

The extent of social media usage for exchanging knowledge by higher education students in Tanzania

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Abstract

Rationale of Study – This study investigated the extent of social media usage for exchanging knowledge by higher education students in Tanzania because, during the COVID-19 outbreak, Tanzania witnessed the closure of various higher education institutions due to a lack of dependable online learning platforms.

Methodology – A mixed-methods approach with a convergent research design was used in this study. Parallel mixed-methods sampling was used to select a sample of 239 out of 633 postgraduate students from the four selected higher education institutions in northern Tanzania. Interviews were conducted with eight heads of academic departments at the HEI. The quantitative data was descriptively analysed with SPSS version 24, and the results were presented as tables, frequencies, and percentages. Qualitative data were submitted to thematic analysis using Atlas.ti version 7 based on the emerging themes.

Findings – The findings established that education (classmates) and WhatsApp were postgraduate students' most commonly used social media. They also perceived social media as applicable and developed positive attitudes towards it because of the advantages it offered them in academics. The study further found the frequent use of social media by postgraduate students.

Implications – The study recommended that the management of HEIs ensure the availability of reliable Internet to facilitate knowledge-sharing activities and offer training on the ethical use of such platforms.

Originality – This is a component of a larger PhD study submitted to the University of South Africa (UNISA), contributing to the existing body of knowledge.

Keywords

Social media usage, higher education institutions, knowledge exchange, Postgraduate students, Tanzania

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1 Introduction

The development of social media technology has given students more ways to share knowledge and information than ever before (Dadzie & Fiawotoafor, 2020). Social media are tools such as Facebook, WhatsApp, social bookmarking, Wikis (Wikipedia, Seed Wiki), YouTube, microblogging (Twitter), podcasts, and others that enable people to create, view, and share knowledge and information with other members who use the same platform (Alenezi & Brinthaupt, 2022; Abraham et al., 2018). In higher education institutions (HEIs), students use social media for collaborative learning and other academic purposes (Acun, 2020). Students are attracted to using social media because it enables them to access knowledge and information promptly, keep in touch with their friends, establish new relationships, and use it for entertainment (Appollis & Sutcliffe, 2022). Additionally, it provides access to global news, academic research, and professional connections (Fermann et al., 2021). Classroom participation has increased using such platforms, and students' academic performance has improved (Boahene et al., 2019). Realising the potential of social media, some HEIs established their official social media pages for disseminating information and communicating with their current and prospective students, alums, and community members (Athukorala, 2018; Peruta & Shields, 2016). Despite being helpful for students to obtain information and knowledge, these platforms can have some drawbacks if they are not effectively governed by regulations and policies (Dadzie & Fiawotoafor, 2020). Some students have accessed social media sites for defamation, cyberbullying, misinformation, and disinformation (Kipapy, 2018).

To ensure students gain maximum benefits from social media platforms, some HEIs have formulated guidelines to govern the proper usage of such platforms (Ponera, 2023). Olannye-Onkonofua and Oji (2023) assert that various studies have indicated the acceleration in the use of mobile computing, such as smartphones, iPads, and cell phones, by HEI students in Nigeria. Social media has eliminated physical distance in learning, enhanced collaborative learning, and provided access to course materials. Ajegbomogun and Oduwole (2018) affirm that social media and networking promote impromptu collaborative learning. This is important for postgraduate students because it is essential to achieving their scholarly goals and is particularly beneficial when performing scholarly research. Various studies have indicated the increased use of social

media by HEI students in other parts of the world (Oyetunde, 2017; Sutherland, 2018; El-Ghorrah, 2016; Leon-Abao et al., 2015; Al-Rahmi et al., 2015; Mchome, 2017).

