

2023

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Recommended Citation

Snoussi, T.; Alrubaye, A.; Radwan, A.; and Khalil, E. (2023) "Cultural Dimensions' Effects on Perceptions of Learning Using Social Media: A Comparative Study between the University of Sharjah and the University of Arkansas Students," *Information Sciences Letters*: Vol. 12 : Iss. 3 , PP -. Available at: <https://digitalcommons.aaru.edu.jo/isl/vol12/iss3/24>

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Cultural Dimensions' Effects on Perceptions of Learning Using Social Media: A Comparative Study between the University of Sharjah and the University of Arkansas Students

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Received: 3 Sep. 2022, Revised: 8 Oct. 2022, Accepted: 8 Nov. 2022.

Published online: 1 Mar. 2023.

Abstract: This research examines the impact of cultural dimensions on perceptions of social media as an educational tool in two different contexts. The study included 815 students volunteered to answer the survey questions from the University of Sharjah (UoS) in the United Arab Emirates and the University of Arkansas (UoA) in the United States of America. The results were analyzed via SPSS, and then counteracted with a Push-pull-mooring model to check for differences in terms of cultural contexts that would be reflected in perceptions of the value of social media in learning. The results reveal a number of differences. Students from the University of Sharjah are more immersed in social media for learning, and more interested in forming strong, long-term, and reliable collaborative friendships based on the exchange of ideas and academic assistance. By contrast, students from the University of Arkansas seem to be short-term oriented because their use of social media is related to discussion and instant chat. The authors conclude that UoS students' perceptions reflect a culture of collectivism that invests in social networks to enhance the already deeply rooted offline social activities, while those from UoA reveal a culture of individualism in which social media use is restricted to self-information.

Keywords: Social media, e-learning, Collectivism, individualism, Push-pull-mooring theory.

1 Introduction

As virtual space provides worldwide openness, social media has been considered as one of the most appropriate ways for students to exchange ideas and learn from each other, both formally and informally. Recently, the spread of Covid-19 pandemic prompted many universities to use social networking sites to maintain education due to the high cost of Learning Management System in many countries in the world. Due to the increasing role of social media as a tributary of interaction and social communication [1], the authors believe that cultural influences play an important role in guiding the use of social media in the educational process.

The Covid-19 pandemic has caused a major disruption to education organizations in recent years, affecting more than 94% of students across the world. This generated a need to invent and implement an alternative education system and paved the way for the introduction of digital learning as an effective means of teaching and learning, especially during Covid-19 pandemic [2, 3]. Hence, instructors have adopted 'Education in Emergencies' procedures through several online platforms such as Microsoft Teams, Google Classroom, Canvas and Blackboard, to facilitate student learning while universities and schools were closed [4]. Meanwhile, many countries in the world have faced major problems in accessing digital devices [5, 6]. Therefore, it has become necessary for students to engage in offline activities and self-exploratory learning. Furthermore, using different social media and group forums such as Telegram, Messenger, WhatsApp and WeChat has also been explored and experimented with for teaching and learning in further education. Several authors assert the vital role social media play in the teaching and learning process [7].

The adoption of social media as an educational tool in higher education has thus gained popularity among researchers and practitioners. In Australia, it has been adopted specifically to support different learning approaches such as cooperative learning in a number of universities which contributed to alleviating the challenges of social media, and the intention of students to use social media more and more in the learning process [8]. In the Gulf region, WhatsApp, Snapchat, Twitter and Instagram were the most popular social media networks used by undergraduate students at Shaqra University in Saudi Arabia during Covid-19, while Facebook and Skype were the less preferred [9]. In the same vein, Alzain et al [10] indicate

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that YouTube was the most-used social network for training and continuing education programs among healthcare professionals in eastern Saudi Arabia.

