media as a formal platform to keep the education going. However, there were concerns about using social media for several factors such as internet services, information and communication technology skills of instructors and students, integrity, and quality insurance of education. This study investigated the teachers' and students' perceptions regarding these concerns by adopting a survey method through an online questionnaire using 'google forms' (N= 2010) with responses from teachers and students of universities and high schools and parents of students of basic schools. This study revealed that less than half of the respondents were in favor of using social media in the learning process. The findings suggested that the educational level, age, and geographical hierarchies and jobs of respondents are also correlated with using social media and e-learning.

Keywords: Social Media, e-learning, Iraq, COVID19, education, students, teachers

1. Introduction

Social media applications have become a vital tool for human daily communication and are widely used in the education process worldwide. However, the use of social media for educational purposes has been neglected in Iraq except for the fairly use by some instructors as a personal initiative. The outbreak of the COVID 19 pandemic impelled the world to implement online teaching using social media as an essential tool in the learning process. The desire for distance learning might be related to modern technology and adapting to new challenging situations. Due to COVID-19, more than 1.2 billion learners

in 186 countries are affected by school closure (“From Disruption to Recovery”, 2020). This opens the door to more digital learning. Even before COVID-19, global educational technology investments reached \$18.66 billion in 2019. There has been a significant surge in usage of educational technology since COVID-19 whether it is language apps, visual tutoring, video conferencing tools, or online learning software and it is estimated that the overall market for online education projects to reach \$350 billion by 2025 (“Online Education Market Study”, 2019).

Using social media can hardly be neglected because of some factors including the fear of been isolated, professional demand, information needs, educational purposes, and conveniences. In recent years, social media expanded their reach into pedagogical activities, also provide an open space for student engagement and collaborative learning. Several studies emphasized the use of social media for independent and collaborative learning and extending social networking (Jabr, 2011; Dalsgaard, 2004; Palktzoglou, Stylianou, & Suhonen, 2014; Paliktzoglou and Suhonen, 2014). However, literature shows educators’ concern over social media use regarding time-consuming, privacy, information security and integrity, and face-to-face communication discouragement (Boumarafi, 2015). In the Iraqi educational experience, online teaching and using social media for educational purposes was not accepted legitimately. However, students themselves have been using social media for exchanging information and discussions on their homework and assignments. The outbreak of COVID 19 has pushed the world to implement e-learning to keep the education process going particularly the developing countries where using online teaching is at a minimum level. Following this, the Iraqi government is concerned about implementing e-learning through technology applications including social media to restart the education process, which was shut down from March to June, because of several reasons such as the lack of educational facilities, lack of ICT skills of teachers and students, conflict regulations against E-learning, quality of education, trust, and integrity of the educational process. These reasons still represent the big issues of adopting e-learning and there is still limited information about the different dimensions of implementing e-learning in Iraq (Bali, 2018). This study seeks to examine the perceptions of teachers and students at all levels of education about the potentials and facilities of applying e-learning and using social media in the learning process. Since teachers and students constitute the key actors of the learning process, their perceptions determine the obstacles and challenges of using social media in the learning process.

2. Literature Review

The modern world has embraced social media. As of July 2020, more than half of all the people on Earth use social media, which is 3.96 billion people across the planet equating to almost 51 percent of the total global population. Facebook remains the biggest social media platform with 2.603 billion monthly active users, YouTube (2 billion); WhatsApp (2 billion), Facebook Messenger (1.3 billion), WeChat (1.203 billion); Instagram (1.08 billion); TikTok (800 million), QQ (694 million); Sina Weibo (550 million), QZone (517 million); Reddit (430 million); Douyin (400 million); Kuaishou (400 million); Snapchat (397 million), Pinterest (367 million); Twitter (326 million) (“Global Social Media Overview,” n.d.). The significant characteristic of social media platforms including communication, collaboration, community, creativity, and convergence are useful for educational purposes as well as forming friendships. On this point, Friedman and Friedman (2011) discuss some serious issues facing education that can be resolved by online education including a draconian budget, making education interesting and relevant for students, raising standards, and the high dropout rates in the high schools.

