

**RESEARCH ARTICLE****The Impact of E-Learning on the EFL Learners' Motivation in Learning Medical Terms**

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**Abstract:**

Acquiring medical terminology can be a challenging task that requires a high level of motivation from students. Utilizing technology platforms like WhatsApp and Zoom have been identified as an effective method to boost the motivation of EFL medical students by promoting collaboration. The basic objective of this study is to explore how technology impacts the motivation of students when learning medical terms. The research focuses on leveraging social media tools to support and enhance students' motivation to learn Medical Terms at the University of Gezira. By encouraging students to work together in creating engaging stories using medical terminologies, the study aims to investigate how the integration of social media can enhance motivation levels among higher education students. The study adopted descriptive, analytical methods; a survey consisting of 20 items was administered to 120 Medical students last semester. The data was analyzed using SPSS, revealing that technology plays a significant role in promoting students' motivation and academic performance. The results indicate that students actively engage in sharing information and Knowledge and collaborating on complex medical problem-solving tasks through social media platforms. The study suggests that learning via social media is an effective and engaging approach for students. Based on these findings, the study recommends incorporating social media into EFL classroom interactions to foster a conducive learning environment that encourages positive relationships among learners. Additionally, the study highlights the importance of extracurricular activities and modern technological strategies as motivational tools in EFL classrooms.

**Keywords:** E-Learning, medical terms, collaboration, motivation, technology, Zoom, WhatsApp

**Introduction:**

The techniques and strategies utilized to enhance and promote motivation and interactivity in EFL medical classes are largely inadequate. This is due to the fact that many EFL Sudanese learners still struggle with effective and sufficient communication. Based on our observations as lecturers at the University of Gezira before coming to Jazan University, it is evident that many students perceive English as a highly complex subject. This mindset leads them to adopt a passive approach in class and disregard opportunities to test their own learning. The traditional teaching and learning methods fail to encourage students to become active learners. Given that motivation, desires, and attitudes are crucial factors in language acquisition, EFL students require motivation within a new environmental atmosphere. Consequently, the integration of e-learning tools has become a part of the educational process and has demonstrated its value in learning practices. Research has shown that social media plays a significant role in increasing students' motivation and communication via collaboration, thereby fostering positive attitudes toward second or foreign-language performance.

**RESEARCH ARTICLE****Statement of the Problem**

Sudanese medical students at the university level are facing a significant lack of the necessary resources to motivate them. This is evident in their interactions with native speakers in social settings, as well as in their written communication with teachers and peers, where they tend to rely on basic English and fixed phrases. As future doctors, they struggle to use medical terms effectively in their writing and conversations with their patients. Furthermore, students continue to struggle with accurate pronunciation of medical terms. Their teachers are lagging behind and still using traditional teaching methods, and some of them are hesitant to incorporate technology and other resources into their teaching practices. Teachers are uncertain whether utilizing these tools of technology will lead to the same success as seen in other fields. They have to prepare students to communicate effectively on a global scale using various technological platforms, such as Zoom, WhatsApp, and other network applications in collaboration.

**Objectives of the Research**

The objectives of the research can be summarized in the following

- To explore the methods in which the application of technology can affect students' motivation.
- To have learners communicate effectively with their patients in a survival digital era.
- Involve target students in creating creative medical stories through WhatsApp.
- To create a place for students to collaborate with their instructor and with each other outside of the classroom.

**The Significance of the Study**

The utilization of technology in the classroom has become a popular trend, and this research aims to explore the effectiveness of incorporating networks into English as a Foreign Language (EFL) instruction. Numerous studies have investigated how social media can be successfully integrated into the teaching methods of English in Sudan.