Deo and Shao (2014) indicated an increase in the use of social media by university students in Tanzania as a result of the benefits they gained from them in academics. Liang (2017) reports that 14.9% of Facebook account users in Tanzania were active by November 2015. By 2020, Tanzania had 25.5 million users of WhatsApp, 17.6 million Facebook Messenger users, 1.9 million Skype users, 3.5 million Snap Chat users, 0.6 million WeChat users, 1.5 million users of Viber, and 3.8 million users of Telegram (TCRA, 2020). The Tanzania Communications Regulatory Authority (TCRA) data reveals that internet users in Tanzania have increased from 29.8 million users in 2021 to 31.12 million users in September 2022, an increase of 4.2 per cent (The Business Wiz, 2022). This increase in internet users takes into account postgraduate students in Tanzania's HEIs who use social media for communication and knowledge sharing. Although social media users have increased in recent years in Tanzania, the extent of social media usage for exchanging knowledge by postgraduate students in HEIs is not well documented. This is evidenced by the outbreak of the COVID-19 pandemic, which has forced the closure of many Tanzanian higher education institutions because of a shortage of online learning platforms, for which social media could have been a solution. Knowledge sharing can also help postgraduates bridge new knowledge frontiers by utilising new knowledge, allowing them to contribute to the higher education innovation system. Thus, this study is conducted to fill the existing knowledge gap, guided by the four research objectives which were to identify the most preferred social media for exchanging knowledge; examine the perceptions of postgraduate students on the use of social media; assess the attitudes of postgraduate students on the use of social media; and determine the frequency of social media usage for exchanging knowledge.

2 Conceptual framework

The Technology Acceptance Model TAM 2 proposed by Davis (1989) served as the basis for this study. The model helps determine how users embrace and use new technology. The actual use of a new technology is determined by the users' perception of how simple it is to use and the utility of the technology. Perception is how one feels about an object or a system (Aiyebilehin & Omekwu, 2019). In this context, perception is influenced by individuals' skills in using emerging technologies, which can influence their decisions towards accepting and using the technology (UNDP, 2018). Another factor that affects

whether or not a new technology is embraced and used is users' attitudes towards it. ICT benefits for students, like online collaboration, peer discussion, and communication, affect how positively they feel about social media (Cheta & Yinka, 2017). The TAM 2 model includes extra cognitive instrumental processes and social influence processes, and the application of a new system is expanded into cultural and social aspects. In light of this, perceived usefulness is directly influenced by subjective norms, job relevance, output quality, experiences, and voluntariness. Hence, various factors, such as organisational culture, self-efficacy, experiences, trust, and perceived usefulness in academic-related matters and other aspects of students' lives, may affect how they utilise social media for exchanging knowledge (Ponera, 2023). Factors such as perceived ease of use of social media, experiences of postgraduate students, the culture of exchanging knowledge, job relevance of the social media platforms, and output quality may also attract individuals to prefer using a specific platform for exchanging knowledge because numerous social media platforms can be used to serve such a purpose, including WhatsApp, LinkedIn, Wikispaces, Academia.edu, Facebook, and others. These platforms can be used for various purposes, including academic, social, and entertainment purposes. The model helped illuminate how postgraduate students' attitudes and perceptions affect the frequency of social media usage for exchanging knowledge in Tanzanian higher education institutions, including their reasons for using such platforms for exchanging knowledge.

3 Literature review

Because social media users can freely create, share, and edit content, it has improved engagement and knowledge transfer among people. (Mutarubukwa and Mazana, 2020). According to Boyd and Ellison (2008), social media allows users to create a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their own list of connections as well as those made by others within the system. Various technologies and platforms, such as Facebook, MySpace, professional networks such as LinkedIn, Wikis, and social tagging, might improve knowledge sharing among postgraduates in postsecondary institutions (Mosha & Holmner, 2019; Alsaadi, 2018). According to a study conducted in South Africa by Dlamini and Siphamandla (2020), students chose to use WhatsApp for knowledge sharing due to its numerous features, which make it convenient for students to get the knowledge required for academic purposes. This means that numerous social media platforms can be used to exchange knowledge among students in HEIs in

Tanzania. Based on the argument from the viewed literature, such a communication platform can be used for different purposes depending on the needs of students, environment, culture, and experiences.