Distance learning can cause communication problems and the lack of human contacts and affects students’ sense of belonging and to a community of students. Thus, students feel isolated. However, social media can improve communication between students and instructors, and help students make friends, share their thoughts, and interact with their peers. (Hamilton et al., 2016) found that 75% of students feel comfortable using social media websites to discuss their course work with other students and 58 % of students use social networking websites to communicate with their classmates. Cain & Policastri (2011) found that students used Facebook groups successfully to expand course content to a

contemporary topic not included in the class and to engage with outside experts and thought leaders. DeAndrea et al. (2012) concluded that social media usage increased students' social support diversely especially during the first semester. But, on the flip side, social media usage involves addiction (García del Castillo, 2013), academic dishonesty (Hernandez, 2015), privacy issues (Oravec, 2012), and copyright infringement (Jamar, 2010). Fox & Varadarajan (2011) conclude that educators who use Twitter for educational purposes should consider the potential positive aspects of it including active interaction among students and the potential drawbacks including the disruptive nature of Twitter as well as the overwhelming Tweets. In this regard, Japan's Ministry of Education worried about 518,000 children aged 12-18 addicted to social media and needed to be rehabilitated (Tylor, 2013). But Greenhow (2011) argued that using social networking websites in an academic context is to create inventive ideas and share them with other users, and can provide an emotional outlet for school-related stress and support and recommendations about class assignments or other everyday issues that arise during their study in a shorter time.

Online social networking can stimulate social and civic benefits, which has implications for education. For example, in Saudi Arabia, the most common social networking sites are WhatsApp (67.90%), Facebook, Twitter, LinkedIn, and Snapchat which develop students' academic performance (Alaslani & Alandejani, 2020) and social networking service and visual learning environment make the learning process more interesting, fun, and effective (Rosy, 2018). The use of social media at the K-12 level for educational purposes is no exception. Several current research highlight three affordances of social media for fostering active learning, community building, and civic participation and explain how social media can be used in conjunction with conventional learning management systems in K-12 education for enhancing student engagement, community connections, and teacher-student interactions, but these essences come with challenges (Greenhow & Chapman, 2020; Galvin, & Greenhow 2020; Greenhow, Galvin, Brandon, & Emilia, 2020). There are some challenges in online education to overcome. For example, according to OECD data, while 95% of students in Switzerland, Norway, and Austria have a computer to use for digital learning, only 34% in Indonesia do. In the US, nearly 25% of those 15-year-olds from disadvantaged backgrounds said that they did not have a computer to use for their schoolwork ("Programme for International Student Assessment", 2003). While some countries provide digital equipment to students in need such as New South Wales, Australia ("Laptop Loans Help", 2020), many are still concerned that the Corona Virus Pandemic broaden digital device ("Coronavirus Reveals Need", 2020).

Research shows that university graduates' computer literacy skill is low. Therefore, it can be assumed that computer skills of students who are recently beginning their studies or are in the middle of it are not much better and there is a definite need to provide computer training for new university students (Nash, 2009). Online classes provide students with educational opportunities that they may not have otherwise because of a lack of interest in a subject, school budget, or teacher expertise. In some cases, online educations may be more influential than traditional education. (Means et al., 2009) conducted a systematic search of more than a thousand empirical research literature of online learning from 1996 through 2008 and found that, on average, students who learn in the online educational environment perform modestly better than those receiving face-to-face classes. However, effective online education is dependent on three aspects: "1) well-designed course content, motivating interaction between the instructor and learners, well-prepared and fully-supported instructors; 2) creation of a sense of online learning community; and 3) rapid advancement of technology" (Sun & Chen 2016, p. 157).

