Opportunities and Challenges of Social Media Usage in Higher Education Institutions: A Systematic Review

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Abstract: The purpose of this study is to investigate the opportunities and challenges of social media usage in higher education institutions. The study is significant because it adds both theoretical and practical knowledge to the existing literature on how higher education institutions' students use social media to improve the quality of their education in a given context. PRISMA guidelines for systematic review methodology were employed to explore the current literature on the topic. Different sources were searched using pre-defined search items. A total of 1156 papers were found and screened for abstracts and titles, and 27 full-text articles were evaluated for eligibility. Finally, 9 articles were selected for the systematic review. The result indicated that social media usage in higher education institutions has both opportunities and challenges. Most of the reviewed articles mentioned f social media as an opportunity for improving students' academic performance and helping in sharing information, thoughts, and ideas with their peers. On the contrary, improper usage of social media platforms could distract students' attention, and also make them become addicted, and may result in sleeping disorders for students of higher education institutions.

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Introduction

In recent years, social media are increasingly used for information sharing, communication, entertainment, and sources of income across the globe. A number of new social media platforms are emerging from time to time. Although the advantage of social media is growing, the addictive nature of this new technology is also growing (Sun & Zhang, 2021). Apart from information sharing, communication, and entertainment, social media are recently becoming teaching-learning tools in higher education institutions.

The use of social media as a teaching tool in higher education is gaining increased attention from researchers and practitioners (Hamadi et al., 2022). Social media platforms can also be a fantastic tool for fostering the learning community, student involvement in classes, information sharing, and student mentorship, facilitating instant social learning and insightful communications (Sobaih et al., 2016).

Although social media platforms are increasingly used in higher education as learning tools, their adoption as formal teaching and learning tools by educators is still quite limited, subject to numerous restrictions, and lacking integration models and frameworks that are universally accepted (Hamadi et al., 2022). Despite the widespread usage of online social media for personal interests, few students and teachers use it for instructional objectives (Chen & Bryer, 2012).

In order to provide educational opportunities to potential students such as those for whom attendance at the university is not possible, students who are employed full-time and are unable to leave their jobs, physically challenged individuals, parents with young children, and military personnel, among others, many higher education institutions around the world are adopting online learning (Egielewa et al., 2022). This educational process entails teaching via ICT between an instructor and students who are not in the same place and in which learning may occur in a synchronous or asynchronous situation.

To better understand student involvement and improve learning outcomes, research on social media usage in higher education institutions is essential. Through the examination of students' social media usage, educational institutions can customize their outreach tactics and promote community development. Furthermore, the research findings might be utilized to improve the overall student experience by informing the creation of digital literacy initiatives and crisis communication plans.

This systematic review aims to identify the opportunities and challenges associated with social media usage in higher education institutions. It is conducted with consideration for the need to highlight the significance of social media in higher education as well as the barriers that prevent the effective use of social media for learning.

Objectives

The main objective of the study is to investigate the opportunities and challenges of social media usage by undergraduate students in higher education institutions. To reach this goal, the researcher conducted a systemic review of the social media usage of undergraduate students in higher education institutions, especially on the opportunities and challenges of using social media.

Methods

This review adheres to PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) which is a standard technique for systematic reviews (UK, 2021). The PRISMA systematic process consists of four stages: Identification, Screening, Eligibility, and Inclusion of articles reviewed in this study. The identification stage entails locating articles through database searches and other sources. The screening stage identifies and removes duplicate articles. The eligibility stage specifies the number of items that will be evaluated and rejected. Finally,

the inclusion stage displays the remaining articles that will be included in the analysis after the articles to be excluded have been removed.

Based on accessibility, relevance, and timing, this study searched resources from databases such as Science Direct, Emerald Insight, and ERIC for studies focusing on the social media usage of undergraduate students in higher education institutions. All reference citations, tables, and figures were used according to APA 7th guidelines (*Publication Manual of the American Psychological Association (7th Ed.).*, 2020).