Individuals' opinions about something they thought was true and comprehended are known as perceptions (Harun et al., 2022). The multi-step process of perception involves focusing attention on an object, receiving sensory data from it, interpreting that data to generate a meaning that influences our behaviour, and finally applying that meaning to the object (Safitri, 2021). Ghanta (2021) affirms that the majority of students utilise social media because it is an advanced platform for interaction that appeals to youngsters in a variety of ways. Students' perceptions of the value and significance of social media in the classroom are influenced by the educator's and students' level of familiarity with the platforms (Liu et al., 2016). Alshehri and Lally (2019) assert that social media platforms are essential for facilitating learning, communication between students and their teachers, and knowledge acquisition. Al-Hamad et al. (2021) opine that social media have proven to be effective in teaching and learning, as well as being a place to meet new people and a source of information and entertainment. Thus, the students perceived the usefulness of social media by comparing the benefits they gained from such interaction platforms. Through social media, students can interact with colleagues, access the knowledge and information they need, and participate in classroom discussions, enabling them to improve their academic achievements.

Social media users are sure that joining a network allows them to contact many other users and establish relationships to exchange knowledge and information (Ma & Chan, 2014). Students will thus join and utilise social media with other students once they begin to positively evaluate the value of such platforms in their academic activities, expecting to obtain knowledge and meet their information needs related to their academic activities and social goals (Ponera, 2023). Students can learn more effectively with social media support, and sharing knowledge about particular topics on social media after class helps students learn more (Agbo et al., 2021). Therefore, the perception of students towards social media is associated with the usefulness of such platforms in their daily academic and social lives on campus. A study by Hamafyelto (2019) found that students in Nigeria had a positive perception of using social media platforms and were willing to use them for learning and other academic tasks.

Different scholars have attempted to define attitude. García-Martínez et al. (2021) defined attitude as the mental state that precedes an action. Attitudes are learned through socialisation rather than being innate, and they differ between people and groups based on cultural and social experiences. (Ngo, 2019). According to Kaban (2021), individuals acquire the cognitive component of an attitude through their education or personal experiences related to a subject. Cheta and Yinka (2017) assert that students' positive attitudes towards using social media are influenced by the advantages of ICTs, including online cooperation, peer communication, and discussion. Kim and Gyeong-Ju (2017) affirm that while social media benefits students in their academic and social endeavours, it also brings privacy-related issues. As a result, some students develop negative attitudes towards social media and avoid using them daily (Matikiti et al., 2017). According to a study conducted in Saudi Arabia on students' attitudes and perceptions of the use of social media for academic activities by Alqahtani (2016), students feel at ease using social media because of the advantages they receive, such as knowledge exchange, virtual meetings with course instructors, and discussion with classmates. Thus, students' attitudes in this context are influenced by the advantages of social media platforms to their learning. Factors such as cyberbullying and fake information may affect students' attitudes towards using social media because they may cause social harm, which is the other wrong side of social media. This calls for proper guidelines on using such platforms in the academic context to protect students from harm, ensure their security, and ensure the ethical use of such platforms.

Thus, after taking into account several factors, such as the advantages and risks of using social media technology, students develop either negative or positive attitudes regarding the use of social media. According to a study by Zhang et al. (2020), system accessibility, social norms, and disciplinary variations are directly related to attitudes, behavioural intentions, and perceptions of utility and usability. A study by Yuan et al. (2021) reported that social media literacy significantly influenced users' attitudes towards using such platforms. A study conducted in Saudi Arabia by Zabadi and Al-Alawi (2016) revealed that students generally had a positive attitude towards e-learning, including social media usage. Their study recommended that teachers implement ways to change students' negative attitudes towards online learning by encouraging students to use the Internet for their education. Related results were observed in a study conducted by Akcil and Bastas (2021), which showed that students had moderately positive attitudes towards the use of social media and e-learning. A study by Popovic et al. (2021) established that students

favour using some forms of e-learning, and they can also express themselves on social media in circumstances when teachers think it might be helpful. Thus, students' attitudes towards the usefulness of social media in academics determine their usage frequencies. The literature reviewed by various scholars has highlighted different social media platforms that can be used to facilitate the sharing of knowledge among students in higher learning institutions. However, the extent of social media usage and the usage of such platforms have not been well documented. Thus, the current study will uncover the existing knowledge gap.

