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To cite this article: Isaac Kofi Biney & Moses Kumi Asamoah (2023) Adult learners' use of social media at the university of Ghana, Cogent Social Sciences, 9:2, 2245613, DOI: 10.1080/23311886.2023.2245613

To link to this article: <https://doi.org/10.1080/23311886.2023.2245613>



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Published online: 23 Aug 2023.



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Received: 22 June 2023
Accepted: 03 August 2023

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MEDIA & COMMUNICATION STUDIES | RESEARCH ARTICLE

Adult learners' use of social media at the university of Ghana

Isaac Kofi Biney^{1*} and Moses Kumi Asamoah¹

Abstract: This study explores adult learners' use of social media as a complement to the Sakai Learning Management System (E-learning) at the Accra Learning Center of the University of Ghana. E-learning thrives on the use of modern social networking applications, including smartphones, WhatsApp, Facebook, Twitter, YouTube, and Google. This study ascertained the use of social media platforms by adult learners to acquire rich knowledge and skills. Exploratory and interpretive case study designs were used within the qualitative paradigm. Convenience sampling was employed to select the study area (Accra Learning Center), and a simple random sampling technique was used to select the interview participants for the study. Interviews were conducted to collect insightful experiences from 34 adult learners regarding the use of social media in their studies. The principles of research ethics and data credibility were followed throughout the study. Interpretivist philosophy that asserts idiographic explication was employed to interpret the interview data. It emerged that the application of social media encourages self-directed learning and research among adult learners. The study recommends that regular orientations be held for adult learners to explore the good side of social media more in their lifelong learning drive.

Subjects: Adult Education; Technology in Education

Keywords: Adult learners; social media; Accra Learning Center; social networking; self-directed learning, lifelong learning

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1. Introduction

1.1. Background of the study

As the world continues to be influenced by digital and educational technologies, modes of learning are becoming increasingly transforming. Zawacki-Richter and Qayyum (2019) state that the transformation of teaching and learning in a digital age presents a dramatic challenge of innovation and change for the majority of “conventional” universities. Before the global outbreak of COVID-19, some higher education institutions (HEIs) invested in new technologies to deliver educational experiences (Benfield et al., 2020). Bates (2020) asserts that online learning surged during the COVID-19 pandemic. Biney (2022) adds that during the COVID-19 pandemic, lecturers and students were forced to go online to facilitate and learn, and that might have accelerated the usage of social media platforms to learn in Ghana.

Facebook, Twitter, YouTube, Instagram, and Google have changed the way *the Internet* is been experienced by providing a platform for unlimited information mining and peer-to-peer content sharing (Hysten, 2015). Social media is a multifaceted tool that has been used by educators and students in ways that are both beneficial and detrimental (Griffin & Zinskie, 2021). Social media facilitates collaborative learning and research in higher educational institutions (HEIs), and promotes interactions among people (Dabbagh & Kitsantas, 2012; Carrigan, 2016; LeNoue et al., 2011). The literature reveals mixed findings regarding how social media are perceived (Gachago & Ivala, 2015). There is little engagement with the potential of social media for teaching and research; yet, today’s tech savvy students are multitaskers and hyperlink learners using multiple websites such as Facebook and Twitter, changing the way in which we communicate, socialize, and network (Parkay, 2013). Learning management systems (LMS) and Internet use in higher education have changed previous teaching and learning pedagogies (Machumu et al., 2018). This demonstrates that ideas to improve technology arise from its use; hence, single- and dual-mode universities are adopting learning technology to promote distance education (DE).

Despite the ubiquitous nature of social media, there is still much research on the multitude of ways in which it impacts education and learning in developing countries. Today’s DE programs are dominated by young adult learners whose usage of technology is an everyday part of their lives. Hence, lecturers could integrate *social media* in their teaching to motivate adult learners to engage in self-directed learning and lifelong learning endeavors and address challenges facing adult learners learning in the DE mode. After all, opportunities to use different social networking applications are similar (Selwyn, 2013); meaning that we can incorporate social media in learning anywhere and at any time. However, learning activities must be contextualized in the learning environment of adult learners to enable them to demonstrate competencies relevant to their future jobs (Turra et al., 2019). It is not yet clear whether adult learners have been using social media for research endeavors; meanwhile, social media appears to promote self-directed learning, even as we strive to combine work with learning. Self-directed learning is crucial due to the advancement in ICT teaching and learning tools. Today, some academics have been using social media platforms, including Facebook, and social networks such as *Google Scholar*, *Academia.edu* and *ResearchGate* to upload their research to the academic world to promote their scholarly works (Carrigan, 2016; Coughlan & Perryman, 2016; Lupton, 2016).

1.2. DE Program of university of Ghana

The University of Ghana’s DE program started in 2007 with hard-copy learning materials provided to adult learners. The challenge was that facilitation and learning were more teacher-centered than learner-centered. Adult learners read the modules and reproduced what was in the modules instead of making the information their own. This challenge led to a paradigm shift from the use of modules to ICT teaching and learning software to power the DE mode of delivery. The University of Ghana adopted blended learning in 2014 on the SAKAI (LMS) platform, and has since been using the SAKAI (LMS) software platform to power its DE program. The Accra Learning Center (ALC) is the largest among the 11 University of Ghana Learning Centers (UGLCs), hosting over 80% of all DE

students. Computer laboratories, video-conferencing rooms, smart classrooms, discussion rooms, and presentation practice rooms help learners' learning. Adult Learners receive face-to-face tutorials on weekends and spend some time online on the SAKAI (LMS) platform. PowerPoint slides and video recordings of the contents of courses taught by lecturers were uploaded on the SAKAI (LMS) and YouTube platforms. Adult learners undertake interim assessment (IA) online to build up digital skills and attend tutorials less with books and pens but more with learning tools such as laptops and smartphones. A study by Kolan and Dzandza (2018) indicated that more than 50% of students at the University of Ghana spend almost 30 minutes to two hours daily on social media networks chatting, sending videos, pictures, mails, and announcements to friends. If it is about using social media to disseminate information to students, it is a good platform, but the short attention span of young people may be a challenge in the utilization of social media.