Eligibility Criteria

As described in the objective, this study examines the challenges and opportunities of social media usage among regular undergraduate students in higher education institutions. Thus, the articles included in the review explored the use of social media in higher education institutions. Peer-reviewed articles that used mixed-method approaches and were published from 2014-2022 with a focus on the opportunities and challenges of social media usage were included in the systematic review. However, conference papers, reports, book reviews, book chapters, and synopsis were excluded from the review to make the study specific and focused.
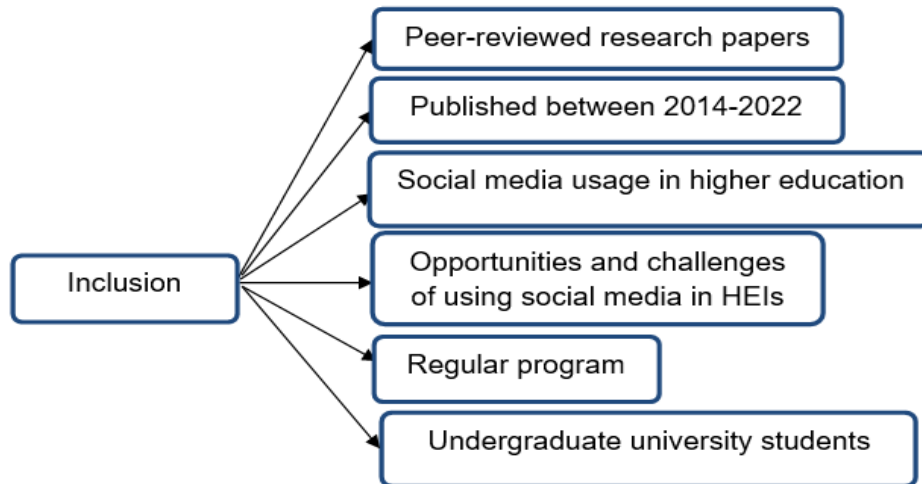
Figure 1. Inclusion criteria for the systematic review

Selection process

Following the PRISMA Flow diagram in Fig. 3, after searching from databases with the given search terms (social media, challenges, opportunities, media usage, undergraduate regular students, higher education institutions), a total of 1156 papers were obtained in the identification stage. In the screening stage, a reference software (Zotero) was used to remove duplicates. Subsequently, only the titles and abstracts of the 145 papers were maintained and examined to see if they fulfill the inclusion criteria in Fig. 1. In the next stage, the number of full-text articles for eligibility was obtained by subtracting the records excluded from the records screened.
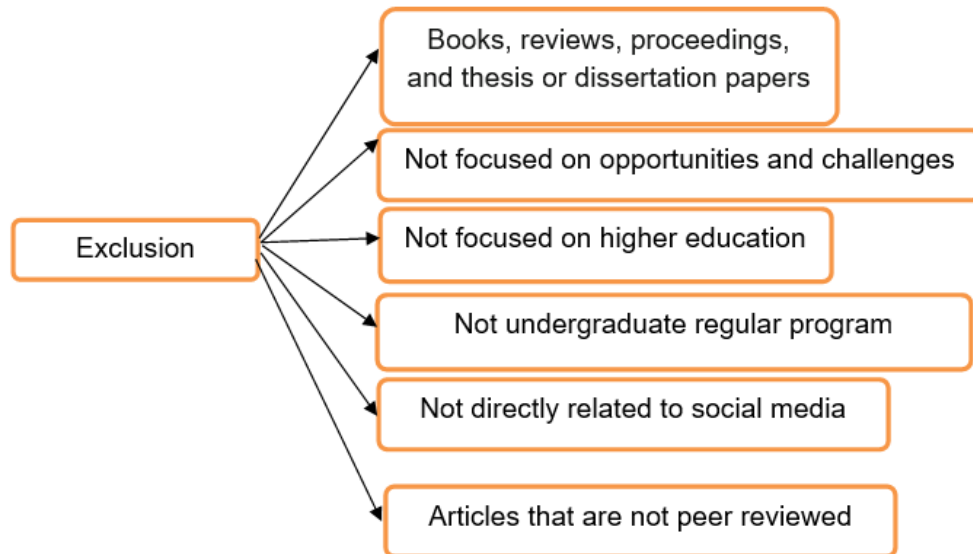
Figure 2. Exclusion criteria for the systematic review