4 Methodology

This study used a mixed-methods approach and a convergent research design. The study's population consisted of 633 postgraduate students from four selected higher education institutions in Tanzania's northern region. The list of admitted postgraduate students was obtained from the admission office of each HEI chosen for the study, which forms the sampling frame. The number of postgraduate students at the selected HEIs was small compared to undergraduate students because only a few with financial capacity could proceed with postgraduate studies, and this situation prevails in many HEIs in Tanzania. These institutions were Moshi Co-operative University, Mwenge Catholic University, Nelson Mandela African Institution of Science and Technology, and the Institute of Accountancy in Arusha. The Institute of Accountancy in Arusha has not attained university status. However, it is one of the tertiary institutions offering postgraduate studies in northern Tanzania. It is guided by the regulations stipulated by the Tanzania Commission for Universities in admitting postgraduate students, which is why they were included in this study. These institutions were purposefully selected because they were among the few HEIs offering postgraduate studies in northern Tanzania.

Krejcie and Morgan (1970) supplied a sample size calculator in a table that was used to select a sample of 239 postgraduate students. This was performed by entering the population size into the table and then noting the sample size immediately adjacent to it. The study employed parallel mixed-methods sampling to acquire quantitative data from 171 postgraduate students. Since the data for this study were collected in Tanzania during the COVID-19 epidemic, the researchers used an online survey to collect the data. The procedure assisted researchers in adhering to government regulations and ethical standards for safeguarding survey participants against the spread of the COVID-19

pandemic. The online survey received 171 responses out of the expected 239. The completion rate of the 171 online surveys (71%) was rated very well for concluding the results, as recommended by Ansell et al. (2010) and Groves (2006). Telephone interviews were conducted with two heads of academic departments from each selected HEI who were purposefully selected to participate in the study, making a total of eight interview sessions. Various techniques were employed to analyse quantitative and qualitative data. Thematic analysis was performed on the qualitative data collected from interviews using Atlas.ti version 7 based on the emerging themes and the quantitative data was descriptively analysed using SPSS version 24, with the results displayed in tables, frequencies, and percentages. The quantitative and qualitative threads were connected for comparison, and possible causes for their convergence and divergence were offered.

5 Results

This study was carried out during the outbreak of the COVID-19 pandemic; therefore, researchers had to use Google Forms to collect data for the study. A total of 171 online questionnaires were filled out by the respondents for a response rate of 71.5%. The study revealed that postgraduates used various social media platforms to exchange knowledge. However, the majority of the respondents preferred to use education (classmates), which was confirmed by 130 (76%), WhatsApp 122 (71.3%), and 103 (60.2%) who preferred to use research (ResearchGate). Table 1 shows the social media that postgraduate students preferred to use.

Table 1: Preferred social media for exchanging knowledge among postgraduate students

Type of Social Media	Frequency (<i>n</i> =171)	Percentage (%)
Education (classmate)	130	76.0
WhatsApp	122	71.3
Research (ResearchGate)	103	60.2
Google+	84	49.1
You Tube	84	49.1
Books (Shelfari)	57	33.3
Facebook	55	32.2
Twitter	55	32.2
LinkedIn	47	27.5
Live Journal	32	18.7
My creativity community	26	15.2
My life	20	11.7
Wiki spaces	14	8.2
My space	14	8.2

Table 2 shows postgraduate students' perceptions of using social media for exchanging knowledge. The findings revealed that 101 (59.1%) of postgraduate students perceived the use of social media to be very useful, 61 (35.7%) perceived it as applicable, 6 (3.5%) were neutral, 1 (0.6%) perceived it as not applicable, and 2 (1.2%) perceived it as useless.

Table 2: Perceptions of postgraduate students on the use of social media

Perception	Frequency (n=171)	Percentage (%)
Very useful	101	59.1
Useful	61	35.7
Neutral	6	3.5
Not useful	2	1.2
Useless	1	0.6
Total	171	100

The responses obtained from the interview participants were as follows:

Participant HoD 1 stated the following:

“Postgraduate students have found the use of social media in knowledge and information sharing to be very useful because they can now access the knowledge they require for academic reasons from any location, regardless of distance or the necessity for physical access”.

Participant HoD 2 had this to say:

“They all agree that social media are beneficial, especially during the outbreak of COVID-19, which has brought us to a point where the use of social media is highly valued, particularly in official communications and postgraduate training due to the postponement of physical classes.

Participant HoD 3 remarked that:

“Social media are useful, especially when it comes to gaining knowledge for academic purposes. However, their use of social media is influenced by pressure from their teachers, particularly when they require all postgraduate students to conduct independent studies and submit through social media”.