Previous studies have revealed a number of unparalleled opportunities that social media offer for collaboration [11] as well as ability to provide facilities for assignment of tasks and creation of group discussions [3, 7, 12, 13] claim that networks like Facebook, Twitter, and WhatsApp represent a good alternative for classroom-based teaching as they enhance interaction among instructors and learners; the authors argue that Facebook is perceived as a learning platform where students can easily retrieve academic sources and share them with their classmates for intellectual discussion. Purvis et al [14] clarify that the quality of online learning activities can be greater than other modes of learning and facilitate the engagement of all learners rather than just the more confident, as might be seen in face-to-face learning activities. For this, the authors confirm that the quality of online learning activities can be greater than other methods, including face-to-face learning. By the same token, Lacka et al [15] advocate that virtual learning can enhance students' higher education goals achievement with additional inputs and facilities, while Vaghjee [16], based on research conducted in Mauritius, considers that popular social platforms provide the right environment for promoting teacher-generated academic content. Sacks et al [17] consider that social networks provide valuable insights into university students' learning and engagement styles. Chen et al [18] indicate a positive correlation between social media use and literacy through digital reading mediated by knowledge of metacognitive strategies; in their cross-cultural study, the authors show that in Asiatic regions, social media use did not have any significant indirect effect on digital literacy through reading self-concept, whereas in most western countries, an indirect positive effect was observed.

Dirjal et al [19] highlight a generally positive tendency towards Skype-based instruction in Iraqi higher education institutions, mainly among academics who held more constructivist conceptions of teaching and learning. In Morocco, Bahri et al [20], after assessing the readiness and willingness of students to use social media for learning during and after Covid-19 pandemic, concluding that social media is considered as the most secure means of learning. In the context of the Gulf region, Alzain et al [10] confirm that healthcare professionals in eastern Saudi Arabia consider social media platforms to be 'very helpful' for improving their knowledge, creativity, critical thinking, and problem-solving skills, ensuring that their theoretical and practical knowledge is improved.

While a number of studies in the literature have explored the potential of using Facebook in classroom teaching, there is a scarcity of studies that investigate its use as an online learning support application, especially when classes have to be moved to online and remote teaching due to health emergencies like the Covid-19 pandemic [21]. In fact, social platform use appears to negatively affect learners' academic performance, as a number of studies have concluded that utilizing social media in education is associated with poor outcomes among college students [9, 22]. A number of negative outcomes of social media use suggested by Purvis et al [14] are: information overload, communication overload, lack of self-regulation, fatigue, depression, narcissism, stress and decreased academic performance. Figueras-Maz [23], after exploring Spanish university students' perceptions of social network usage for educational purposes in the classroom, noticed that students have a conflicting perception as they both criticize and approve of the use of mobile devices in university teaching. The findings show that there is little use of social networks for educational and creative purposes in Spanish universities. Students appreciate the direct and immediate connection of these networks, mainly WhatsApp and Instagram, but are concerned about their distracting effect in the classroom and the possibility for teachers to intrude on their privacy. Similarly, Kolehar et al [24] reported that only 1% of students at Abdulaziz University (Saudi Arabia) use social media for academic purposes because its use may distract them as it leads them to chat with friends during lessons.

Although a large number of researchers [25, 26, 27] have claimed that cultural differences are mitigated in virtual spaces, recent research has confirmed the impact of cultural contexts on the use of social network features. Amaro and Duarte [28] consider social media to play an important role in traveler planning and decision-making. The authors highlighted that the use of social media in travel planning may differ between countries, while culture may explain these differences. DeAndrea et al [29] indicated that the cultural factor has influenced the way users represent themselves on social networking sites. Zaw [30] investigates how social media shapes the process of intercultural adaptation and concludes that people use social media to become abler to adapt to the new cultures of their host countries and to maintain links with their countries of origin. Al-Omouh et al [31] investigated the impact of cultural values on motivations and attitudes toward social media in the Arab world. They found a difference in cultural influence on motivations and attitudes. While Arab youth seek to be liberated from all kinds of restrictions to meet their human needs by joining social networking sites, their attitudes are still influenced by Arab cultural values. In her study on the social use of modern technologies, Snoussi [32] emphasized that cultural context plays a major role in the usage process, and came up with the statement: "Tell me how you use social media, I will tell you who you are." The process of using social media thus becomes a determining factor of the user's social identity.