A total of 27 articles that fulfilled the eligibility criteria were further scrutinized employing the exclusion criteria. Eighteen articles of the 27 did not fulfill the inclusion criteria and were thus excluded leaving us with a total of nine full-text articles.
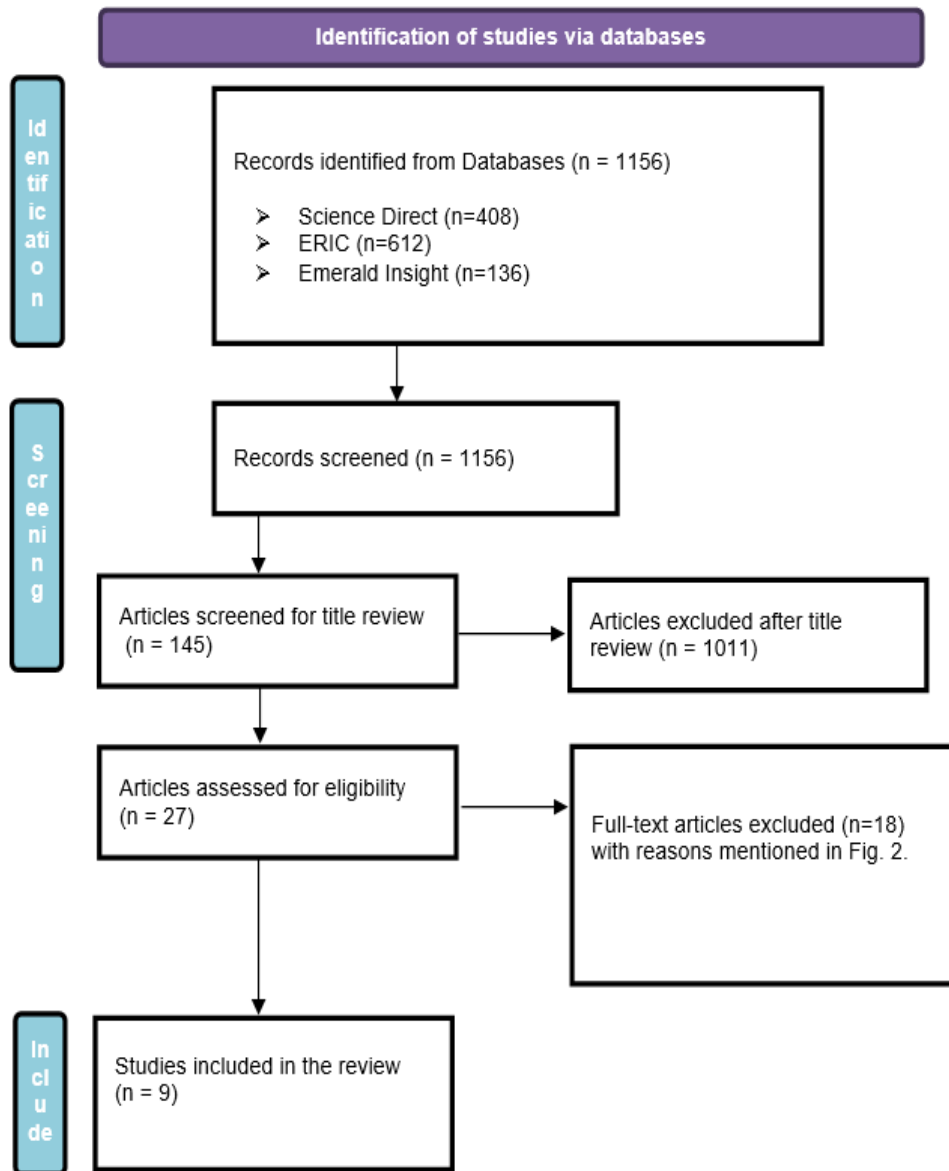
Figure 3. Flow diagram of included articles based on PRISMA