Online education has been practiced in different forms worldwide and it is now growing at exponential speed. Thirty-two percent of higher education students in 2013 took at least one online course (Allen & Seaman, 2013). In 2010-11, 89 percent of universities offer classes taught fully online, or hybrid online, or other forms of distance education (Parker, Lenhart, & Moore, 2011). In the world of technology teachers, students, and administrators are allowed to collect relevant data, feedback, and evaluations on education and online experiences. The emergence of the World Wide Web (WWW) in 1991 created an infinite digital world in which so many websites provide platforms for the development

of online communities and groups who can make the most out of websites such as Google Classroom, Google Drive, Google Doc, Google Hangout, Dropbox, Facebook, Twitter, and various apps for emailing, conferencing, and chatting such as Yahoo, Skype, Zoom, Viber, etc. Drigas and Tsolaki reviewed papers during 2003-2013 regarding mobile learning tools, technologies in e-learning, and the role of ICT networks and concluded that e-learning can provide new opportunities for developing countries to facilitate social and professional interaction among learners anytime and anywhere they need. E-learning can overcome the limitations of traditional education in terms of time, space, and facilities, but developing countries may encounter significant challenges while applying online learning including the lack of electricity and devices, required skills, and students' and teachers' contributions to the process.

Garrison, Anderson, & Archer, (2000) developed the Community of Inquiry (CoI) framework which consists of three required elements to achieve effective online learning. They are cognitive presence (students' collaboration to explore, create, and confirm meaning through discourse), teaching presence (planning, careful consideration, facilitation, and direction of discourse for meaningful learning), and social presence (learners' social and emotional factors in online environments). Similarly, Bailey and Card (2009) described effective pedagogical practices through the perspectives of experienced, award-winning e-learning teachers. The awardees shared eight effective pedagogical practices in online teaching: (1) fostering relationships; (2) engagement; (3) timeliness; (4) communications; (5) organization; (6) technology; (7) flexibility; and (8) high expectations (p. 154). The development of Information Communication technology provides a variety of teaching options and makes e-learning increasingly ubiquitous to promote knowledge, skills, and other outcomes of learners. Various emerging technological applications for developing the educational system make new online education remarkably more convenient than traditional education.

Pham et al., (2019) found that e-learning service quality plays a significant role in e-learning, students' satisfaction, and loyalty in the context of Vietnam as an emerging country, where online technology infrastructure is still in the investment stage. Similarly, Moseley et al., (1999) observed that teachers who favored ICT valued collaborative working, inquiry, and decision making by students. MacCarney (2004) investigated the impact of different models of staff development in ICT on teachers and emphasized more practice on the pedagogy of ICT.

The need for economic and social development encourages many countries to invest in educational reform and educational Information Communication Technology (ICT). The significant effects of ICT encourage East African countries to focus on the role of ICT in improving the quality of teaching and learning in schools grades K-12. Kelles-Viitanen (2003) argued that ICT plays a vital role in all aspects of national life, politics, economy, and social and cultural development to a degree that it rapidly transforms the way people communicate, access information, and even entertain themselves. Hennessy et al., (2010) concluded that for ICT to be effective there are some additional needs: blending ICTs with other applications, ongoing in-service education, investment and strategic leadership by government, and intensifying evaluation and sustainability of these programs towards reform. Developing the capacity of teachers' skills to apply ICT as a teaching and learning tool is key because research studies indicated that having resources without the expertise on how to effectively employ them is a definite path to wastage and dissolution of investment (Farrell and Isaacs, 2007).

Power outage and unreliable electricity is a big constraint on effectively applying ICT and e-education. Therefore, in several countries where electrical infrastructure remains undeveloped several initiatives for using renewable energy technology especially in remote areas have been emerged (Hennessy et al., 2010). In a rapidly changing globalized world that is massively influenced and reliant on digital technology (Bali & Zarea, 2017; Bali et al, 2020), pedagogical teaching and learning approaches continue to evolve to meet the students' needs. MacCloud (2004) claimed that students who take online classes learn as much as those in classrooms. Several research studies believe that online courses offer better teaching and learning outcomes (Young, 2004). Online courses offer students skills for their future careers. The nature of online education requires teachers to be flexible, committed, and well-timed in responding to emails and messages, giving feedback, and grading assignments. Good

online teachers can cope with and adapt updated technologies and are available online at all times to engage students through the use of efficient technologies, online discussion boards, by encouraging students to share their thoughts and experiences. Organized teachers can achieve these goals by familiarizing students on how to successfully use all necessary resources and course material that leads to their success.