The credibility factor of information placed on social media platforms, genuine or fake news, is a challenge. The main problem is that of the adult learners themselves. It appears that some young adults do not understand the concept of DE and come to the learning center, indicating that they do not know how to use computers to access information and learn. This means that such people would have to wait for their colleagues to provide them with information instead of looking for it themselves. Meanwhile, there was an increase in student numbers at the Accra Learning Center (ALC) from 860 in 2007 to over 12,000 in 2023; however, inadequate computers and lack of refurbishment of computer laboratories negatively influence access and utilization of computer laboratories. This situation reflected in seeming challenges with the utilization of learning facilities to ensure effective learning for adult learners, and evidenced by increasing failure of courses by adult learners in three successive years- 793 in 2015; 906 in 2016 and 810 in 2017. It is envisaged that using other social media platforms to complement the SAKAI (LMS) teaching and learning tools used by universities could help adult learners improve their learning, warranting the current study.

2. Justification and objectives of the study

In Ghana, it is perceived that adult learners use social media platforms variously, but it appears that they use them less frequently in their studies and research. The world is becoming more globalized and digitized, and adult learners need to increase in response to the changing learning trends evolving globally. As adult learners adjust to the transformation taking place around the globe, they would become relevant in the learning space(s); however, informal it may be. Similarly, the Ghanaian economy is becoming digitized; thus, helping adult learners explore social media platforms to learn is a good effort to promote. The University of Ghana Learning Centers (UGLCs) could adapt the usage of social media and elearning tools for the successful facilitation of academic programs of students due to its usage. SAKAI (LMS) attempts to bring both software and hardware of education into one integrated, extensive package, including attendance and keeping student records. Many learning tools, including chat, forum, and email, are incorporated for usage by students, and this e-learning approach has helped by easing interaction and learning among students and lecturers. However, the University of Ghana (UG) needs to go beyond using one learning platform and bring onboard other social media learning platforms to address difficulties, including the poor interface posed by the SAKAI (LMS) in learning. After all, social media permits learners the opportunity to virtually communicate with their fellow colleagues and facilitators in the academic world, preventing heavy dependence on lectures and memorization in learning endeavors.

In Ghana, some lecturers have introduced social media to support adult learners' studies at learning centers, and some students have started using social media in their studies; however, these are isolated cases and not backed by policy (Biney, 2019). It appears that social media platforms are used less often by adult learners. Even if it is used in learning, insufficient information exists on the types of social media platforms used and *how* they have promoted self-directed learning and research among adult learners. These issues would have to be probed if adult learners remained useful in the global economy. It is against this backdrop that this qualitative

case study seeks to investigate adult learners' usage of social media platforms as complementary tools to that of the SAKAI (LMS) to learn in Ghana. Social media platforms, if deployed in adult learning settings, the researchers believe would help adult learners improve their studies via the DE mode of learning. Based on the above supposition, the main objective of this study is to ascertain how adult learners use Social Media at learning centers to improve their learning outcomes. The specific objectives of this study are as follows:

- (i) Identify the types of social media platforms that adult learners use in their studies.
- (ii) Determine how social media promotes self-directed learning.
- (iii) Determine how social media promotes adult learners' research in their studies.

3. Related literature review

The theoretical framework underlying this study is the use of technology in DE, as discussed by Carlsen et al. (2016) and UNESCO (2015). Related literature is organized around three issues at hand: technology-supported learning emphasizing the use of social media in adult learning, self-directed learning, and types of social media used to promote learning and research among adult learners. Social constructivism, communities of practice, and learner self-determination theories were discussed.

3.1. The use of technology in distance education

Zawacki-Richter and Qayyum (2019) assert that higher education institutions have undergone changes to innovate their teaching and learning processes by investing in educational technologies and developing support structures for students and faculty. Digital technologies, including smartphones, tablet computers, the worldwide web, the Internet, blogs, wikis, podcasts, and social media are useful tools for distance learning and research (Carlsen et al., 2016; Coffin & Fournier, 2019; UNESCO, 2015). Similarly, a number of studies have revealed the importance of technology in academia in eliminating distance barriers, facilitating communication between students and instructors, and promoting social and peer learning (Attwell & Hughes, 2010; Carlsen et al., 2016; Coffin & Fournier, 2019; UNESCO, 2015).

Coughlan and Perryman (2016) opine that social media allows people to personalize the way they experience and interact with the Web. Thus, tools such as Facebook, Twitter, and Instagram have been almost exclusively used to take a break from academics, but social media is increasingly being leveraged as a study tool for today's tech-savvy students in HEIs. Social media use tends to be viewed as a frivolous activity undertaken for personal reasons, such as keeping in touch with friends or family (Lupton, 2016). These views are often expressed in academic circles; however, some universities encourage academics to use social media to engage with the public and disseminate their research findings. Social media can make learning more social, encourage deeper discussions, and act as a catalyst for creation and collaboration, putting course examiners closer to where the students are. Twitter was valued as a medium for scholarly communication as it was viewed as fast and responsive (Lupton, 2016). Social media can be useful in supporting learning, and can give students a richer, enhanced learning experience and a broader perspective on issues covered in their studies, and become a valued part of a learning community. It serves as a community in its own right by providing support and motivation to teachers and students throughout the learning journey.