This study holds significant importance as it demonstrates that using networks in Sudanese classrooms can enhance students' motivation, engagement, and willingness to learn collaboratively. Platforms such as Twitter, Instagram, room chat, and WhatsApp are utilized to achieve better outcomes. Furthermore, this research examines the various learning opportunities and possibilities that technology can offer fresh EFL students in universities and higher institutions. The ultimate goal is to facilitate their mastery of the English language. Additionally, the researchers anticipate that using technology in education and internet applications (i.e., WhatsApp) will increase students' motivation and interest and foster a positive attitude toward learning English.

**Literature Review:**

Prior studies have noted the importance of E-learning on medical learners' motivation and communication. Nowadays, the network's technological applications provide active and creative learning communities for second language learners. Collaborative learning and creativity can be facilitated through apps (Su, F., & Zou, D. 2022). According to Lee, G., Wallace, et al., A. (2018). Most English learners do not use English as a means of communication if they sit quietly and passively via lecturing and texting, with few opportunities to receive language input.

Active learning is essential for English learners to utilize the target language effectively. The impact of social networks on medical learning is significant. Educators should explore ways to maximize the opportunities provided by social media in order to enhance and support learning interventions. This involves engaging students in active learning by encouraging them to create content, facilitating intercommunication and feedback, promoting collaboration, and granting access to resources and interaction without geographical limitations. Network platforms like Twitter, Instagram, and WhatsApp can create active learning environments for communication in English, which is the dominant language. Twitter, for example,

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encourages students to express their thoughts concisely and clearly. In addition, Cindy, Q. A. (2021). describes it as a unique technique to improve students' ability to communicate effectively through brief writing. Teachers are also trying to work out solutions to implement Twitter because it has a limited number of 140 characters. Therefore, learners can be assigned to write a short story. In practice, a student initiates the process by writing a few lines, and then the next student takes their turn, and so on. "Engaging in exercises that require students to communicate in a concise and clear manner can be beneficial in developing their focus on the essential aspects of patient care. These skills are highly valuable in clinical practice and directly applicable to real-life situations in healthcare, where accurate sharing of important information, such as during patient handovers and transfers, is crucial (Tercero et al., 2020). Additionally, Instagram is a smartphone application that enables users to capture photos or post 15-second videos, which can then be shared on Instagram and various other social networks like Twitter and Facebook. Powell Library staff utilize Instagram as an enjoyable educational tool to teach students about medical and surgical instruments used during the Civil War. For example, they posted a picture of a small saw that was used for surgical amputations, accompanied by the question, "Can anyone guess the purpose of this saw?" (Salomon, 2020). According to social media research, Instagram provides students with an opportunity to express their experiences by selecting and decorating photos to present them as they desire Huebner, E. J. (2022:21). These studies demonstrate that platforms like Twitter and Instagram enable students to collaboratively and creatively create stories and share information. There exists a connection between social media and visual and active learning, which enhances students' thinking skills. For instance, students can utilize videos, images, and short stories to effectively convey large amounts of information when utilizing social media. This combination of verbal and visual information aids in making connections, understanding the relationships between ideas, recalling relevant details, and facilitating the expression of thoughts through writing. Learning through social media cultivates students' curiosity and enhances their creativity. As one teacher aptly stated, "Knowledge is not merely based on facts; it is rooted in curiosity. A single inspired teacher has the power to transform a student's life" Chopra & Tanzi, (2012:7)

**Technology and Motivation**

Intrinsic and extrinsic motivation is a crucial factor that plays a significant role in the acquisition of a second language. Studies have indicated that students need to be motivated in order to reduce distractions and fatigue during lectures (Ornstein, 1995). To understand the various attitudes, Worley, 2011 and Dusseau M (2019) explain how new-generation learners experience motivation in higher education and the strategies they employ to increase motivation for all adults.