As for learning purposes, Watkins [33] has reported that cultural differences between Western and Asian students, for example, have an impact on teaching values, methods and strategies. In the same vein, Balakrishnan et al [34] revealed that cultural standards influence students' thinking style as results confirmed that Japanese students learn more through

the application of memorization than do Australians. They concluded that the cultural factor is a determinant element in organizing self-learning. Slim and Hafedh [35] explore the effects of Facebook-assisted teaching on learning English for specific purposes by students at the University of Tabuk, Saudi Arabia. They concluded that the specific cultural and educational context must be taken into account in the learning process.

Based on previous (published) research, the author concluded that the diversity of social media platforms used in several contexts. Numerous opportunities have been identified; among the most prominent of these are the sustainability of education in times of the Covid-19 pandemic, rapprochement, interaction, and the exchange of all kinds of ideas. On the other hand, the biggest challenge lies in the weakness of Internet connection in some areas and the breach of the principle of privacy for some users. In addition, several scholars have made it clear that the specific cultural and educational context must be taken into account in the learning process, pointing out that social media is not a suitable platform for formal education, not least because it is primarily a tool for social networking and friendship. This social character, infused with the user's cultural context, is reflected in the choice of platforms used, the peculiarities of use, and the perceptions of social media as a learning and teaching tool. The authors note a wealth of literature on studies focusing on the impact of culture on social media. In particular, it has been demonstrated that there are many factors that are likely to influence the use of social media in higher education in Asian contexts. However, there is a lack of comparative studies between Arab / Gulf and western social media users for learning purposes. Thus, they believe that cross-cultural study is necessary to examine whether students with different cultural backgrounds and norms view differently the role of social media in promoting learning.

This study provides background information on the use of social media in Emirate (UoS) and American (UoA) higher education environments and explores how cultural settings affect usage profiles.

The study proceeds from two hypotheses:

H1: Convergence in terms of age, education level, and specialties leads to similarities in the perceptions of UoS and UoA students regarding the opportunities and challenges posed by social media as educational tools.

H2: Differences in terms of cultural contexts (America vs. the UAE) will be reflected in perceptions of the value of social media in learning, where differences emerge.

Push-pull-mooring theory (PPM) refers to how individuals' movement is influenced by three factors: push elements begin with passive elements, which serve to repel people. Pull factors express the positive elements of the journey's endpoint. Mooring factors are complementary components that enable or restrict immigration provisions according to personal backgrounds.

A PPM model was built to address students' switch to online settings based on the following factors: ease of use, academic reasons, social networking, e-learning perception, barriers, relevance, and social impact.

Several studies cite Geert Hofstede's cultural dimensions to discuss the impact of national culture on various social networking issues [35, 36, 37], as they can be used in a non-regulatory context [38]. The authors believe it appears to be very useful as a reference while analysing PPM factors to measure cultural impact on social media engagement for learning purposes, within two different cultural contexts: The United Arab Emirates and the United States of America.

Based on Hofstede's framework, the cultural dimensions consist of individualism/collectivism, masculinity, power distance, long-time orientation, uncertainty avoidance, and indulgence/restraint. The authors will refer only to the dimensions that are reflected in the results.

2 Method

The agreed method for examining the factors affecting students' use of social media in higher education is applied through survey questions conducted in two of the biggest universities in the United Arab Emirates (UoS) and the United States of America (UoA) (N= 815). An electronic questionnaire was designed and put in Google Forms; The link was distributed both in UoA and UoS during the months of April – May 2022. Data was analyzed using SPSS software (standard deviation, means, T Tests... and so on, were measured).

After exposing the survey data around three themes: peculiarities of use, perceived opportunities and limits, the authors intend to evaluate the findings based on the PPM factors to trace the impact of cultural context on participants from Emirate and American universities as follows:

Push factors: convenience, academic reasons, ease of use, and social networking,

Pull factors: opportunities for e-learning perception,

Mooring factors: Limits of e-learning.

3 Results

Table No. (1) shows the characteristics of the sample of UoS and UoA students in terms of gender, age, qualification, and specialization.