Table 1: Summary of 9 Peer-Reviewed Studies Evaluating the Usage of Social Media in Higher Education Institutions Included in a Systematic Review

N o	Author(s)	Title	Objectives of the Study	Methodology	Major Findings
1	Choi & Kang (2014)	A Dynamic Examination of Motives for Using Social Media and Social Media Usage Among Undergraduate Students: A Latent Class Analysis	To analyze motives for using social media, To identify the type of social media usage, and To investigate whether motives affect social media usage types	Latent class analysis (LCA) and multinomial Logistic regression were carried out using PROC LCA for SAS	Students are better able to create their own understanding of content when using social media in learning. However, the research result revealed that university students use definite usage such as searching content.
2	Mungofa & Tsvara (2015)	Social Media in Tertiary Education-Vhembe Further Education Training College Case Study	To establish whether social media technologies are being considered disruptive or complementary technologies in the context of a further education training college located in a rural environment.	A mixed methods approach was adopted for this research.	The use of social media in higher learning enables students to interact with content they can create individually or share with other students. Furthermore, potential learning occurs outside the classroom or independent of

					location as students can be able to access educational resources as long as they are connected to the internet.
3	Amadu et al. (2018)	Using the Technology Acceptance Model to Measure the Use of Social Media for Collaborativ e Learning in Ghana	To investigate the impact of social media usage on students' academic performance through collaborative learning among university students in Ghana.	A quantitative data analysis method was employed.	The outcome of this study indicates that interaction with peers, perceived ease of use, and perceived usefulness through collaborative learning help students achieve higher GPAs at the university since they find it easy and useful for their studies.
4	Subair S. et al. (2019	Social Media: Usage and Influence on Undergradu ate Studies in Nigerian Universities	To examine the usage and influence of social media on undergraduate studies.	Descriptive survey research design (quantitative approach))	Findings from the study indicate that undergraduates used social media platforms mainly for socialization, information, and academic purposes.
5	Alaslani & Alandejani (2020)	Identifying factors that influence students'	To identify and examine factors that have an	Survey design was used to analyze the factors	The findings indicate that SNSs have a significant

		performance through social networking sites: An exploratory case study	impact on the academic performance of students by using SNSs	associated with students' performance, among undergraduate and graduate students during the 2016/2017 academic year.	positive effect on interactions with colleagues, interactions with instructors, engagement, cooperative learning, and student performance.
6	Wang et al. (2021)	Social media's (Facebook) improper use and the influence of sleeping quality among Taiwan's university students	To investigate university students' FB usage and addiction levels, and how FB influences their daily lives and sleep quality.	Quantitative Survey Research Design was used and a total of 277 participants were involved in the study.	This study demonstrates that improper use of social media platforms like FB increases the risk of addiction and sleep disorders.
7	Ali et al. (2017)	Strengthening the academic usage of social media: An exploratory study	To explore factors that can help to understand the academic use of social media among students, reduce the phenomenon of learning distraction, and enhance their online engagement.	Qualitative research (exploratory analysis) was used and data were collected through interviews conducted with students of higher education. ATLAS-Ti-7 and MS Excel. N= 47 were used for analysis.	Results showed that individual psychological characteristics, social influences, information quality, and system usefulness are the leading factors. Furthermore, the survey established the importance of this platform for academic purposes and

				perception concerning the phenomenon of distraction.
8	Manu et al. (2021)	Students' engagement and social media in tertiary education: The perception and experience from the Ghanaian public university	To explore students' perceptions of social media as an effective teaching instrument. The study is expected to properly frame the use of social media tools in the classroom and provide insight into how students embrace these efforts in a broader educational context.	A survey that employed both quantitative and qualitative approaches was used to understand how students perceive the application of social media in higher education. Two rounds of survey data collection and 14 in-depth interviews were piloted.	The results divulge the openness of using social media in education, uncover the interaction and information motivation of its use, and have theoretical and pedagogical significance.
9	V.Rasiah (2014)	Transformative Higher Education Teaching and Learning: Using