Researchers have highlighted the importance of using technology in fostering students' motivation and transforming the learning environment through innovative educational methods that break down traditional learning barriers, ultimately leading to enhanced student learning. If it comes to students who enrolled in an online Education course, those who are tasked with completing routine assignments display a noticeably higher level of motivation and engagement via concrete visualization shown in Instagram. (Cited from Lussier, C. M., Ditta, A. S., & Speer, A. C. (2023).). The integration of social media tools in education has proven to be valuable in educational practices. By incorporating social networking applications into medical humanities class activities, a wide range of benefits over traditional academic resources and techniques can be observed. These applications have the potential to revolutionize the outdated medical humanities teaching system and better prepare students for a future where social media will play a significant role in the field of medicine. A study suggests that students in a structured social networking environment for

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education can quickly join learning communities and access course materials (Alghamdi et al (2019:16). In the same regard, Wannas, A. S., & Alshaye, R. A. (2024:77), state that motivation has two types relating to the ability of a second or a foreign language (ESL/EFL) they are the integration of intrinsic and extrinsic motivation:

- I. Integrative motivation refers to the use of ESL/EFL for social interaction, where learners aim to become part of a social community or local society. This type of motivation involves a desire for students to engage with individuals who speak the target language, socialize within that community, appreciate its culture, and become integrated into the society where the language is spoken. Essentially, integrative motivation is driven by an interest in practicing a second or foreign language with the goal of studying it, forming relationships with speakers of the language for personal or social reasons, or becoming part of a new community that uses the target language in its social interactions. This motivation leads to the development of proficiency in the target language.
- II. Instrumental motivation refers to the situation where students acquire a second language with the aim of enhancing their career prospects, earning respect and authority, accessing practical and experiential information, or simply achieving high grades in academic assignments.

**Usage of Mobile Learning**

I. In today's fast-paced digital world, the importance of self-study in language learning cannot be overstated. From my personal experience, dedicating just an hour a week to self-study can yield immediate results for students. However, many medical students have opted to utilize social media platforms for additional learning activities, leveraging their mobile devices to be more creative and motivated at any given time.

II. With the increasing prevalence of mobile technology, it makes sense to provide students with the opportunity to study whenever and wherever they choose, using their mobile devices. To kickstart this approach, we assign small, practical homework tasks to our students, utilizing platforms like Zoom, Instagram, WhatsApp, etc. We encourage students to dedicate a few minutes each day to practicing English and familiarizing themselves with medical terminologies through their mobile devices, introducing them to concise medical terms and promoting a mobile-centric learning approach.

**Using Social Media in Sudan:**

Sudanese use social media to stay updated on what is going on around the world, keep in touch with friends and families, share their opinions, and find entertaining content. Officially, the government uses networks for military and commercial purposes. People use Facebook, Zoom, and WhatsApp mainly for communications and, recently, for education with different institutes. Sudanese prefer to use WhatsApp, and it is considered the most social communication platform that enables the exchange of text messages, voice calls videos, and pictures (Guiñez-Cabrera et al., K. (2021). By signing up for WhatsApp, anyone can make voice and video calls and share images, documents, user locations, and other applications. With over two billion users worldwide, it has become a crucial tool for social interaction in Sudan. Because of these features, a growing number of studies have examined its potential use for language learning and teaching. According to Kahlid Albaih in 'The Guardian' (Oct. 2015), WhatsApp has emerged as a significant news outlet for the Sudanese population, owing to its convenient sharing capabilities and extensive group chat feature. This has facilitated the connection of the vast diaspora with the most recent wedding photos and local gossip. Recently, some of the Sudanese universities have used WhatsApp as a means to convey messages and lectures to their medical students in groups and patches. The app's free accessibility and

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compatibility with various smartphone models contribute to its widespread popularity among users all over the world.

**Research Methodology**

In order to find persuasive answers to the research questions and find solutions to the problems in using E-Learning, the paper will adopt a descriptive, analytical method using a survey. The study used a 5-Likert Scale graded from strongly agree to strongly disagree.

**The Participants**

The study includes 120 EFL medical students from the University of Gezira in Sudan. All participants' majors are medicine and surgery at the Faculty of Medicine. All participants are native Arabic speakers.