Current trends suggest that access to social media increases along with growing mobile device ownership, which may benefit students because learning has become more informal, personal, and ubiquitous (UNESCO, 2015). Mobile technologies, to UNESCO (2015), have lower cost in comparison with desktop computers, and their incorporation of rich resources from the internet. Fraser (2007) asserts how web 2.0 tools and applications are being used to supplement the limitations of Learning Management Systems and states that Personal Learning Environments (PLE) has become a tool for *empowerment* as it embody the principles of self-directed learning.

Considering the daily challenge of surviving the constant influence of new technologies and related practices on the use of ICT tools for teaching and learning, adult learning becomes key to success in conquering this relentless wave of change (King, 2017). Hence, encouraging adult learners to use social media platforms as a complementary tool to Sakai (LMS) to learn at a distance is a laudable strategy because it possesses the potential to improve learning endeavors among adult learners. The platforms used by adult learners include WhatsApp, Facebook, YouTube, Instagram, Open Elms, and SkyPrep (Gachago & Ivala, 2015).

3.2. Technology-supported learning: use of social media in adult learning & higher education

Governments worldwide, education systems, researchers, school leaders, teachers, and parents consider technology a critical part of [adult] education (Eady & Lockyer, 2013; King, 2017). Vivian (2012) observed that university students are frequent users of social media; however, limited research has applied in-depth investigations to the extent to which students embrace social media for learning, necessitating the current study. Moodle and SAKAI (LMS) are used in Ghana to support adult learning via the DE mode. SAKAI (LMS) is a learning platform with numerous tools used to manage teaching and learning. Adult learners learn course materials prepared by expert course writers on the SAKAI (LMS) platform, or access them by downloading and uploading them on their personal laptops with the support of information technologists at the center. Adult learners learn at any time and at their own pace. The University of Ghana employed the SAKAI (LMS) platform to power DE in the eleven (11) learning centers in Ghana. Despite the importance of the SAKAI (LMS) platform for adult learners, it is fraught with several challenges. Poor Internet connection and low-speed Internet have been identified as challenges facing the use of the SAKAI (LMS) platform (Biney, 2019).

The unavailability of computers and poor interface in using the SAKAI (LMS) platform are other identified challenges (Asamoah, 2021; Asamoah & Mackin, 2016). These challenges make it imperative for the SAKAI (LMS) platform to be complemented with other social media platforms to promote flexibility for adult learners learning via the DE mode, making the current study worthwhile. Pathak-Shelat (2018) observed that the transformations we see in the world today are brought about by the processes of globalization and the rapid spread of digital media. Lambert et al. (2014) assert that at the end of the 20th century and the beginning of the 21st century, *social media* were beginning to coalesce into what is now referred to as Web 2.0. Many of the tools associated with social media were on the cusp of being invented, such as Myspace in 2003 (Bennett, 2008), Facebook in 2004 (Yadav, 2006), YouTube in 2005 (Dickey, 2013), and Twitter in 2007 (Myers, 2018). Since the turn of the new millennium, technological devices, software programs, and the influence of the Internet on educational practices have evolved substantially. McCay-Peet and Quan-Haase (2016) indicate that, despite the proliferation of research on social media in recent years, there are relatively few formal definitions. The lack of definition is potentially due to the difficulty in defining the term, as it is relatively nascent and still evolving (Ellison & Boyd, 2013). Citing authorities in social media scholarship, Coughlan and Perryman (2016) admit that only recently have researchers begun to explore learner-driven Facebook use (e.g. Dron & Anderson, 2014; Gardner, 2014; Kent & Leaver, 2014). Recent research on college study trends has found that over 70% of students feel that the technology they use to study should be tailored to their needs as social media feeds (Coughlan & Perryman, 2016).

3.3. Self-directed learning

Self-directed learning (SDL) refers to how individuals play a central and primary role in their learning (King, 2017). Thus, adults *identify*, *plan*, and *implement* their learning independently (King, 2017). It is argued that SDL has the potential to make adult learners become skilled workers and fulfill human needs because, as adult learners design, plan, and implement their own learning, there is a likelihood that they can do the same in executing their jobs at workplaces.

Adult learners engage in learning outside the confines of lecturers. They schedule the time for their studies, determine what to learn, how to learn it, and when to do so. The use of *social media*

is an added tool to save adult learners from isolation, making it possible to reach out to their lecturers for clarification if they have difficulties related to learning. Even in online reading, as Liu (Cited in Davidson & Goldberg, 2012) reminds us, “has become collaborative, interactive, nonlinear and relational, engaging multiple voices’ (p. 26). However, SDL can be sustained when an adult learner is interested in the program he/she is pursuing in a higher education institution.