Online education enhances communication between teachers and learners, help students to be the focus of education, and eliminates the teacher-centered approach. Students who feel self-conscious or introverted are more likely to participate actively in online education than in the traditional education process, and they can gradually overcome their natural shyness in this electronic environment. Dobbs & Arnold (2009) found that unlike students who display disruptive or noticeable behavior, shy students in a physical classroom environment did not receive favorable teacher attention. Aloe et al., (2014) explained that teachers in traditional classrooms work constantly to manage multiple demands and may not always have the resources or time to intervene in every situation that arises. But online classes provide enough opportunities for shy students to express themselves and construct knowledge.

Emerging modern technology has provided an equal educational opportunity for everyone and every place with an ability to present courses continually and more diversely. But students' satisfaction is key in e-learning (Swan, 2001, Arbaugh, 2001, Richardson & Swan, 2003; Bolliger, 2004). Six effective dimensions affect learners' satisfaction including learner, instructor, course, technology, design, and environmental dimensions (Mohammadi & Fadaiyan, 2014). These, however, cannot sustain deep and effective learning unless there are effective training methods that result in satisfying learners using modern applications, facilities, and appropriate structures.

3. Research questions

Based on the aim of the research, four research questions are formulated as follows:

Research question 1: What are the perceptions of teachers, students, and the parents of students in the basic schools (henceforth respondents) using social media in the learning process?

Research question 2: What are the obstacles of using social media in the learning process in Iraq from the respondents' perspectives?

Research question 3: What is the role of the demographic background of the respondents who are willing to use social media in the learning process?

Research question 4: What are the most popular social media applications and platforms in the learning process?

4. Hypothesis

Along with the research questions presented, this study tests four hypotheses on the base of the collected data from the survey. These hypotheses shed light on the study's underlying arguments.

Hypothesis 1: Genders of the respondents are associated with their different perceptions regarding using social media and fully or partially online teaching in the learning process.

Hypothesis 2: Different ages of the respondents correlates with different perceptions of them regarding using social media and fully or partially online teaching in the learning process.

Hypothesis 3: The geographical hierarchy (Village, Smalltown, large town, City) of the respondents' jobs correlates with their perceptions regarding using social media and fully or partially online teaching in the learning process. In other words, the geographical size or location of the jobs of the respondents has a significant role in teachers' perceptions regarding using social media in the learning process. It is also predicted that teachers from cities will favor using social media in the learning process more than teachers from the villages because online teaching is more aligned with the developments and modern nature of cities than villages.

Hypothesis 4: Different educational positions (professors, high school teachers, basic school

teachers, university students, high school students, and parents of students of the basic school) of the respondents correlate with different perceptions regarding using social media and fully or partially online teaching in the learning process.

5. Methodology

This study adopted a survey method through an online questionnaire using 'Google Forms' (N= 2100) with responses from teachers and students from universities, high schools, and basic schools. Furthermore, data was taken from parents of basic school students because the students are not legally permitted to have social media accounts. The sample was a probability sample, which means all the members of the population had the same chance of inclusion (Becker, Bryman, & Ferguson, 2012; Lampard & Pole, 2015). Consequently, the result of the respondents represented the whole population (Bryman & Bell, 2015). The data collection was carried out from the last week of March to mid-May 2020, this period was within the quarantine period (the first week of March to the last week of July) ordered by the Iraqi government.

the duration of data collection was very important because the Ministry of Education started a discussion to implement online teaching and the case encourages debates among teachers.