Participant HoD 4 stated that:

“Postgraduate students consider social media platforms beneficial since, unlike undergraduate students, ownership of academic work for postgraduate students is at the individual level”.

According to Participant HoD 5:

“Postgraduate students have perceived the usage of social media platforms to be useful, especially during the coronavirus (COVID-19) epidemic, where studies have been postponed and universities have been closed. As a result, lectures, seminars, and presentations were delivered via social media like Zoom, Microsoft Teams, Moodle, and other virtual learning platforms”.

Participant HoD 6 articulated that:

“They find it useful for sharing information because they are required to share knowledge and information through social media platforms, and thus, they are exposed. They enjoy and use it for sharing academic information, and they also use social media for communication among themselves”.

Participant HoD 7 affirmed that:

“In terms of studying, I can state that students find social media platforms useful because it is the ideal approach for acquiring and sharing knowledge and information for academic purposes”.

Participant HoD 8 elaborated that:

“Postgraduate students consider the use of social media in knowledge and information sharing to be very useful because they no longer need to visit the physical building of the library to access the knowledge and information that they require; instead, they simply use various social networking sites via their cell phones”.

Table 3: Attitudes of postgraduate students on the use of social media

Attitudes	Frequency ($n=171$)	Percentage (%)
Very positive	80	46.8
Positive	78	45.6
Neutral	13	7.6
Total	171	100

According to Table 3, 80 (46.8%) of postgraduate students had very positive attitudes toward the use of social media for exchanging knowledge and information, followed by 78 (45.6%) who had positive attitudes and 13 (7.6%) who were neutral. Eight heads of academic departments who participated in the study as interviewees were also asked to

discuss postgraduate students' attitudes towards social media usage for their academic purposes. Their responses were as follows:

Participant HoD 1 stated the following:

“Postgraduate students have positive attitudes towards using social media platforms and are collaborative since they use them for academic purposes. Because not all postgraduate students are full-time students, they sometimes use social media platforms as official forums for communications”.

Participant HoD 2 lamented that:

“To be honest, postgraduate students' attitudes against using social media for academic purposes are extremely negative because of the risks associated with its use”.

Participant HoD 3 articulated that:

“Students' attitudes about the usage of social media in academics are moderate, as they are sometimes required to use them for accessing current literature due to their level of study”.

Participant HoD 4 remarked that:

“Most postgraduate students have positive attitudes towards using social media platforms for academic purposes since it helps them access current information and knowledge needed in both academic and social life”.

Participant HoD 5 stated the following:

“Most postgraduate students have developed positive attitudes towards using social media. They are also interested in learning more about social media and are enthusiastic about it”.

Participant HoD 6 proclaimed that:

“I am unsure because I do not spend much time assessing their attitudes towards using social media for academic work”.

Participant HoD 7 stated that:

“Postgraduate students at our university have developed positive attitudes towards social media platforms due to the benefits they receive, such as access to academic information that allows them to complete their academic tasks”.

Table 4: The extent of social media usage by postgraduate students

Extent of usage	Frequency (n=171)	Percentage (%)
Always	96	56.1
Often	36	21.1
Sometimes	23	13.5
Rarely	13	7.6
Never	3	1.8
Total	171	100

As depicted in Table 4, 96 (56.1%) of postgraduate students used social media always for their academic activities, 36 (21.1%) often used social media, 23 (13.5%) sometimes used social media to access knowledge and information required for their academic tasks, 13 (7.6%) rarely used social media for academic purposes, and 3 (1.8%) never used social media for academic purposes. The findings obtained from the interviews were as follows:

Participant HoD 1 had this to say:

“Postgraduate students frequently use social media because it helps them to access information promptly”.

Participant HoD 2 stated that:

“With the current trend of mobile technology, almost every postgraduate student has a Smartphone connected to social media, and they use them on a daily basis for accessing knowledge and information of their needs”.

Participant HoD 3 mentioned that:

“Students use social media daily for academic matters and other social issues”.

Participant HoD 4 elaborated that:

“Only a few students who fear their security and privacy do not use social media frequently, but the majority enjoy using them because they need to keep informed”.

Participant HoD 5 narrated that:

“Now days, the use of social media is no longer an option for students because such platforms, apart from providing information, are also used for entertainment purposes”.