Kaufmann (2010) asserted that studies show that online learning, distance learning, and SDL are more convenient and effective than classroom learning for adult learners. The use of digital and educational technologies has changed how we deal with knowledge. We agree with Kaufmann that *programmers* are constantly developing new learning applications for HEIs. The advancement of ICT teaching and learning tools makes it imperative for people to learn about their usage and to become global citizens. The Open University (OU) in the UK talks about why they support the use of social media in learning, and Coughlan and Perryman (2016) opine that the lure of Facebook for university students has grown in recent years, with many defects, from institutions providing formal online tuition spaces to student-led study-focused groups on the social media platform. Callaghan and Fribbance (2016) used Facebook to examine how the Faculty of Social Sciences at the Open University has been building an academic community; thus, social media promotes SDL.

3.4. Learning and researching using social media platforms

Carrigan (2016) reveals that social networks designed for academics are growing in popularity, with services such as *Academia.edu* and *ResearchGate* effectively. Even as these social networks serve specific roles of allowing academics to archive papers in a way, while categorizing them and promoting them to others who share an interest in those topics, their students can tap into them and search for relevant materials that will aid their independent research. Social media can be used as a tool for research to aid in data collection, the dissemination of online surveys, recruitment of research participants, collaboration online, helping learners exchange thoughts and beliefs, and facilitating social interaction (McCay-Peet & Quan-Haase, 2016, The Open University, 2016; Hylen, 2015). It enables easier discussions between a wide range of learners, each with their own background, culture, and experience, and fosters a great sense of community. Such social media communities can be supportive of adult learners, using them in their studies, because learning through groups in tertiary institutions is interactive. Social media platforms are categorized into Wikis, Blogs, Internet Forums, Podcast, Virtual Worlds, Microblogging, and Social Networking, which are tools employed in learning and research in tertiary institutions.

3.5. Social constructivism

The constructivist view of learning was changed by the rise of the “situated cognition and learning,” which emphasized the role of context, particularly social interaction. Criticism of the information-processing constructivist approach to cognition and learning became stronger as the pioneering work of Vygotsky, Rogoff, and Lave gathered support. Thus, information-processing constructivism sees cognition and learning as processes occurring within the mind in isolation from the surroundings and interaction with it. Meanwhile, knowledge is not just about content but also about values (Bates, 2016). Knowledge is socially constructed and considered self-sufficient and independent of the context in which it finds itself. In this new view, cognition and learning are understood as interactions between an individual and a situation. Knowledge is considered to be situated and a product of the activity, context, and culture in which it is formed and utilized; thus, a new metaphor for learning as “participation” and “social negotiation”.

The University of Ghana employed the constructivist approach of teaching via the DE mode. Adult learners learn with SAKAI (LMS) through the DE mode. This approach to learning can make adult learners self-directed in their learning endeavors but can happen when learning materials are developed to boost learners’ comprehension (Biney, 2018). Thus, constructivism provides an accurate picture of how learners learn, and offers a powerful tool for combating one of the most difficult problems in schools (Biney, 2018). A social constructivist approach emphasizes the social context of learning and that knowledge is mutually built and constructed (Vygotsky, 1999). Today’s

social-media-savvy learners like learning in groups to gain an understanding (Parkay, 2013). In such a situation, lecturers become “*guides on the side*” and students become “*sages on the stage*,” doing more of the talking, asking questions, seeking clarifications to promote their understanding of the courses they read in the programs they pursue in DE mode. Thus, students must create knowledge and reality by constructing, reconstructing, and deconstructing the world they want to live in and develop.

3.6. Community of practice

Lave and Wenger coined the term “communities of practice” to capture the importance of activity in building individuals sharing mutually defined practices, beliefs, and understanding over an extended time frame in the pursuit of a shared enterprise. Hence, learning occurs most effectively within communities. Learning via the DE mode is learner-centered; thus, much of the learning is borne by learners. As adult learners go through the learning materials uploaded for them, discuss and share ideas with colleagues using social media platforms, they leverage social capital and engage in meaningful learning.

3.7. Learner self-determination theory

This theory, as developed by Ryan and Deci (Vinney, 2019) suggests that people can become self-determined when their needs for competence, connection, and autonomy are fulfilled (Cherry, 2019). It grew out of research on intrinsic motivation and stated that people are driven by three basic psychological needs: autonomy, competence, and relatedness. The self-efficacy and internal self-control of adult learners in pursuing programs via the DE mode determines their performance. If adult learners have autonomy, competence, and interest in learning, they would persevere, endure, and persist in their studies to succeed. This demonstrates that there is a paradigm shift in the way lecturers facilitate adult learners’ learning in today’s digital era, which makes learning more social, conversational, and constructive (Jonassen & Land, 2012).

4. Methods

The accessible population comprised 200, 300, and 400 students at the Accra Learning Center (ALC). Information was obtained from a list of registered levels of 200 to 400 students. Qualitative exploratory and interpretive case study designs were used to collect in-depth information. Hermeneutics, in-depth analysis, thick description, and interpretation of the data helped to gain new insights into adult learners’ use of social media platforms in learning (Creswell & Poth, 2018; Merriam & Grenier, 2019; Yin, 2016). The researchers conducted this study to grasp subtle shades of meaning and pull together divergent information from adult learners’ use of social media in research.