5.1 The procedure of measuring hypotheses

A t-test model has been employed to test the first hypothesis which looks at the variation of gender differences, males, and females' perceptions (Table 6). A Spearman correlation model was used to test hypotheses 2-4, as these three hypotheses were used to test the roles of age, geographical hierarchy, and educational position and allowed them to act as the control variables of the respondents' perceptions (Table 7). Each of the three variables consists of more than three categories, where the Spearman correlation model is the most commonly used model to test variables consisting of more than three categories designed by ordinal ranking such as age, geographical hierarchy, educational position (Weinberg & Abramowitz, 2008). Additionally, quantitative descriptions of 'frequency and percentage' were used to examine and interpret hypotheses 1-4 because respondents were asked about their perceptions regarding using social media and fully and partially online teaching in general (Table 2). The data was processed by the SPSS and the age variable was categorized into five age-groups. The age-group of 15-18 years old was given 1 value, 2 values for 19-25, 3 values for 26-35, 4 values for 36-50, and 5 values for 51 or above. The geographical hierarchy variable was categorized into 4 geographical levels and the smallest one (villages) was given 1 value, 2 values for small towns, 3 values for large towns, and 4 values for cities. The educational position was categorized into six groups: 1 value was given to the parents of students of basic schools, 2 values for high schools students, 3 values for universities students, 4 values for basic school teachers, 5 values for high school teachers, and 6 values for university professors.

Table 1. Demographical background of the participants

Gender	Male	Female				
	58.5	41.5				
Age	15-18	19-25	26-35	36-50	51 and above	
	3.3	38.2	21	32.1	5.4	
Educational Position	University lecturer	Higher school teachers	Basic schools teachers	University students	Higher schools students	Parents of basic schools students
	30.2	5.3	8.5	42.4	4.2	9.2
Geographical Hierarchy	City	Big town	Small town	Village		
	57.1	32.9	7.4	2.6		

6. Results

The results explored in the following analysis has been divided into sections corresponding to the hypotheses and research questions.

6.1 Using social media in the learning process

This section examines the first research question which is to consider the perceptions of respondents about using social applications and platforms in the learning process in Iraq. The respondents were asked to show their perceptions about using social media applications in the learning process, for example for exchanging information, providing feedback to students, keeping contact with teachers, and saving time because social media can facilitate communication. Table 2 indicates that the majority 50.4% of respondents have a negative perception of using social media in the learning process and less than half of the respondents 45.1% were in favor while 4.5% selected did not know which is assumed that they never used social media or were unaware of the role of social media to facilitate learning. Regarding fully or partially implementing online teaching, table 2 shows that most of the respondents 78.1% were against fully implementing online teaching, whereas nearly half 47.8% were not even in favor of partially implementing online teaching. Table 2 shows that only 16.1% of the respondents said yes to fully implementing online teaching while less than half said yes to partially. This refers that online teaching among teachers and students is not widely embraced and this poses a challenge to the education department's plan at all levels to keep education going during the lockdown which was imposed as the emergency safety protocol to contain the COVID-19 pandemic.

Online learning is not common in Iraq and the education system does not acknowledge online courses as accredited online programs and they are not legally permitted. Table 2 shows that 5.8% of respondents selected did not know about fully implementing online teaching and 7.6% for partially. It assumed that they were not sure either to accept or reject online teaching. This is not surprising because online teaching in Iraq is still an idea and not officially permitted by the Ministry of Education and teachers were not trained for online teaching while online teaching has become a growing trend in the western countries and many researches emphasized its benefits (Pham et al., 2019; Means et al., 2009; Young, 2006; MacCloud, 2004).

Table 2. Teachers 'attitude toward using social media in learning process and implementing online teaching

Statements	Yes	No	I Do Not Know
	%	%	%
Using social media in learning process	45.1	50.4	4.5
Implementing online teaching fully	16.1	78.1	5.8
Implementing online teaching partially	44.6	47.8	7.6

6.2 Obstacles of implementing online teaching

This section examines the second research question to determine the obstacles to implementing online teaching from the respondents 'perspective. Tables 3 illustrates that poor quality of the internet service represents the major obstacle (80.9%) of implementing online teaching in Iraq because there is no good quality internet service to facilitate online teaching in many places, even if it is available it is expensive for many people when compared in proportion to people's income. Additionally, students and economically disadvantaged families are not supported by any kind of social benefits or student loans that would help provide internet service and better education. The second significant obstacle comes from teachers 'lack of ICT experience and economic reasons because 66.9% (Table 3) of respondents acknowledged that they lack ICT skills and do not have laptops that they can use for online

classes. In general, the data indicates that it is currently impossible to start online teaching because the majority of teachers and students do not have enough ICT skills or communication facilities particularly laptops and smartphones with suitable internet service. For example, the respondents' stated that 60.6% of students lack ICT experience, and nearly half of the teachers 45.8% acknowledged that they have the same problem (Table 3). This rate is too high to overcome unless the government provides substantial subsidies to a big number of students and offers training courses for teachers before introducing online teaching which seems challenging now.