Table 1: The frequency distribution of students according to general characteristics

Gender		College/University		Total
		UoS	UoA	
Male	Count	176	89	265
	%	51.6%	18.8%	32.5%
Female	Count	165	385	550
	%	48.4%	81.2%	67.5%
Total	Count	341	474	815
	%	100.0%	100.0%	100.0%
Age		College/University		Total
		UoS	UoA	
15 - 20	Count	122	442	564
	%	35.8%	93.2%	69.2%
25 - 35	Count	219	32	251
	%	64.2%	6.8%	30.8%
Total	Count	341	474	815
	%	100.0%	100.0%	100.0%
Qualification		College/University		Total
		UoS	UoA	
Undergraduate	Count	179	468	647
	%	52.5%	98.7%	79.4%
Graduate	Count	162	6	168
	%	47.5%	1.3%	20.6%
Total	Count	341	474	815
	%	100.0%	100.0%	100.0%
Specialization		College/University		Total
		UoS	UoA	
Life sciences and technology	Count	288	432	720
	%	84.5%	91.1%	88.35%
Social sciences	Count	53	42	95
	%	15.5%	8.9 %	11.65%
Total	Count	341	474	815
	%	100.0%	100.0%	100.0%

The data show that there is an even balance in terms of gender in the University of Sharjah (51.6% versus 48.4%), while females dominate the American sample (81.2%). The same observation is valid in terms of qualifications (undergraduates make up 98.7% of UoA students but only 52.5% of UoS students). Furthermore, 64.2% of participants at the University of Sharjah are between the ages of 25 and 35, while 93.2% of Americans are between the ages of 15 and 25. Thus, it seems that the University of Arkansas students are much younger than their counterparts at the University of Sharjah. Also, the sample consists mainly of life sciences and technology students from both universities (84.5% UoS and 91.1% UoA).

General SM usage features

This section examines the main characteristics of social media use among students at the University of Arkansas (UoA), USA and the University of Sharjah (UoS), UAE. The focus is on the type of platforms used, frequency of use and general and educational purposes of use:

1. Types of SM platforms used

Most-used social media platforms by UoS and UoA students are as follows:

Table 2.: Most-used SM Platforms

SM	UoS		UoA		Total	
	Mean	Std.	Mean	Std.	Mean	Std.
[twitter]	1.73	1.13	1.01	1.16	1.31	1.20
[facebook]	1.19	0.97	1.34	1.19	1.28	1.11
[whats app]	2.55	0.91	0.38	0.98	1.29	1.44
[you tube]	2.50	0.86	1.97	1.22	2.19	1.11
[telegram]	1.45	1.45	0.13	0.48	0.68	1.20
[skype]	1.00	0.96	0.08	0.34	0.46	0.81
[viber]	0.43	0.76	0.04	0.28	0.20	0.57
[wechat]	0.38	0.75	0.02	0.17	0.17	0.53
[myspace]	0.29	0.68	0.02	0.16	0.13	0.47
[bado]	0.28	0.64	0.03	0.26	0.13	0.48
[others]	0.84	1.12	0.57	1.11	0.68	1.12
[instagram]	1.73	1.42	3.18	1.03	2.57	1.40
snapchat	0.50	1.25	3.15	1.20	2.04	1.79
tik.tok	0.37	1.08	2.90	1.36	1.84	1.77

Findings show that Instagram is the most popular social networking platform used both by UoS and UoA universities (means = 2.57); with this common feature among American and Emirati university students, the authors find that there are trends unique to each. While University of Sharjah students primarily use WhatsApp (means= 2.55), YouTube and Twitter (means =2.50 for each), University of Arkansas students choose Snapchat (means = 3.15) and TikTok (means = 2.90). Important to note also that UoA students have a great interest in the YouTube channel as it comes third in terms of use (means = 1.97).

2. *Frequency of social media use*

The weekly frequency of use of social media platforms by UoS and UoA sample are summarized in Table 3.

Table 3: Weekly frequency of SM use

Frequency		College/University		Total
		UoS	UoA	
1–5 h/week	Count	54	96	150
	%	15.8%	20.3%	18.4%
6–10 h/week	Count	121	229	350
	%	35.5%	48.3%	42.9%
11-15 h/week	Count	133	149	282
	%	39.0%	31.4%	34.6%
more than 15 h/week	Count	33	0	33
	%	9.7%	0.0%	4.0%
Total	Count	341	474	815
	%	100.0%	100.0%	100.0%

The data show widespread SM use with nearly half of the University of Arkansas students who participated in the survey using these platforms 6-10 hours per week (48.3%). The UoS sample also demonstrates these networks are more popular, with 39% using these networks 11-15 hours per week.

