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Abstract
Learning activities are significant undertakings in shaping the overall performance of the students. Students' engagement in learning activities requires a seamless flow of interaction from inside and outside the classroom. The continued dismal performance in students' assessments raises questions about what hinders the effective interface of learning activities. This study aimed to assess the influence of mobile social media on students' learning activities in public day secondary schools in Nyeri County, Kenya. The specific objectives were; to determine the effect of frequent use of mobile social media on participation in outdoor play; and to evaluate the impact of social media use on learning. The study was guided by the social cognitive theory proposed by Albert Bandura in 1977. The descriptive research design was adopted. A target population of 160 public day secondary schools in Nyeri County with 5400 form two students was taken. A simple random sampling was applied to get sample size of 48 principals and 48 guidance and counseling teachers (30%). Krejcie and Morgan 1970 table was used to get 358 students sample population. Questionnaires were reliably used to collect data from students and guidance and counseling teachers. Principals were taken through the interview. The collected quantitative and qualitative data was analysed using descriptive statistics and thematic analysis respectively. Research results indicated that the majority of students, 76.2, access social media sites distracting learning activities. This study will empower education stakeholders to put control mechanisms on excessive social media use which deters students' performance.

Introduction
Various social dynamics have shaped learning activities. With the advent of the internet and mobile technologies, new social factors influence students' learning experiences. For instance, the internet offers many resources that students can utilise for educational purposes. However, it also presents potential distractions and challenges in effective time management (Alwagait, Shahzad, & Alim, 2017).

Learning activities involve tasks and assignments that students undertake to acquire knowledge and skills, either offline or online (mobile technology). For instance, ICT integration in the teaching-learning process, such as the use of tablets and interactive whiteboards, has been proven to arouse learners'

interest, enhancing learning activities (Colliot et al., 2024; Gong et al., 2021; Mendez, Reguera & Lopez, 2021). However, this technological advancement has failed to differentiate educational learning areas from social media sites. Students are more engaged on digital platforms to socialise than to gain knowledge. The students in public day secondary schools often sneak phones into the school compound and regularly visit the school computer laboratories. They frequently access the internet through purchasing bundles, borrowing bundles, using hotspots, free Wi-Fi connections, and parents' or guardians' phones. The irresistible attraction of social media platforms among the youth has encroached upon students' learning activities. Globalisation and the availability of internet facilities continue to define and shape youths' learning activities in public day secondary schools in Nyeri County, Kenya.

Mobile social media and outdoor play

Dodson (2020); Olowo et al. (2020), in their study on the behaviour of high-performing college students, explain that top students embraced key social factors such as the integration of digital learning resources, effective leisure time management, peer discussion group support, and participation in outdoor learning activities as essential elements of their valuable learning experiences. These high-performing learners created a systematic to-do list organised into fixed sessions for both learning and entertainment. The role of digital resources has become increasingly significant in the modern educational landscape. According to a study by Zhao and Frank (2003), Zhao (2023), and Huang et al. (2023), digital resources such as online textbooks, educational software, and e-learning platforms have been suggested to enhance student participation in learning activities. These resources provide wide and tailored learning experiences, which address diverse learning needs and preferences.

Several studies have also indicated that the rampant abuse of mobile social websites and social accounts by high school students habitually results in dismal academic performance (Agwi & Ogwueleka, 2018; Bamigboye & Olusesan, 2017; Kolhar et al., 2021; Oguguo et al., 2020; Omachonu & Akanya, 2019). The unsatisfactory results elicit concerns from guardians and other stakeholders in the education sector. Consequently, if the trend of poor academic performance is not adequately addressed, the situation will continue to deteriorate. Findings from Nigerian secondary school students indicated that most access a one-on-one communication channel numerous times daily. Due to the negative impact internet-based media may have on students' academic performance, mobile phones have been banned from learning halls in most educational institutions.

Njoroge (2019) emphasises that schools with ample digital resources, such as e-textbooks, modern laboratory equipment, and digital tools, provide students with better learning opportunities, positively influencing their learning. Wambugu and Changeiywo (2018) observed that students interact with content presented in an accessible and engaging manner. This highlights the importance of investing in quality educational resources.