Lack of trust to teach and learn online is a stumbling block to implement online education as 15% of respondents believe that the students do not trust online teaching (Table 3). This might be because online education has never been tested or practiced in the Iraqi education system before. This is quite new to the Iraqi educational sectors and problematically, online education has not legally been recognized yet. The respondents realized this problem as 24.8% tied it up with laws and regulations (Table 3). The lockdown and school closures during the COVID-19 pandemic can be a real eye-opener to the Iraqi government education officials because they could not continue the education process with another issue—teachers and students' lack of ICT experience. In short, lack of ICT skills, people's low income, deficiency in education services, and decrepit education infrastructure restrict opportunities for online education development in Iraq.

Table 3. Obstacles of implementing online teaching from respondents' perspective

Statements which representing the obstacles	%
Expensive internet services	55.5
lack of teachers' experience of using ICT in teaching	45.8
Lack of Electricity	66.9
Lack of students' experience of using ICT for learning	60.6
The poor quality of Internet services	80.9
Regulations regarding online teaching	24.8
Education department's lack of trust in teachers' competencies in implementation of online teaching	15
Lack of Internet in Rural areas	66.9

6.3 Respondents' experience of using social media in the learning

This section studies the third research question on using social media applications and in the learning process as a platform for teachers and students. It is observed that social media is gaining more and more popularity among Iraqi young people that mainly represent students. The findings of this research illustrate that half of the respondents use social media in the learning process. Students use them to exchange ideas, get more useful information, and connect with learning groups that make education convenient. However, the majority of teachers still do not believe that is appropriate to communicate with their students via social media because they argue that they are not formal platforms and are still not suggested by the education department for the learning proposes. Additionally, only half of the respondents have a positive view on using social media in learning, for example, 56% of respondents (Table 5) stated that social media contribute to keeping the education process going during this crisis of the COVID-19 pandemic, and 53.6 % said that social media use is valuable for quickly exchanging information, although nearly half of the respondents do not have a positive perception about e-learning or social media, as a platform, for the learning. For example, only 25.9% (Table 5) of respondents believe that social media afford people multiple opportunities to improve learning methods.

Regarding the most popular social media platform and applications in learning among the respondents, Facebook comes first by 50.3%, Viber 22.3%, and 20.6% for YouTube (Table 4). This reveals that none of the other online communication applications is well-liked, Zoom is only used by 15.3% of the respondents and 4% used Skype, for example (Table 4). Arguably, the findings indicate

that social media have not become a widely approved platform for learning purposes, but even so half of the respondents had used them before the lockdown despite the education department's disapproval. Consequently, social media are predicted to be a substantial platform for learning if the government encourages teachers to use them effectively, however, it requires to overcome the problems that face teacher and students including the cost of internet, requisite devices, and introducing extensive courses to develop students and teachers' ICT expertise.

Table 4. Applications were used by the respondents

Applications	%
Facebook	50.2
Viber	22.3
Zoom	15.3
YouTobe	20.6
Telegram	4.4
Skype	4
Instagram	4.4
None of them	25

Table 5. Positive perception of Respondents of using Social Media in the learning process

Statements	%
Exchanging information quickly	53.3
Keeping the education process going in the crisis	56
More opportunity to learn	25.9
Making a friendly relationship between teachers and students	25

6.4 Respondents' experience of using social media in the learning

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7. Result of Hypothesis

7.1 Gender Differences

The first hypothesis predicts that respondents hold different perceptions regarding using social media and fully or partially online teaching in the learning process according to their gender. Table 6 provides evidence that this hypothesis holds true with significant differences in male and female perceptions

presented in the data. The t-test model suggested that using social media $t(df=10)=5.09, p=0.00$, implementing online teaching partially $t(df=10)=5.08, p=0.00$ (Table 6). Male respondents hold more positive perceptions than females. With the males, Mean Square rated at 2 in using social media while with the female, it is only 1.7. This indicates that males are more open to accepting social media's use and implementing partially online teaching comparing to females. following this, the education department should consider this issue because the females are not in favor of using social media and implementing online teaching. A part of the same hypothesis shows that both males and females' perceptions are not different regarding implementing fully online teaching $t(df=10)=1.29, p=0.19$ (Table 6). This is because the majority of the respondents apart from their genders were not in favor of implementing fully online teaching 78.1% Table 2).