3. *General SM use purposes*

Table 4. Purposes of SM uses by UoS and UoA students

Uses	UoS		UoA		Total	
	Mean	Std.	Mean	Std.	Mean	Std.
Self-promoting	1.25	1.19	1.10	1.16	1.16	1.17
Self-news updating	1.42	1.09	1.99	1.18	1.75	1.18
Entertainment	1.64	1.21	3.42	0.71	2.68	1.30
Participating in group discussions	1.99	1.03	1.57	1.12	1.75	1.10
Curiosity	1.73	1.07	2.69	0.98	2.29	1.12
Reading posts' comments	1.94	1.11	2.18	1.07	2.08	1.09
Looking for academic support	1.91	1.03	1.32	1.04	1.57	1.07
Without a specific reason	1.56	1.10	2.46	1.12	2.08	1.20

Entertainment appears to be the primary general purpose of UoS and UoA students' use of social media (means = 2.68), followed by curiosity (means = 2.29). Also, both samples appear to be driven by reading posts' comments (means = 1.94 and 2.18). UoS students appear more interested in participating in group discussions (means = 1.99), while the UoA sample shows a particular interest in self-news update (means = 1.99). Remarkably, the search for academic support appears among the top three motivations of University of Sharjah students (means = 1.91), while it ranks second to last in the UoA sample (means = 1.32).

UoS and UoA students' perceptions of the opportunities offered by SM to learn

4. Academic groups and educational pages UoS and UoA students belong to

Table 5: Number of academic groups joined, and SM educational pages followed, by UoS and UoA students

The number of academic groups joined		College/University		Total
		Gulf	USA	
1 to 5	Count	265	442	707
	%	77.7%	93.2%	86.7%
More than 5	Count	76	32	108
	%	22.3%	6.8%	13.3%
Total	Count	341	474	815
	%	100.0%	100.0%	100.0%
The number of educational pages followed		College/University		Total
		UoS	UoA	
1 to 5	Count	239		
	%	70.1%	85.4%	79.0%
More than 5	Count	102		
	%	29.9%	14.6%	21.0%
Total	Count	341	474	815
	%	100.0%	100.0%	100.0%

According to Table 2, both UoS and UoA students are relatively attracted to academic groups as 86.7% of them are affiliated with 1-5 groups; only 13.3% are members within more than five academic groups on social media. This indicates that affiliation to, and follow-up of, academic groups and pages occur according to the educational needs of the students. Access to these groups seems to be limited to delving into the educational materials of the courses they are studying or seeking help with homework and discussion about research and practical projects.

5. SM use for learning purposes

Table 6: SM use for learning

Learning activities	UoS		UoA		Total	
	Mean	Std.	Mean	Std.	Mean	Std.
Search for info to understand scientific and educational jargon	1.20	1.38	2.19	1.18	1.50	1.07
Share homework and links related to lectures and projects	1.78	1.12	2.14	1.15	1.99	1.15
Search inspiration from projects and topics exposed	1.63	1.18	2.26	1.15	2.00	1.20
Discuss with classmates about projects/assignments...etc.	1.69	1.18	2.49	1.17	2.15	1.24

Discussion with classmates about projects and assignments appears to be the main activity of students from both samples (means = 2.15), followed by seeking inspiration from projects related to their coursework (means = 2), and sharing of homework and links related to lectures and projects (means = 1.99). It is clear from the above that the power of social media attraction lies in providing an opportunity for interaction and exchange of information and ideas rather than a space for traditional indoctrination of knowledge.

6. Opportunities SM offer for learners in the UoS and UoA

To explore the opportunities offered by these platforms, American and Emirati sample perceptions on the use of social media in learning were collected.