**Research Questions**

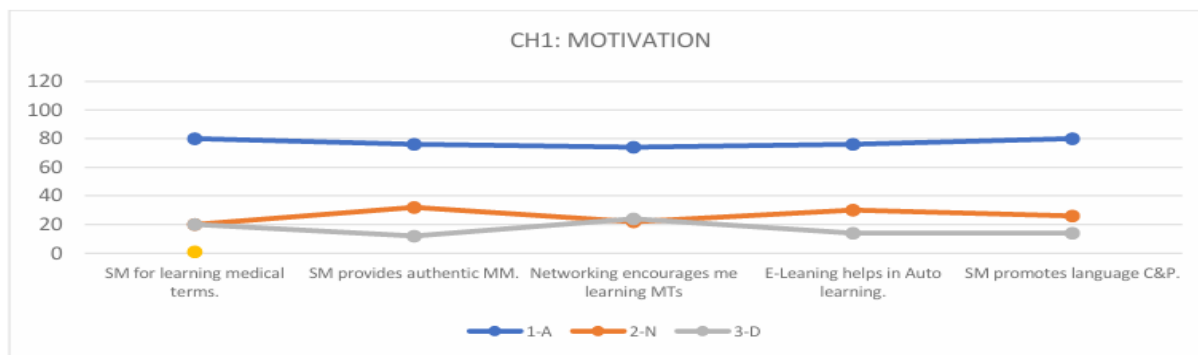
- To what extent can the application of networking platforms affect students' motivation?
- To what extent does social media enable medical students to communicate effectively?
- To what extent do social media tools create a place for students to interact in collaboration with their instructor and with each other outside of the classroom?
- To what extent can students be involved in creating creative stories through Zoom and WhatsApp platforms?