A purposive convenience sampling technique was applied to sample the Accra Learning Center for the study. As a technique to avoid subjectivity and to enhance objectivity in the sampling procedure, we used simple random sampling technique to select the participants needed for the interviews. The process was simple: We had access to the accessible population which was 150 adult students comprising level 200 to level 400 students. The names of accessible adult learners were compiled and serially labeled on pieces of paper. The names were folded and placed in a container and reshuffled, and thirty-four (34) participants were randomly selected (authors were not aware which names were being picked). Each name in a wrapped piece of paper had an equal chance of being selected). We engaged in an in-depth interview with each of these 34 adult learners with the goal of achieving the objectives set for the current study. Before the interviews, researchers explained the study to the participants, and their consent was sought. The researchers reached a point of saturation when we realized that the trend and patterns of information-rich data collected to address issues raised appeared similar. Saturation was arrived at during the 34th interview participants. At this point, further interview was unnecessary. Saunders et al. (2017) opine that saturation is used in qualitative research as a criterion for discontinuing data collection and/or analysis.

All 34 participants who were in their young and middle adulthood stages, aged between 18 and 45 years, participated in the study. The views and ideas they brought helped enrich the study. ALC was chosen because it constitutes approximately 80 percent of all 11 learning centers of the university under review. It is also one of the University-Based Adult Education institutions supporting adult learners in learning *how* to learn and become self-directed learners. Hence, knowledge, skills, new ideas, and insights that adult learners gather from using social media would positively influence their studies.

The interviews were informal and conversational, and such an approach to data collection helped researchers and participants establish *the credibility* of the study (Chilisa & Preece, 2005). The conversational nature of the interviews allowed us to summarize what happened during the interview. We took the opportunity to ask the participants if the notes accurately reflected their positions, in line with the member-check principle for ensuring ethics and rigor in data processing. The questions posed to adult learners were largely open-ended and grouped into three sections based on the three specific objectives raised. *Section A* sought to identify the types of social media platforms adult learners use in their studies at the ALC. The participants were asked, What social media platforms are you currently using? Which social media platforms do you use in your studies? Why do not use other social media platforms but this platform(s)? *Section B* was to find out how social media promotes self-directed learning. At the ALC, participants were asked whether the social media promoted their learning, and if yes, explained. *Section C* was on how social media promotes research among adult learners. Participants were asked five questions: Do social media platforms aid in research for the programs you are reading? If the answer is yes, how do they help with research in the courses you are reading? How do you cope with research using social media when the system is shut down? Is there an alternative source of information for studies? How can social media platforms be incorporated into tools to help adults learn? This enabled researchers to probe further to identify and describe patterns and themes from the perspectives of the participants. It also paved the way for researchers and participants to co-construct narratives.

4.1. Data analysis

The interviews were transcribed verbatim, and field notes and diaries were reviewed regularly (Creswell & Poth, 2018). The responses from in-depth interviews were checked for accuracy and completeness. The responses from the valid qualitative in-depth interviews were analyzed using a computer program called ATLAS.ti. The data were edited to ensure the consistency of the responses. The analysis was performed manually and followed a number of steps. The new ideas and findings gathered were used as anecdotal evidence to triangulate the responses gathered from the in-depth interview guides. As researchers, we took cues from qualitative researchers, including Creswell and Poth (2018), in analyzing the qualitative data gathered.

The first step was to thoroughly read the raw data to identify the initial themes that emerged. The second step involved building a thematic framework composed of themes and sub-themes after identifying the general patterns in the first stage. We used a data analysis grid to generate the data coding of emerging themes. We were able to identify five themes on adult learners use of social media including “social media platforms used by adult learners to learn”; “flexibility of social media tools usage” “availability of social media tools”; “social media promoting self-directed learning”; and “social media promoting students research.”

In the next stage, the themes that were identified were indexed by assigning the same numbers to themes that had similar interpretations, which allowed for proper categorization of thematic charts to synthesize the data. This step was followed by an interpretivist analysis of the themes in which elements were properly refined by inspecting each column of the thematic chart across all cases to identify the content and dimensions of each case. This ensured a better refinement of the various categories that were identified. The next stage searched for patterns and links between

sets of phenomena and between different individual views expressed. This stage involved associative analysis.

The final stage involved a discussion of the findings of the study in the context of existing literature. An in-depth scrutiny of the data was undertaken by the researchers to arrive at the final themes and sub-themes. Indeed, the use of a *data analysis grid* facilitated report-writing. All quotations were presented verbatim to present a true reflection of the participants' voices. In summary, all the names of participants in the study have been replaced with pseudonyms to ensure anonymity and confidentiality of the information. Thematic analysis was performed following the steps recommended by Creswell and Poth (2018), and Chilisa and Preece (2005).

5. Results and discussion

This study explored adult learners' use of social media at the largest learning center of the University of Ghana. Of the 34 participants who were in the young and middle adulthood stages, their ages ranged from 18 to 45 years. Of these, 18 were female and 16 were male. All participants were pursuing degree programs via DE mode. This section of the paper is based on five themes that emerged from the study such as: (i) "social media platforms used by adult learners to learn"; (ii) "flexibility of social media tools usage" (iii) "availability of social media tools"; (iv) "social media promoting self-directed learning"; and (v) "social media promoting students research."

5.1. Social media platforms used by adult learners to learn

All the participants used at least two social media platforms for learning. The dominant factors to complement the SAKAI LMS were WhatsApp, Facebook, Instagram, and Twitter. This observation supports the assertions of eMarketer Report (2013) that 68 percent of adult learners use social media of some kind in learning, against the backdrop that Attar (2005) and Parkay (2013) assert that social media application use is often full of young people, presuming that basic computer literacy and English proficiency is a preservation of the youth. This was an apt way a participant expressed it.