Table 7: Social media opportunities in learning from students' perspective

Opportunities	UoS		UoA		Total	
	Mean	Std.	Mean	Std.	Mean	Std.
Easy to use	2.49	1.33	4.31	0.68	3.55	1.35
Able to post text/photo/video...etc.	3.40	1.60	4.38	0.70	3.97	1.26
Able to share educational documents	3.50	1.59	3.85	0.92	3.70	1.26

Easy to interact with fellows and instructors	3.45	1.53	3.85	0.95	3.68	1.24
Easy to download content	3.41	1.57	3.99	0.82	3.75	1.23
Groups can be set up	3.38	1.51	4.11	0.79	3.80	1.21
Variety of privacy options	3.41	1.53	3.69	0.99	3.58	1.25
Able to host documents	3.32	1.46	3.56	0.95	3.46	1.19
Instant chatting about projects / assignments	3.38	1.50	4.07	0.76	3.78	1.18
Send and receive private messages	3.40	1.57	4.23	0.73	3.88	1.22
Follow the news of educational nature	3.48	1.52	3.93	0.89	3.74	1.22

Regarding the general trend of answers about the opportunities that social media offer to the learners, the data in Table 7 show that posting texts, images or videos is considered the most valuable opportunity for participants from both contexts (USA and UAE) as means = 3.97; private correspondence with friends and followers comes second with means = 3.88, then group discussion (means = 3.80) and instant chat (3.78).

Comparing the results of both samples, the authors found that UoS participants highlight the ability to share educational documents (means = 3.50), ease of interaction with colleagues and teachers (means = 3.45), and download educational documents (means = 3.41) Meanwhile, UoA participants focus more on the opportunities to follow the news of educational nature (means = 3.93) as well as instant chatting about projects and assignments (means = 4.09).

UoS and UoA students' perceptions of the challenges faced while learning via SM

Table 8: Perceptions on SM limits in learning

Limits	UoS		UoA		Total	
	Mean	Std.	Mean	Std.	Mean	Std.
Used more for personal and social life	3.68	1.10	4.16	0.85	3.96	0.99
Resources are not easy to collect compared to LMS	3.87	1.07	3.25	0.98	3.51	1.07
Group collaboration with the same docs is not easy	3.40	1.09	2.86	1.04	3.09	1.09
Cannot integrate with VLE	3.26	1.16	2.85	0.95	3.02	1.06
Sometimes groups move from university-related work to personal	3.48	1.05	3.51	0.98	3.49	1.01
Hard to organize (not structured spaces)	3.62	1.02	3.15	1.03	3.35	1.05
More difficult to review past information beyond certain points	3.37	1.18	3.31	1.06	3.34	1.11
Absence of academic language usage	3.38	1.22	3.24	1.02	3.30	1.11
Lack of credibility on shared content	3.56	1.14	3.64	1.01	3.61	1.06

According to Table 8, the limits agreed upon by the two samples concerning the use of social media as a learning tool, lie in the use of these platforms for personal and social life (means = 3.96), the lack of credibility of some shared content (means = 3.61), and the difficulty of collecting educational resources compared to management systems learning.

Participants from the University of Sharjah highlighted the differences between social networks and learning management systems in terms of collection and storage of educational resources (means = 3.87); whereas participants from the University of Arkansas were more concerned about the fact that members of the social media groups are always moving from learning-related activity to that of personal issues or interests (M = 3.51).

Differences and similarities in use and perceptions of social media as a learning tool

This part of the research is dedicated to answering the fourth research question related to the extent of the impact of the spatial context (USA - UAE) on students' answers participating in the research in terms of the characteristics of use and/or perceptions about the opportunities and challenges facing social media as an educational tool. Its goal is to check whether technological uses (social media in particular) are shaped by the cultural environment of the user and thus the possibility of talking about a global use related to learning.