**Assumptions**

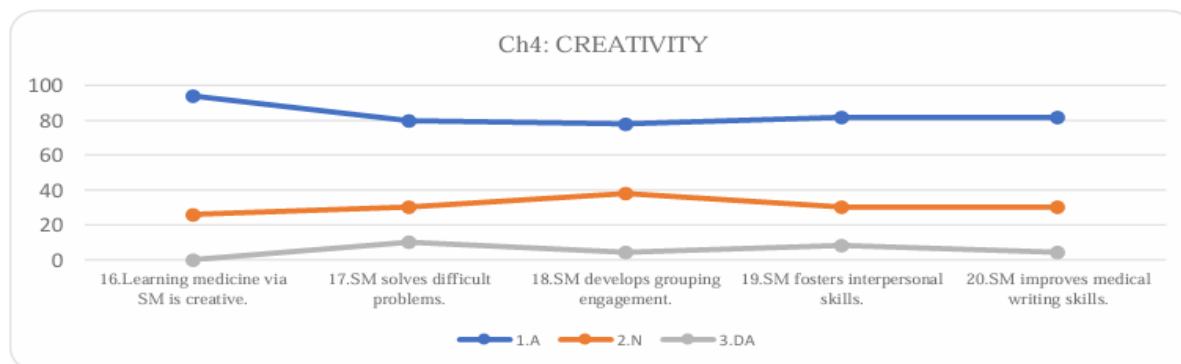
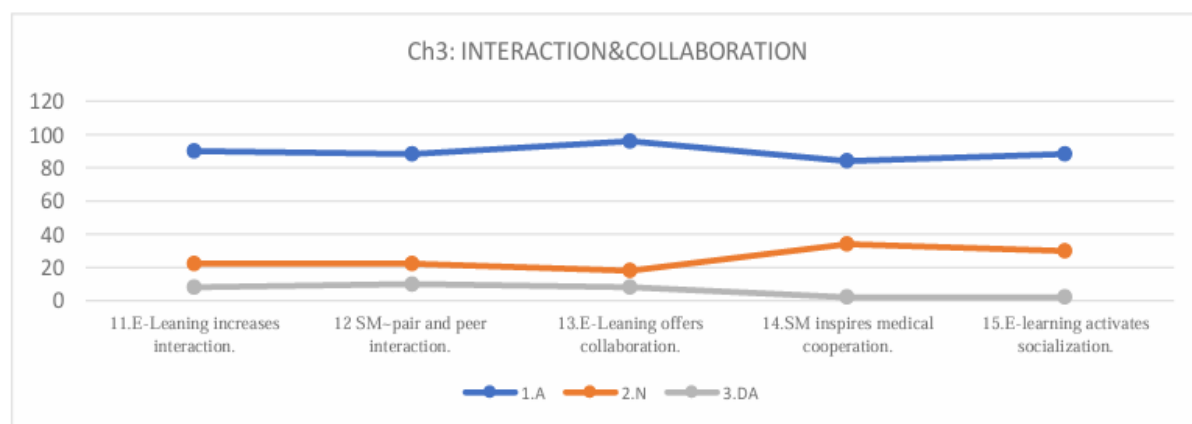
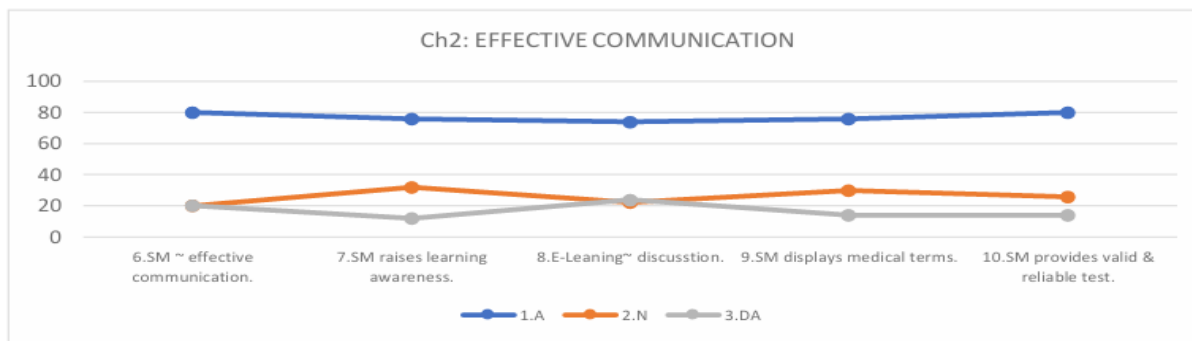
- The utilization of social media platforms fosters students' motivation, with Instagram videos serving as a source of inspiration for learning medical terminologies.
- In this digital age, social media empowers medical students to effectively communicate and adapt to the ever-evolving landscape.
- Social media platforms provide a virtual space for students to engage in collaborative interactions with their instructors and peers beyond the confines of the traditional classroom setting.
- Zoom and WhatsApp platforms offer students an avenue to actively participate in crafting imaginative narratives pertaining to medical matters.

**Discussion and Analysis:**

1. The research conducted a statistical analysis on the general outcomes of utilizing E-learning for teaching and learning English as a second language. The findings were presented through tabular charts and graphs, comparing the percentage of different learning groups using Zoom and WhatsApp platforms. Additionally, the study continuously observed the effects of social media applications on students' integrative and instrumental motivation to enhance their interaction, communication, creativity, and performance.



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Regarding the participant's perception of technology applications in teaching medical terms and the influence on motivation, results showed a positive perception of this enhancement. (see chart1). In chart 2, all participants agreed that they communicate effectively via social media applications like Zoom and WhatsApp (100%). In chart 3, the participants' mean score on interaction and collaboration via Zoom and WhatsApp was quite positive (94 out of 120=78%), while 6.6% of them disagreed. In chart 4, about 78% of the participants agreed that learning medical English through social media apps is creative, and 21,6 were neutral, while no one disagreed. Therefore, the majority of the participants prefer to study medical terms through social media applications.