Table 6. The t-Test Model I Reports respondents' Perceptions of using social media, online teaching fully or partially in the learning process, based on their gender differences

Variables	Using t-test for testing Gender differences					
		M	df	t-test	Sig	
Gender	Using social media in the learning	Male	2	10	5.09	.00
		Female	1.7			
	Implementing online teaching Fully	Male	1.40	10	1.29	.19
		Female	1.34			
	Implementing online teaching partially	Male	2.11	10	5.8	.00
		Female	1.76			

t-test indicates that the differences between the respondents' positive and negative perceptions regarding government performance are significant, at $p \leq 0.05$.

7.2 Age differences

The second hypothesis predicted that the perceptions of respondents would differ according to age. Table 7 indicates that this hypothesis holds true and there is a significant gap amongst the different age categories' perceptions regarding using social media and fully or partially online teaching in the learning process. The Spearman correlation model suggested that there is a poor negative association and significant at, $r_s = -.19, p=0.000$, using social media, $r_s = -.14, p=0.000$, online teaching fully, $r_s = -.15, p=0.000$, online teaching partially (Table 7). Here, the negative association means the younger respondents are more open to accepting and using social media and online teaching either fully or partially compared to the older respondents. This assumption is globally predicted because the young embrace high advanced technologies more easily and they are willing to using ICT in the learning more than the older generation who have been adjusted to the traditional tools for learning.

7.3 Geographical Hierarchies' correlation with using social media and fully and partially online teaching in learning

The third hypothesis was suggested to test the correlation between the job geographical hierarchies of respondents with their perceptions regarding using social media and fully or partially online teaching in the learning process. In this hypothesis, it was predicted that the respondents who work in primate areas, large cities, or conurbations work are more receptive to using social media and implementing fully or partially online teaching. The Spearman correlation model illustrated that there is a very strong

and positive significant at $r_s=.89, p=0.000$, using social media, and there is a poor positive significant at $r_s=.14, p=0.000$, implementing online teaching partially (Table 7). By contrast, there is no correlation between respondents' perceptions and implementing fully online teaching and $r_s=0.00, p=0.115$ because the respondents were not fundamentally in favor of implementing fully online teaching by 78.1% (Table 2). To sum up, the finding suggests that there is an association between job geographical hierarchies of respondents and their perceptions regarding using social media and partially online teaching. Schools' and universities' locations influence using social media and online teaching because the educational facilities are more accessible in major cities compared to small towns and villages. In other words, the size of job locations has a significant role in teachers' perceptions regarding using social media in learning. And teachers from cities are more amenable to using social media in learning compared to their counterparts in villages because modern technology, the internet, and online teaching are more aligned with the developments and modern nature of cities than villages.

7.4 Educational Position correlation with using social media, online teaching fully and partially in the learning

The third hypothesis was proposed to test the correlation between the respondents' job titles or education positions with their perceptions regarding using social media and fully or partially online teaching in learning. In this hypothesis, the respondents with higher education levels were predicted to be more open to using social media and implementing fully or partially online teaching. The Spearman correlation model illustrated there is no correlation between education levels or positions and using social media at $r_s=.09, p=0.002$, and implementing online teaching at $r_s=.000, p=0.992$, (Table 7). However, there is a poor significant correlation between implementing partially online teaching and education level at $r_s=.16, p=0.000$. In general, this hypothesis does not hold true, however, the finding shows a poor significant association between education level and implementing partially online teaching, which denotes that the respondent with a high level of education like professors are more open to this concept than teachers at basic schools. Since this hypothesis proved not to be true, it is easier for the government and education policymakers to introduce online teaching and social media for educational purposes as long as the students' and teachers' education levels do not play a role.