Table 9: Overall comparison between participants from UOS and UOA regarding the sample variables

Uses, opportunities, and limitations	University	N	Mean	Std. Deviation	t	df	Sig.
General uses of social media	UoS	341	13.44	5.724	-8.839	813	0.000
	UoA	474	16.73	4.870			
Uses of social media for learning	UoS	341	6.30	3.756	-2.511	813	0.012
	UoA	474	6.89	3.003			
Social media opportunities in learning	UoS	341	36.60	15.128	-9.569	813	0.000
	UoA	474	43.98	6.179			
Social media limits in learning	UoS	341	31.62	6.896	3.694	813	0.000
	UoA	474	29.98	5.738			

Differences between students in UoS and UoA are significant ($p.value=0.000$) in the general use of social media, in perceptions of the opportunities for using these platforms in learning. Students in USA have many more uses for it than do students in the Gulf (mean= 16.57); they also have more positive opinions about it than do students in the Gulf (mean= 43.98). Results also indicate the difference between the two groups in their opinion of its limitations; students in the Gulf have more worries about using it than do students in USA (mean= 31.62).

The PPM model and cultural implications

To explore the cultural elements that influence the perceptions of UoS and UoA participants on social media for learning purposes, the following factors will be examined separately:

Push factors: convenience, academic reasons, ease of use, and social networking,

Pull factors: e-learning opportunities,

Mooring factors: The limits of e-learning.

Push factors

7. Convenience

According to data, participants from Emirate and American cultural contexts appear to be familiar with social media platforms, which make it convenient for them to use for learning purposes. Similarities appear in the use of Instagram and YouTube as the most popular platforms in both contexts.

8. Academic reasons

The authors point out that the main reason for switching to social media for learning is the global health situation (COVID-19) and social distancing measures still in place when the survey was distributed (April 2022). Consequently, the students proceeded to communicate with their colleagues and professors through social media in search of academic support, which appears in the top three motivations of respondents at the University of Sharjah (see Table 4).

An important note at this point is that the University of Arkansas sample does not appear to be very interested in this push factor, because the impetus for seeking academic support came penultimate.

9. Ease of use

This factor appears to be significant for both samples as shown in Table 7. The authors believe this finding makes sense given the high frequency of weekly use in both samples despite the slight difference in favor of UoS participants (11 to 15 hours per week versus 6 to 10 hours per week?).

10. Social networking

Social networking also seems to be a substantial push factor since the two samples confirm use of social media by curiosity, and reading posts' comments. Social networking practices seem to be more pronounced by UoS participants, who claimed using social media to engage in group discussion, while the American sample showed a greater interest in self-news updates.

To explain the participants' push factors in the American and Emirate contexts, the authors believe that Hofstede's cultural dimensions would be of great interest, especially around individualism/collectivism. According to him, in the collectivism culture, people are integrated into strong, cohesive in-groups, often extended families. The members of collectivism cultures are more likely to maintain closed and narrow in-group relationships than members of individualistic cultures [39].

When applied to Gulf versus American contexts, the authors believe that participants from the University of Sharjah behave as in a collectivism culture, using social networks in ways that complement or enhance their social activities that have been reduced due to the pandemic. This means that they communicate with people who are already part of their extended social network or learning environment, such as classmates and professors in this study. Motivated by high levels of trust and broad social interaction with each other, participants of the Emirate university interact via social media for academic support. Conversely, participants from the American context behave as in a culture of individualism where the strength of the bonds that bind people to others is not strong. For this, they only use social media to provide news. Therefore, it can be concluded that there is a relationship between collectivism (low individualism) and pushing factors to use social media for learning purposes.

Pull factors

Pull factors mainly lie in participants' perceptions of learning on social networks. In times of social distancing, the

alternative seems to be creating parallel communities within the virtual space. Thus, perceptions of opportunities provided by social media in learning are valued. Despite the difference in spatial and cultural contexts, the two samples value the advantage of social media in building academic groups and educational pages. They see social media as a space to discuss and exchange ideas about assignments, lectures, and research projects.

Differences were noted between the two samples: While participants from the University of Sharjah emphasized the capabilities of document sharing and downloading, the American participants seemed to be drawn more to following the news of an educational nature and instant chatting about projects and assignments. The Emirati sample appears more pragmatic, focusing on actions, while the American sample focuses on verbal communication and interaction.

The Emirati sample appears to have a utilitarian relationship with social media. Participants are highly focused on how to invest in these networks to get their homework, projects, and assignments done, The American sample seems to view social media primarily as a space for effective communication, discussion and cross-fertilization of ideas, including in the educational field.