Participant HoD 6 said that:

“Every postgraduate student uses social media almost daily because they formed groups to share all classroom issues”.

Participant HoD 7 proclaimed that:

“Through social media such as Facebook, Research Gate, Academia.edu, LinkedIn, and others, postgraduates are able to establish new relationships with other scholars around the globe, which is why they frequently use social media platforms”.

Participant HoD 8 articulated that:

“Social media platforms are rich in knowledge dissemination that is why most postgraduate students prefer using them daily for academic purposes”.

In order to gain an in-depth understanding of the uses of social media for exchanging knowledge, postgraduate students were asked to indicate how they use social media in their day-to-day lives. Findings presented in Table 5 show that social media was used for various purposes by postgraduate students, including sending text and voice messages 136 (79.5%), creating and editing online content 127 (74.3%), scanning documents and images 121 (70.8%), storing knowledge 120 (70.2%), establishing relationships with other online research scholars 109 (63.7%), enhancing collaboration and peer-to-peer learning, watching and listening 103 (60.2%), and other uses.

Table 5: Uses of social media by postgraduate students

Uses	Frequency (<i>n</i> =171)	Percentage (%)
Sending text and voice messages	136	79.5
creating and editing the contents	127	74.3
Scanning of documents/images	121	70.8
Storing of knowledge	120	70.2
establishing relationship	109	63.7
Collaborative learning	104	60.8
Watching and listening	103	60.2
Attending online tutorials	97	56.7
Attending online conference	97	56.7
Entertainment purposes	86	50.3
Virtual online knowledge sharing	78	45.6
interaction among students	2	1.2
Access to online reading resources	1	0.6
Dissemination of knowledge	1	0.6

6 Discussion

6.1 Types of social media used by postgraduate students for exchanging knowledge

The findings of the study depicted that various social media platforms were used by postgraduate students for communication and exchanging knowledge, but education (classmates) 130 (76%), WhatsApp 122 (71.3%), and research (ResearchGate) 103 (60.2%) were the most commonly used platforms compared to others. This is because it requires minimal training for students to use such communication outlets. This attracted most postgraduate students at the selected HEIs to use such platforms for various purposes, such as learning, entertainment, and social interactions. The study's findings align with the TAM 2 model, which states that perceived ease of use of the technology can attract its actual use. The study's findings are contrary to the study conducted in Saudi Arabia by Alsaadi (2018), which found that students at Saudi HEIs favoured face-to-face communications that used social media platforms for communication purposes. Thus, the context, culture, experiences, security issues, policies, and guidelines may determine whether students will use social media platforms to exchange knowledge because, in some HEIs, social media are not regarded as official communication platforms. However, students use them to access various information and knowledge necessary daily.

6.2 Students perceptions on the use of social media

The study established that postgraduate students found the use of social media in academia to be very useful. This was supported by 59.1% of all respondents who completed the online questionnaires. Students could search for, access, and share helpful knowledge and information for their academic purposes using social media. According to the findings, most postgraduate students at the selected HEIs use smartphones. This has allowed them to form groups for collaborative learning and communication. Through such platforms, postgraduate students could share knowledge, which improved the quality of their assignments and enhanced their academic performance. Students have also been able to meet with other scholars online, form friendships, and share knowledge on various aspects, such as writing academic papers, conducting research, sharing other information relating to seminars and conferences, and matters relating to their professionalism. According to a study conducted in Saudi Arabia by Muhammad and Tamimi (2017), there was agreement among media users that if online social networks are used appropriately, they can provide numerous benefits to students. Another study done by Neir and Zayer (2015) found that lecturers assess students' perceptions of social

media usage for academic purposes as one of the factors they consider before engaging them in classroom activities. The study's findings are consistent with Davis's (1989) TAM model, which claims that an individual user's perceived usefulness and ease of technology use impact its use. Because of the apparent ease of use, most postgraduate students sought help from their peers if they encountered challenges while using social media. As a result, social media usage for academic purposes has become an integral part of a student's life at the selected HEIs.