My fear of using social media was dissolved when I realized I had all the qualities and equipment available to be a participant. I now have platforms where I can communicate with my colleagues, and quite easily, except SAKAI (LMS). I am learning about the tools and will soon be a master of them. (Mrs. Red, a level 300 student at Bachelor of Arts, University of Ghana, DE)

WhatsApp, Facebook complementing SAKAI (LMS), emerged as the most used platform among all the other platforms. The participants indicated that they chose these platforms because of flexibility and the availability of most colleagues.

5.2. Flexibility of social media tools usage

The participants' admission of flexibility in the usage of social media platforms is important and crucial in the sense that adult learning hinges on the flexibility of the learning program. Therefore, if there are social media platforms that are flexible in learning, then adult learners would like using such learning platforms because they can engage in what we call "smart learning." Thus, adult learners, as they learn in groups, can engage in conference calls even at their respective homes to share ideas and come up with ways to solve problems related to their academic work. The participatory and collaborative nature of learning on social media platforms makes it useful for adult learning. A year 3 student expressed it in the best way:

In my study group, we use WhatsApp and conference call in our studies. This was helpful in my studies. I received quick feedback from my colleagues during my independent study. They become more important in usage when I come across certain terms and concepts in my studies which I have difficulties comprehending them. (Mr. Smart, Bachelor of Arts, University of Ghana, DE)

The flexibility of social media usage informed the University of Washington (UW) (Coffin & Fournier, 2019), and twenty (20) South African Universities (Gachago & Ivala, 2015), to use social media platforms to facilitate and learn in universities. Gachago and Ivala (2015) mentioned over twelve (12) social media platforms used in 20 South African Universities, but singled out Facebook as the most used social media learning tool. Coffin and Fournier (2019) indicated that more students at the University of Washington report using social media as a *learning* tool in class and for course-related purposes. This may be due to the flexibility in the usage of social media tools in learning that entice them to call for their usage. Interestingly, in the case of adult learners in Ghana, although preference for social media platform usage comprises WhatsApp and Facebook to complement SAKAI (LMS), the attraction of WhatsApp learning platforms to adult learners surpasses all other learning platforms. This is one way a participant presented it.

I prefer WhatsApp platform usage over SAKAI (LMS) and Facebook because of the connectivity challenges involved. (Mr. Blue, Bachelor of Science, Administration, University of Ghana, DE).

This finding confirms Gachago and Ivala (2015), who asserted that mobile apps such as WhatsApp, Mxit, and WeChat have made these tools highly affordable in resource-scarce contexts, such as South Africa. South Africa finds apps such as WhatsApp useful in learning, Ghana, and perhaps countries in sub-Saharan Africa do same.

5.3. Availability of social media tools

Regarding the availability of social media learning tools for adult learners' usage, the observations supported Carrigan (2016), Biney (2019), and UNESCO (2015) who asserted that some smartphones are relatively cheap, such that students can afford them. Eady and Lockyer (2013) opine that the increasing variety and accessibility of technology has expanded the opportunities for [adult learners] to use technology. Ely (2004) noted that social media technologies are relatively inexpensive and can reach many individuals who prefer to study wherever and whenever they wish. As social media savvy learners, today's young adult learners are the first to buy a new smartphone brand. Biney (2019) adds that students prefer interacting with their lecturers on WhatsApp platforms more than any other platform, and this observation supports Ahern et al. (2016), who asserted that a better understanding of student motivation is critical to the successful implementation of social media tools used in the educational arena. Watanabe-Crockett (2019) argues that Facebook is the most popular social media platform today. We are of the view that this position held by some researchers may be borne out of the *flexibility* in usage of social media platforms, the *availability* of learning tools, and the relatively lower cost of handset mobile phones. Parkay (2013) observes that effective teachers recognize that technology can be a powerful tool for enhancing students' inquiry, reflection, and problem solving. Gachago and Ivala (2015) added that the use of social media in learning is often initiated by students themselves, who already use them in other areas of their lives.

5.4. Social media promoting self-directed learning

On whether social media platforms helped adult learners in their learning, the participants responded affirmatively. Nearly all (97 percent) participants were affirmative, and this was significant when social media platforms were used to complement the SAKAI (LMS). One participant in the focus group discussion said:

There is excitement using ICT learning tools to learn. This makes the learning easier. Learning is brought to the doorsteps of people. We learn at our own convenience and pace at our own rate. We take interim assessment as and when we want to take it within the stipulated time granted us.

This observation is in line with Gachago and Ivala (2015), who asserted that the powerful combination of the two technologies has given learners everywhere the capability to discover, create,

repurpose, share, and amplify content. The advantage here is that the combined effect of the two learning technologies provides the potential to create and open up endless global learning networks and offers adult learners limitless resources and opportunities to learn. As suggested by Greenhow and Gleason (2012), the role of social media is to offer a new construct to enhance the learning experience, which may increase engagement, better interactions, and learning of new things between adult learners and facilitators. One participant expressed this as follows:

Due to large student numbers in class, these platforms enable us to express ourselves well, and share in other colleagues' opinions. This goes a long way to help us to learn and read articles we may not get time to read and share in class because of limited time. (Ms. Green, Bachelor of Arts, University of Ghana, DE)

Participants disagreed with the assertion that the social media promotion of self-directed learning that they attested to was negative. Researchers tend to agree with the participants because research suggests that students increasingly want their instructors to use social media as a learning tool (Coffin & Fournier, 2019). They added that social media enables students to build connections with instructors, peers, and campus community interactions that improve retention rates. It can be deduced that if students want their instructors to use social media platforms to instruct and facilitate classes, they would eventually use them to learn and conduct research on topics taught. In terms of social media platforms encouraging distractions and unnecessary arguments that discourage adult learners from participating in active discussions, one participant indicated the following:

Although few group members may misbehave and make fun of serious issues, and post irrelevant materials on the platform, the majority of students use it in sharing important educational information that help their learning. (Mr. Black, Level 400 Bachelor of Arts student, University of Ghana, DE)

This observation provides testimony that social media platforms, particularly WhatsApp, serve as a good platform for effective interaction and learning (Greenhow & Gleason, 2012); because Attwell and Hughes (2010) admit that digital media literacy continues to rise in importance as a skill in every discipline and profession. As students learn to become skillful in the use of social media to access and effectively work with information, they would not find themselves wanting in today's world of work that is technologically driven. It is also noted that social media offers opportunities for personalized learning experiences (McLoughlin & Lee, 2010), and if HEIs are to engage diverse cohorts of [adult] learners, the adoption of technologies that facilitate personalized experiences may be beneficial to students' learning experience. This observation provides ample demonstration that the provision of various social media platforms to complement SAKAI (LMS) would energize adult learners with different learning styles to adapt to one of the best social media platforms to learn.

5.5. Social media promoting students research

One important aspect of social media is its ability to help adult learners in research due to the diverse backgrounds of its participants. When the participants were asked how social media helped their research as students, a Level 200 participant indicated that:

During my market research, I used Facebook to identify trends in the market and gauge customer satisfaction to gain competitive advantage. She added that she put the questionnaire in a link form and shared it with my WhatsApp group. The members completed and returned it to me to enable me to work on my school project. (Ms. Violet, Bachelor of Science, Level 200, University of Ghana, DE)

Parkay (2013) maintained that social-media-savvy learners learn by sharing via Twitter, WhatsApp, and Facebook. The use of ICT learning tools has huge potential for research, but to succeed in this requires regular orientation on the educational significance of social media platforms; adding that

such orientations would help us acquire the skills to effectively use social media platforms in conducting research. Learning centers in Ghana and other parts of the world should emulate this.

On how social media platforms could be integrated into SAKAI (LMS), the participants admitted that SAKAI (LMS) helped adult learners learn immensely. This minimized the challenges of irrelevant materials posted. They add that many adult learners do not prefer using it due to its complexity and large data usage, and believe that the more tools involved the more complex it becomes. They suggested that the SAKAI (LMS) platform should remain an independent application platform for ease of usage. One participant responded as follows:

The SAKAI (LMS) is quiet good so as the other social media platforms in learning, but due to poor access, connectivity, and Internet challenges, it becomes very cumbersome to operate, and will feel happy if it remains an application on its own. (Mr. Brown, Bachelor of Arts, University of Ghana, Level 300 student, DE)

This is another expression by a participant:

The SAKAI and other social media platforms we use in learning have made us acquire knowledge and skills in our programs. It has given me a wider exposure in my learning endeavors such that I can now explore, discuss, and interact with colleagues and lecturers. (Ms. Ruby, Bachelor of Science, Administration, University of Ghana, Level 400 student, DE)

From the responses of the participants, one can surmise that social media platforms should complement the SAKAI (LMS) in adult learners' studies because of connectivity and power fluctuation difficulties the SAKAI (LMS) suffers from. Pathak-Shelat (2018) agrees that the second half of the first decade of the millennium saw social media platforms, including Facebook, Twitter, and Tumblr, allowed an ordinary individual to not only access information from global sources but also interact and network with individuals and groups. Watanabe-Crockett (2019) admits that students can use social media platforms to refine their ideas, update their information, and collaborate to conduct research. In response to the probing question of whether participants collaborate in undertaking research and learning, the response was affirmative. The participants indicated that whatever new information they retrieve from the Internet, they share it with colleagues, which is a good way to empower themselves and make progress in their academic work. This observation is apt because Watanabe-Crockett (2019) and Coffin and Fournier (2019) assert that today's [young adults] are born collaborators, such that they can use social media to conduct research. Coffin and Fournier (2019), in particular, opine that "social media can be an effective learning tool in higher education, facilitating interaction between students and instructors, improving communication, promoting social and peer learning, and increasing collaboration" '(p.1). We are inclined to believe that young adults today like sharing; therefore, they are better positioned to help one another in terms of handling research. Today's social media platforms enable students to access quick results for their surveys and obtain valuable information. This leads to a reduction in the cost of data collection and provides real-time results of the findings of their studies. We are of the view that this approach to learning, if encouraged among adult learners in Ghana, would help them excel in their studies and research.

5.6. Limitations of the study and direction for future studies

One of the shortcomings of this study is the use of purposive convenience sampling techniques which can produce non-representative samples and reduce the generalization of research results. In addition; this study was conducted in only one learning center in Ghana, so the results may not be widely applicable to populations of adult learners in Ghana or in other countries. In addition, this study only uses interviews as a data collection method, so there may be other aspects of the use of social media in distance learning that are not revealed in this study.

Future studies can use quantitative study which deals with huge numbers and the use of representative sample size that allows for the generalization of the findings to the accessible population. Future studies can address all the learning centers of the distance education program of the University of Ghana, as well as other universities in Ghana, so that the results will be widely applicable to populations of DE adult learners in Ghana or in other countries. Finally, future studies may employ or use mixed methods research (MMR) approach so as to capture both the subjective and objective views of research participants on the subject under discussion.