Equally, there are benefits for those students who engage with various social networks constructively (Çebi & Güyer, 2020). When senior secondary students are excessively inclined towards the internet and other informal online interaction platforms, they become susceptible to social media addiction (Feng & Wong, 2019). The online media sites most frequently used by students tend to be personalised communication networks (Chang et al., 2019). On a daily basis, students are drawn to different online social sites (Koca & Berk, 2019). They squander their much-needed study time on gaming sites, Twitter, Facebook, and other social platforms through personal digital assistants (PDAs), which are popular among the youth.

It's evident that during active learning sessions, a large number of students hardly focus entirely on their studies without being tempted to peruse their social accounts or update profiles on these informal

networks (Koca & Berk, 2019). Mobile smartphones, ipads, and tablets are considered to be the most common gadgets used by students to easily access and participate in various web-based media platform activities (Koca & Berk, 2019). Another scholar, Ismail (2021), assessed the impact of social media on teenagers' lifestyle choices and how social media affects their educational career decisions. Notwithstanding the adverse effects of mobile social media on young people, they confess that it is difficult to envision today's world without the latest social media technology.

A recent study by Kolhar et al. (2021) observed that most students preferred mobile online social sites. Due to intensive interactions on social media for non-educational purposes, most students could not focus on academic activities. Moreover, extensive use of social media at night causes sleep-related disorders. They argued that excessive mobile social media use negatively affects students' social well-being, leading to addiction and mental disorders. Furthermore, the study indicated that persistent sleep deprivation causes metabolic complications due to long sitting hours spent engaging in mobile social activities.

A study by Hinkley et al. (2020) indicated that watching time and mobile social media use are inversely proportional to physical activity levels among children and adolescents. The study revealed that as social engagement time increases, the time devoted to physical activities decreases. This shift not only affects physical health but also limits opportunities for social interactions and skills development that occur during outdoor play. Furthermore, the nature of social media content can influence students' preferences and behaviours. According to Przybylski and Weinstein (2021), exposure to passive activities and the allure of social media platforms can foster a preference for online interactions over physical activities. This preference can lead to a decline in outdoor play, which is crucial for holistic development.

The connection between mobile social media usage and engagement in educational games is multifaceted and intriguing. While social media platforms can host educational games that enhance learning, not all interactions on these platforms are beneficial. Nyambura and Muchiri (2020) argue that educational games on social media can boost learning experiences by making them more interactive and engaging. These games can aid in developing cognitive skills, problem-solving abilities, and subject-specific knowledge, although no physical exercise is involved. However, outdoor play is more beneficial and essential for students' physical and mental development than computer games. It promotes physical activity, social skills, and psychological well-being.

Nevertheless, the increased use of mobile social media has raised concerns about its impact on outdoor play. According to Kinyanjui et al. (2022), students who spend significant time on mobile social interaction are less likely to engage in outdoor activities. This inactive behaviour can lead to various health issues, including obesity, poor cardiovascular health, and reduced mental well-being. A study by Rideout (2021) suggested that setting screen time limits and encouraging outdoor activities can help mitigate the adverse effects of excessive mobile social media use. Schools can also incorporate physical activities and outdoor play into their daily schedules to ensure that students partake in sufficient physical exercise.

Moreover, the potential benefits of educational games on social media are often overshadowed by the prevalence of non-educational content. Mugo (2021) found that non-educational social media use frequently distracts students from engaging in meaningful educational activities, including games. The study highlighted that the addictive nature of social media platforms can contribute to excessive use, which consequently reduces the time available for educational pursuits. According to Greenfield (2020), while some games can support educational objectives, others are designed primarily for entertainment, offering little to no educational benefit.

Mobile social media impact on learning

The psychological and social impacts of mobile social media use on students cannot be overlooked. Continuous misuse of mobile social media can readily lead to addiction, which significantly affects students' behaviour and time management.

Additionally, constant exposure to mobile social media can alter students' concentration spans and cognitive functioning. According to Carr (2020), the rapid consumption of information on mobile social media sites can lead to short concentration spans, making it difficult for students to engage in activities that require sustained focus, such as educational games. Educational institutions and parents play a vital role in guiding students towards healthier habits.