6.3 Students' attitudes on the use of social media

The study's findings revealed that most postgraduate students (46.8%) had very positive attitudes, while (45.6%) had positive attitudes regarding the use of social media for exchanging knowledge. Their positive attitudes towards social media are linked to the benefits individuals derive from using such platforms. Some of the linked benefits included quick access to knowledge, removing the distance factor in accessing knowledge, enhancing their knowledge base, increased classroom involvement and interactions, and freedom of expression. These advantages have largely influenced postgraduate students' positive attitudes towards social media and have promoted the use of social media for exchanging knowledge. The study's findings further revealed that the use of social media does not require much time for students to learn how to use them, which influenced their positive attitudes towards using such platforms. A study conducted by Yuan et al. (2021) revealed that media literacy had affected users' attitudes towards the use of social media sites. The study's findings are also consistent with the findings of a study conducted in Nigeria by Omorogbe and Iguodala (2018), which discovered that the use of social media was influenced by students' positive attitudes toward social media technologies. In a study conducted in South Africa by Matikiti et al. (2017), it was discovered that perceived usefulness, as evaluated by social media's benefits, affected the attitudes of precursors towards social media use. In a study conducted in Iran by Akbari et al. (2012), it was found that students had developed positive attitudes towards using social media like Facebook for educational purposes.

6.4 The extent of social media usage in academics

The study also found that postgraduate students at the selected HEIs use social media regularly to stay updated and access information and knowledge for academic purposes. Postgraduate students have formed WhatsApp groups administered by their class leaders, where they post various types of information on classroom matters. This has compelled most of them to purchase smartphones to stay updated about everything that is going on

at the universities. The study's findings indicate that the use of social media for sharing knowledge at selected higher learning institutions is no longer optional but necessary due to social media platforms' ability to disseminate information and knowledge among students and lecturers. According to a study conducted in Sudi Arabia by Eid and Al-Jabri (2016), WhatsApp is the most often used social media platform for online chatting and debate; hence, the study recommended that teachers use such platforms to increase discussion and online knowledge exchange. Similar findings were reported in a study conducted in Nigeria by Omotayo and Salami (2018), which discovered that Facebook and WhatsApp were the social media platforms students used daily to exchange knowledge. Thus, the discussion for this result shows that the extent of social media usage by postgraduate students at the selected HEIs is influenced by their positive attitudes towards such platforms and their perceived usefulness in exchanging knowledge for various academic uses.

6.5 Uses of social media

Study findings indicated that postgraduate students at the selected HEIs in Tanzania utilised social media for various purposes, including entertainment, attending online tutorials, sending text and voice messages, creating online content, and establishing relationships with other online research scholars. The study revealed that social media was used mainly for communication and interaction among postgraduate students. They also used such platforms for sharing classroom-related information and entertainment purposes. Such communication platforms have facilitated knowledge access at a lower cost among postgraduate students because one can post a question in the group and receive prompt feedback from his group mates. The study's findings further show that postgraduate students at the selected HEIs have not optimised using social media for knowledge-sharing. They use such platforms for social interactions, informing each other of events or issues such as the date of assignment submission, presentations, and others, but social media is not intensively used for exchanging knowledge, which could, in turn, enable them to improve their academic performance.

7 Conclusions

The study provided insights into the extent of social media usage for exchanging knowledge by postgraduate students in Tanzanian HEIs. The study concluded that using social media to exchange knowledge has provided several benefits to postgraduate students, including strengthening their knowledge base. This has attracted most

postgraduate students to frequently use social media to access and share knowledge for educational purposes. Postgraduate students' perception of the usefulness of social media for exchanging knowledge is associated with the benefits they gain from using such platforms; thus, they develop positive attitudes towards them. Also, the need to access knowledge for educational activities necessitated most postgraduate students buy smartphones to ensure they got connected every time they had internet bundles to exchange knowledge with their peers.

8 Recommendations

1. The management of HEIs should embrace social media for exchanging knowledge by providing support, such as ensuring reliable Internet is available around the campuses to enable students to use the Internet at a lower cost for accessing knowledge and information that meets their needs.
2. Training should be offered to equip students with the skills of filtering information shared on social media because not all information shared through such platforms is genuine; some is untrue and cannot be relied upon.
3. Students should avoid using social media frequently for non-academic matters, as this will affect their academic performance.
4. HEIs should formulate guidelines and procedures on the proper use of social media platforms to ensure users' ethical use and security.

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