5.7. Implications for policy and practice of adult education

Today's teaching and learning is dominated by technology-driven tools, and to succeed, one has to continuously apply them to it. The University of Ghana already has in place the state-of-the-art SAKAI (LMS) platform to power her DE program. To overcome the challenges of network connectivity and power fluctuations, it is necessary to complement the SAKAI (LMS) platform with social media tools to aid adult learners in learning both at home and at learning centers. Similarly, the fast manner in which computers installed in the computer laboratories break down makes it imperative to support it with social media platforms to engender increased interactions among adult learners and improved interactions between adult learners and their lecturers. By doing so, the problem of distance or isolation can be addressed. Adult learners can continuously learn and seek further explanation from their lecturers without any hindrance during their independent study.

Since the University of Ghana's hybrid DE is powered by the SAKAI (LMS) platform, students are encouraged by the school and center coordinators to learn and acquire relevant digital skills and become digitally literate. It thus requires that conscious effort is made by the school to keep orienting students to utilize the good side of the social media to aid adult learners in their learning anywhere, anytime, and at their own convenience. The point is that as adult learners share information, engage in discussions, and share ideas among themselves on social media platforms, they create their own knowledge and world. Such cross-fertilization of ideas is what today's academicians should encourage students to imbibe, even as they endeavor to become lifelong learners. Hence, the findings of the study make practical contributions to the theory and practice of adult education and teaching and learning in higher education institutions in Africa and beyond.

The findings also add to the existing literature on the use of social media in developing countries, including Ghana, on adult learning via the DE mode. The findings can contribute to the policy and practice of using *preferred* social media platforms for learning via the DE mode. The findings can be judiciously implemented to impact teaching and learning in HEIs in developing countries, particularly using technology. For instance, when the School of Continuing and Distance Education (SCDE) of the University of Ghana continuously integrates modern ICT teaching and learning tools, including social media platforms, into adult learners' learning, it is likely that the requisite human resources will be built to remain competent. They will become ready for today's world of work, which demands that we endeavor to become lifelong, life-wide, and life-sustaining learners.

6. Conclusions and recommendations

This study explored adult learners' use of social media at the Accra Learning Center of the University of Ghana. This study specifically examined the types of social media platforms that adult learners used in their studies. It probed how social media could promote self-directed learning and ascertained how social media could promote adult learners' research in their studies. The findings demonstrate that adult learners informally used social media in their studies; however, they preferred the WhatsApp platform to other social media networks. They added that they use the SAKAI (LMS) platform in their studies and research on the programs they are pursuing. They admitted that the use of the SAKAI (LMS) platform is fraught with complexities and challenges that require improvement to make learning seamless. The findings make a case that the Management of SCDE, and Coordinators of University of Ghana Learning Centres orient adult learners to adopt the good side of the social media networks to aid learning and research. The successful adoption of social media would aid adult learners in seeing progress in their lifelong learning drive.

In today's global economy powered by improved technologies, learning is ubiquitous—it can be done anywhere and anytime at the learner's own convenience. This means that ICT teaching and learning tools, including social media platforms such as WhatsApp, Facebook, and Twitter, must be utilized in learning as a strategy to support the SAKAI (LMS) platform. Since social media plays an important role in every student's life, and it is convenient to access information, adult learners are to be provided regular orientations on the usage of social media platforms to provide information, communicate among themselves on their programs, and learn. Thus, continuous usage of these social media platforms could make adult learners develop self-directed learning skills to become critical thinkers and useful in the digital workplace.

Lecturers and adult learners are connected to each other and make good use of social media platforms to improve their education. This means that lecturers in the DE mode of learning embed various technologies into pedagogy to support the learning process that goes on at learning centers in Ghana. This is perhaps the way to go because Universities South Africa (USA), a group of vice-chancellors of public universities, have policy documents backing them on the usage of social media to teach and learn in twenty (20) universities in South Africa. In the case of the University of Ghana, the SAKAI (LMS) teaching and learning tools, which have policy documents backing its usage in teaching and learning, but not social media platforms. Lecturers and adult learners use them informally to teach.

It is imperative for a country to start a conversation on the use of social media platforms for teaching and learning across all levels of educational institutions in Ghana. According to Gupta (2015), social media helps professors become connected to their students off campus and their ex-students. Thus, professors use social media as a way of teaching by creating *groups* and *accounts* for students where information can be accessed. This observation, which is supported by Gachago and Ivala (2015) about South Africa, where twenty (20) universities use social media platforms to teach students in *groups* can be replicated in the Learning Centers in Ghana. Group learning has also been a tradition in adult education (Imel, 1997), therefore, asking adult learners to form groups and learn using social media platforms is appropriate in this digital era.

Considering the advancements in ICT teaching and learning tools today, Universities in Ghana cannot wait but deploy the best types of social media platforms, as revealed by the study on facilitating adult learners in HEIs. When this happens, lecturers and professors can share ideas with adult learners and point to them to go to LinkedIn or Facebook to learn materials to supplement learning materials uploaded on the SAKAI (LMS) teaching and learning tools and learn. Finally, lecturers and professors can create hash tags that allow adult learners to tag their academic posts and view submissions of their colleagues in order to see what the collective has creatively produced in terms of learning by social media platforms in this digital age.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

Citation information

Cite this article as: Adult learners' use of social media at the university of Ghana, Isaac Kofi Biney & Moses Kumi Asamoah, *Cogent Social Sciences* (2023), 9: 2245613.

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