Looking at the Hofstede model [38], the values of long-term orientation in society highlight perseverance in building relationships. People are usually more concerned with the long-term effects of their decision. By contrast, short-term orientation symbolizes societies that uphold the virtues of personal fortitude and stability, including a tendency toward consumption and preservation of material status.

It seems from the above that the participants from the Emirate context are more immersed in social media for learning, more interested in making strong, long-lasting and reliable collaborative friendships based on the exchange of ideas and academic assistance (sharing lessons, assignments and projects) to generalize the benefit. Participants from the American university seem to be short-term oriented as their uses are linked to discussion and instant chat. Thus, it can be concluded that there is a relationship between long-term orientation and pulling factors to use social media for learning purposes.

Mooring factors

The mooring points lie mainly in participants' perceptions of social media limits as an educational tool. Use for personal and social life as well as lack of credibility in shared documents are the main challenges that participants from the two samples fear. The UoA sample seemed to be concerned about conversations that might spill over into personal issues, while UoS respondents delved deeper, claiming to compare the structure and delivery capacity of social media services with learning management systems.

According to Hofstede's fifth cultural dimension, people from high uncertainty avoidance cultures outflow ambiguous situations; their concern about challenges is generally higher than those from cultures with low uncertainty avoidance [38]. Having said that, UoS participants' perceptions mask a high uncertainty avoidance culture, compared to their UoA counterparts, who inspire more positive vibes. Gulf participants seem to be more preoccupied with social media limits (mean = 43.98). Consequently, there is a relationship between uncertainty avoidance and mooring factors related to social media use for learning purposes.

4 Discussions and conclusion

Findings confirm that convergence in terms of age, education level, and disciplines leads to many similarities in UoS and UoA participants' perceptions regarding the opportunities and challenges posed by social media as educational tools (H1). However, some differences should not be neglected. UoS participants primarily value the ability to share educational documents, while those in UoA appreciate educational news follow-up and instant chat about learning-related topics. As for the limitations of social media in learning, University of Sharjah participants appear more frustrated as they are more concerned with the credibility of academic information and documents. Meanwhile, UoA respondents' preoccupation remains the shift from academic to personal conversations. The findings related to social media opportunities for learning are in line with what have been concluded by Snoussi et al [40]; the online environment is beneficial for the learning process since it integrates all forms of media, which makes the process more effective. Cunha et al [41] also highlighted the power of these networks in enabling knowledge building and interaction through many tools. As for the observed limitations regarding the credibility of information circulated on social media, they fit within the findings of Snoussi et al [40] while conducting a comparative study between students of King Saud University and University of Sharjah.

Moreover, the results confirm that differences in terms of cultural contexts (UAE vs. the USA) are reflected in perceptions of the overall value of social media in learning (H2). The authors believe that perceptions of UoS participants reflect a collectivism culture that invests in social networks to boost their already deeply rooted social activities offline. Participants from the American university reveal a culture of individualism in which the use of social media is restricted to self-information. At the same time, participants from the Emirate context give more value to making strong, long-term and reliable collaborative friendships, while those from the American university appear to be short-term oriented as their

perception of valuable use is linked to discussion and instant chat. These statements are consistent with those of [42], who note that social media from long-term societies support the building of long-term relationships whereas in societies with short-term orientations, building trust and strengthening bonds is very difficult [43].

A final point of interest is that UoS participants' perceptions of social media's limits to learning reflect a higher uncertainty avoidance culture, compared to their UoA counterparts, who inspire more positive feedback. This is in line with Markus and Krishnamurthy [42] who note that professional-user photos on Cyworld USA (low uncertainty avoidance) are of individuals themselves, and Cyworld Japan (high uncertainty avoidance) consist of animals, toys, children, or even celebrities in the place, picture and discussion sections.

The authors believe that the results of this study will contribute to understanding the allocation of social media to learning in different cultural contexts and to identify the role of cultural dimensions in shaping usage features.

Declaration of Conflicting Interests

The authors declared no conflicts.

Funding

The authors received no financial support for the research.

Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

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