Social Media in a Team-Based Learning Environment | To assess the effectiveness of social media in enhancing teaching and learning in a team-based learning environment involving large classes. | Content analysis or textual analysis with quantitative survey was carried out to elicit information on students' perceptions of using Facebook as a team-based learning tool and their | The findings concur with those of several other studies, showing how social networking sites such as Facebook make very effective learning platforms that enhance students' engagement and learning |

	acquisition of various competencies or graduate capabilities as a result.	experience, transforming them into active learners with an increased motivation to learn while fostering the high-quality exchange of ideas and knowledge among participants in a learning community.

Findings

Description of Included Articles

Nine papers were selected for review based on the fulfilment of the inclusion criteria in Fig. 1. Figure 3 shows the flow diagram of the selection process based on PRISMA guidelines. The number of included papers (n = 9) and excluded papers (n = 18) with overall reasons for exclusions are found in Figures 1 and 2, respectively. The summary of information for each of the accepted papers (Table 1 above) presents the titles of the papers, the aims of the study, the methodology, and the findings.

Summary of Methodologies Used in the Reviewed Articles

Of the nine reviewed papers, five of them employed descriptive surveys with a quantitative approach (Alaslani & Alandejani, 2020; Amadu et al., 2018; Choi & Kang, 2014; Subair S. et al., 2019; Wang et al., 2021); however, only one paper (Ali et al., 2017) employed qualitative research approach. And the remaining three papers (Manu et al., 2021; Mungofa

& Tsvara, 2015; V.Rasiah, 2014) adopted a mixed-method research design.

Major Findings

The major findings of the study were classified into two considering their possible opportunities on the one hand and challenges, on the other, of social media usage in higher education institutions.

Opportunities of Social Media Usage in Higher Education

Social media consists of several opportunities for students in higher education: communication with friends; watching news; sharing photos, and videos; involvement in public topic discussions; adding instant messages with real-time web chat; and playing games. These are all user-generated content activities resulting in an interactive social environment that is appropriate for social and peer learning (Sobaih et al., 2016).

Numerous initiatives have been launched to examine social media's potential for use in education as a result of its popularity. For instance, WordPress was used to help students create their e-portfolios for evaluation, and some institutions employed Skype to let students engage with professionals in related subjects as a learning activity (Li & Wong, 2021). According to these authors, the initiatives have illustrated the benefits of social media for active and informal learning by fostering student contact and participation both within and outside of the classroom. The following are some of the advantages that higher education students can make of social media.

Increasing Academic Performance

The result of the study showed that social media in higher education institutions increase students' engagement and academic performance. Through social media, students can search for additional information or

revise what they have learned in the classroom. In addition, online discussion forums via social media are extremely important for improving learning and teaching, particularly for developing higher-order learning abilities, student-centered pedagogy, genuine learning, and interactive learning communities (V.Rasiah, 2014). However, students may waste their time chatting and sharing unnecessary information with their peers through social media platforms.

Information Sharing

Apart from their importance in improving academic performance, social media have been recognized as the best way of sharing information, news, communications, and so forth.

Entertainment

Social media can also be used as a source of amusement that students can utilize for social contact when necessary (Ali et al., 2017). Hence, besides improving their academic performance and information sharing, students use social media for the purpose of entertainment.

Challenges of Social Media Usage in Higher Education

The social, economic, and technical developments that higher education institutions must adapt to in the twenty-first century will significantly alter the educational experience of students. Researchers should keep an eye on emerging technologies to see which ones could be useful in the classroom and how open students are to using them (Neier & Zayer, 2015). Social media come in a wide variety of forms, and there are several applications for them. Despite this variation, researchers find a lot to be worried about (Anderson, 2019).