Table 7. Spearman's correlation Model reports association between age, geographical hierarchies, and education positions of respondents and using social media and fully or partially online teaching in the learning process based on their gender differences.

	Variables	Spearman's correlation coefficient	Sig. (2-tailed)
Age	Using social media in learning	-.19	.000
	Fully online teaching	-.14	.000
	Partially online teaching	-.15	.000
Geographical Hierarchy	Using social media in learning	.89	.000
	Fully online teaching	.49	.115
	Partially online teaching	.14	.000
Education Position	Using social media in learning	.099	.002
	Fully online teaching	.000	.992
	Partially online teaching	.16	.000

The correlation value is significant if r_s ranges from -1 to +1

8. Conclusion

Social media have manifested their vital roles as platforms and tools for learning and allows exchanging ideas and constant interactions between students and instructors. Several studies suggest that e-learning can help overcome educational barriers and provide new opportunities for developing

countries using the web and visual tools to facilitate social and professional interaction among lifelong learners whenever and wherever they need (Drigas and Tsolaki, 2015). Social media have been used for learning in the developed countries for a long time in contrast to the developing countries in spite of their advantages to counteract the drawbacks of traditional education methods including limitations on time, space, and facilities. The outbreak of COVID-19 has pushed the world to adopt e-learning and include social media as well to keep the education process going. The majority of the Iraqi people particularly students use social media in their daily life activities but the education departments do not recognize their use as supplementary tools in the learning process. However, some instructors have initiated to communicate with their students particularly at the university level via social media. These efforts and experiences have been practiced as personal initiatives and social media are not desirable for some instructors arguing that they are social communication tools not official platforms for learning. The prolonged COVID-19 pandemic lockdown in Iraq from March to June has finally obligated the educational departments to ask the instructors to use any platform including social media as official and permitted platforms to restart the education process. The data of this study were collected during the lockdown to understand and analyze the perceptions of students and teachers on using social media in learning. This study revealed that the majority of respondents 78.1% have negative perceptions of implementing fully online teaching, nearly half 47.8% are not even in favor of implementing partially online teaching, and 50.4% are also not in favor of social media for educational purposes. This signifies that online teaching in Iraq is not welcomed by students and teachers and hence the education departments will face great challenges in applying online teaching and using social media for learning.

This study suggests that several reasons determined the use of social media and e-learning decline including bad quality of internet 80.9%, expensive internet services 55.5%, lack of electricity 66.9%, lack of ICT of students 60.6% and 45.8% of teachers. The government should take steps to resolve these issues to establish online education as half of the respondents 50.2% use Facebook for the learning and 53.3% believe that the use of social media facilitates learning. Regarding the demographic background of respondents, the male group was more open to using social media for learning and it was statistically significant at $p=0.00$. The findings suggest an association between age and respondents' perceptions regarding using social media and implementing fully and partially online teaching where younger respondents were more open to these ideas. The educational level of respondents, using social media, and implementing e-learning are also correlated which shows that the respondents with a high level of education realized the benefit of using social media more compared to those with a lower level of education. This gives an optimistic indicator because the groups of respondents who declined using social media and e-learning can definitely change their attitudes if the benefits of social media and e-learning are explained to them. Further, the job geographical hierarchies of respondents correlate with using social media and implement e-learning partially. This reflects the lack of education facilities and low-income students in small towns and villages. Although this issue does not relate to the teachers directly, it represents a big hurdle because it is not easy to overcome quickly.

The problem of income and infrastructure imbalance between large cities, and small towns and villages manifests itself in developing countries. It is predicted that the respondents lack the educational facilities in the small town and rural areas, therefore they were not in favor of using social media and e-learning. There are important preparations the universities and schools have to take into account such as providing good internet service and allocate a budget to meet the requirements of the online education process. Finally, offering training courses for the lecturers and improving the infrastructure must be the top priority of the universities' and schools' agenda. Alongside this, autonomy for the universities is vital to set strategic plans and prepare students according to the marketing demands.

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