**Findings and Conclusion:**

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These results provide further support for the hypothesis that e-learning empowers medical students to effectively communicate and collaborate via networking platforms:

I. These results are likely to be related to the implementation of technology platforms, which have a significant influence on medical students' motivation.

II. A possible explanation for this might be that the implementation of social platforms fosters a higher level of interaction and communication among students studying English as a foreign language.

III. The results of this study show that using social platforms to learn medical terms proves to be more advantageous than traditional methods.

IV. The most interesting finding was that medical students have a positive attitude towards incorporating networks into classrooms.

V. Medical students report positive experiences of effectively communicating and collaborating through network platforms.

VI. Zoom and WhatsApp play a crucial role in enhancing students' language learning abilities and boosting their creativity and performance.

These findings may help us to understand that e-learning offers various advantages and presents ample opportunities for students to enhance their learning experiences. However, due to the limited scope of this study, future studies on the current topic are therefore recommended.

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**Appendix: Teachers' Survey**

| No | Questions   | SA | A  | N  | D  | SD |
|----|---|----|----|----|----|----|
| 1  | I use social media apps like Zoom and WhatsApp to learn medical terms.  | 40 | 40 | 20 | 12 | 8  |
| 2  | Social media apps like Zoom and WhatsApp provide English-language reading and listening to authentic medical materials. | 30 | 46 | 32 | 10 | 2  |
| 3  | Networking apps like Zoom and WhatsApp encourage me to learn medical Terms.   | 36 | 38 | 22 | 12 | 12 |
| 4  | E-learning helps in autonomous learning of medical terms.   | 34 | 42 | 30 | 10 | 4  |
| 5  | Social media apps like Zoom and WhatsApp promote my language competence and performance.                                | 40 | 40 | 26 | 10 | 4  |
| 6  | Social media apps like Zoom and WhatsApp to communicate effectively.  | 60 | 40 | 20 | 0  | 0  |
| 7  | Social media apps like Zoom and WhatsApp raise my awareness of learning medical terms.                                  | 38 | 30 | 38 | 14 | 0  |
| 8  | E-learning helps discuss medical issues in a collaborative way.   | 12 | 54 | 44 | 12 | 0  |
| 9  | Social media apps display medical terms easily.   | 6  | 46 | 48 | 20 | 0  |
| 10 | Social media apps like Zoom and WhatsApp provide valid, reliable test content.  | 36 | 40 | 38 | 6  | 0  |
| 11 | E-learning enables me to interact with others and understand medical terms more.  | 48 | 42 | 22 | 8  | 0  |
| 12 | Studying English via social media apps like Zoom and WhatsApp by interacting in pairs and with peers instantly.         | 36 | 52 | 22 | 10 | 0  |
| 13 | E-learning offers instant, effective feedback tools to collaborate with others.   | 46 | 48 | 18 | 8  | 0  |
| 14 | Social media apps like Zoom and WhatsApp motivate me to study medical terms in active cooperation.                      | 40 | 44 | 34 | 2  | 0  |
| 15 | E-learning motivates me to be a social person with others.  | 40 | 48 | 30 | 2  | 0  |
| 16 | Learning English through social media apps is enjoyable.  | 40 | 54 | 26 | 0  | 0  |
| 17 | Social media apps help me to find imaginative, difficult problem solving  | 32 | 48 | 30 | 10 | 0  |
| 18 | Social media apps develop my choices by engaging in groups and learning the English language.                           | 30 | 48 | 38 | 4  | 0  |
| 19 | Social media apps foster my interpersonal skills and allow me to share with others.                                     | 38 | 44 | 30 | 8  | 0  |
| 20 | Studying Medical terms through social media apps improves my writing skills.  | 42 | 46 | 28 | 4  | 0  |