Difficulties associated with the effective adoption of social media have also been noted. For example, it can be challenging to strike a balance between its informal and academic uses and to modify current

pedagogies to take into account the features of social networking sites (Li & Wong, 2021). Although educational institutions promote student and teacher collaboration to support effective learning outcomes, they nonetheless place a strong emphasis on control and quality monitoring of learning and instruction. Today's culture offers a wide variety of external, free social media platforms, making it challenging for schools to keep track of each one and guarantee that students are using them responsibly (Li et al., 2015). Furthermore, while some scholars encourage the use of social media in education, using social media has some disadvantages such as privacy, copyright, and data ownership (Manu et al., 2021). The following are some of social media's envisaged detriments.

Distraction and Addiction

According to Subair S. et al., (2019), undergraduate students spend an average of 2 to 3 hours daily on social media platforms; which may encourage distraction and addiction to social media platforms. In addition, improper usage of social media platforms like FB increases the risk of addiction and sleep disorders (Wang et al., 2021).

Distraction in the context of social media for learning purposes refers to a delay in study time, less concentration with respect to learning, low academic practice, cyber-bullying or malicious behavior; privacy and health concerns related to poor learning outcomes, lower GPA, and motivational problems, which is the personal desire of a student to achieve high academic achievements (Ali et al., 2017). This study found that the distractions ranged from psychiatric disorders to emotional disorders and lower GPAs. Hence, apart from its educational importance, social media usage has a negative effect on students' academic achievement by making students distracted and/or addicted to social media platforms according to studies by Ali et al. (2017); Subair S. et al. (2019); and Wang et al. (2021). Since the majority of social networks offer unlimited access to entertainment such as videos, music, and games, many students spend more time on these activities than they

do on their school work. This can have a huge impact on student productivity and performance.

Social Media Dependency

Despite their significant use, the study conducted by Wang et al., (2021) indicates that social media can lead to dependence attributed to the fact that most students stay logged into FB for information exchange or social connection for a long time. Besides, this study demonstrates that improper use of social media platforms like FB increases the risk of addiction and sleep disorders. This happens because students are spending much time on social media interacting with their peers which in turn results in social media dependency. Hence, the more time they spend on social media, the more they become addicted and dependent on them.

Strategies to Mitigate the Misuse of Social Media

For the abovementioned challenges of social media usage, scholars have mentioned some important strategies that can help higher education students focus on their academic activities instead of using social media for other purposes. As stated by Nyongesa et al., (2019), it is clear that educational institutions can employ the subsequent tactics to lessen the impact of social media on student behavior: academic institutions can use social media only as a teaching and learning tool; they hire experts to monitor students' exposure to and use of social media; allow students to access only educational social media sites; educate students about online safety and responsible use of social media; use YouTube to shield students from inappropriate communication; and advise and encourage parents to be involved in their children's online activities.

Conclusion

In this study, a comprehensive review was conducted on articles published between 2014-2022 on the challenges and opportunities associated with social media usage in higher education. The objective of the study was to examine the impact of social media on higher education and findings revealed a dual nature of social media usage in this context. The majority of the reviewed studies highlighted numerous opportunities presented by social media in enhancing students' academic performance, facilitating information sharing, and fostering the exchange of thoughts and ideas among peers. Additionally, social media enables students to participate in virtual classrooms, breaking down geographical barriers.

However, alongside these unlimited opportunities, the study also identified certain drawbacks associated with social media usage. Improper utilization of social media platforms, for instance, was found to be a significant challenge. It can lead to distractions, addiction, and even sleep disorders among students in higher education institutions. Therefore, higher education institutions should also keep an eye on how their students use social media on campus. This supervision can be used to spot communication patterns, engagement trends, and the general effects of social media on students' academic and social lives.

Overall, this study emphasizes the importance of understanding and managing the opportunities and challenges posed by social media in higher education, in order to harness its potential benefits while mitigating its negative impacts.

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