Educational strategies and interventions can help mitigate the influence of mobile social media on students. Integrating ICT programmes into the secondary curriculum can expose students to responsible, beneficial use of mobile social media. According to a study by Livingstone et al. (2018), informing students about the potential hazards and benefits of mobile social media use can enable them to make well-informed decisions regarding their internet-enabled activities. Schools can collaborate with software developers to enhance educational content that aligns with curricular objectives. This approach can ensure that students' screen time is productive and conducive to learning.

Monitoring and balancing screen time with outdoor play promotes high-quality educational content, making it a crucial strategy for reducing the negative effects of mobile social media use. All education stakeholders must enforce deliberate restrictions on mobile social sites for students. By adopting these strategies, educators and parents can support students' holistic development in an environment rich with digital content.

The rampant use of mobile social media among students has significantly distracted learning activities in public day secondary schools in Nyeri County, Kenya. This issue has not received adequate attention from education stakeholders. As a result, there is a gap in best practices aimed at enhancing learning activities among students to improve their academic performance.

Albert Bandura's social learning theory underpins this study. The theory posits that individuals learn through observation, imitation, and modelling, emphasising the role of social context in shaping learning behaviour. It integrates both behavioural and cognitive principles, indicating that learning can be acquired by watching others. Mobile social media primarily involves social interaction through digital platforms, enabling users to connect and provide feedback. Students gain insights from mobile social media, which ultimately become part of their learning practices.

Methodology

Research design

The descriptive research design was adopted for the study. This design was ideal due to its simplicity and accuracy. The research occurred in public day secondary schools in Nyeri County, Kenya. Nyeri County was chosen because of the public outcry regarding generally poor results in most national assessments in public day secondary schools within the county.

Target population

The target population refers to the entire group involved in the research for concluding. The study's target population comprised 160 public day secondary schools, with 5400 Form Two students, 160 principals, and 160 guidance and counselling teachers.

Sample size and sampling technique

A simple random sampling technique was employed to identify a sample size of 30% of the target population, ensuring the data was representative and unbiased (Kothari, 2019). The representative sample consisted of 48 principals and 48 guidance and counselling teachers. The Krejcie and Morgan 1970 table was utilised to obtain a sample of 358 students from 5400 form two students.

Data collection instruments

Data tools, primarily questionnaires, were administered to students and teachers to collect quantitative data, while an interview guide was developed for principals to gather qualitative data. The instrument's validity was assessed through expert judgement. A test-retest technique was utilised to determine the reliability of the developed questionnaires. The Pearson Product-Moment Correlation formula was employed to compute the correlation coefficient for the test-retest. A correlation coefficient of approximately 0.8 was deemed sufficient to consider the instrument reliable for the study (Orodho, 2009).

Data analysis

Data were analysed descriptively, and inferential statistics, including frequency tally, averages, and percentages, were applied to present data. Quantitative data from the students and teachers were analysed using version 25 of the Statistical Package for the Social Sciences (SPSS). Qualitative data collected from principals' interviews were thematically analysed to link common themes and patterns related to mobile social media use. Themes were generated by coding the transcribed interview data, identifying recurring ideas, grouping similar codes, and refining categories into key themes that reflected everyday experiences and perceptions among the principals.

Results and discussion

Quantitative data

The study aimed to assess the influence of mobile social media use on learning activities in public day secondary schools in Nyeri County, Kenya. Data were collected using questionnaires from both the students and the guidance and counselling teachers.

Table 1 below indicates that more than 76.2% of the student respondents access social media. This results in a decline in students' participation in learning activities. Specifically, 17.9% admitted that they always have access to social media. Another 12.3% indicated they frequently access social media, while 20.9% admitted to occasional use and 25.1% reported using it rarely. On the other hand, only 23.7% of the respondents indicated no access to mobile social media. The teachers were asked about the frequency of social media engagement by students in their schools. Most respondents specified that students in public day secondary schools engage with each other on social media. According to 30% of the respondents, students are frequently involved, 38% indicated occasional engagement, and only 26% stated that students are rarely engaged. In support, Núñez & Muñoz (2020) posited that when students use mobile devices for academic purposes, they experience increased engagement and enhanced learning outcomes. This view is also supported by Jiang & Ding (2020), who argue that mobile phone use for non-educational purposes could hinder students' cooperation, resulting in lower academic performance.

Table 1: Response on frequency of mobile social media use

	STUDENTS		TEACHERS	
Response	Frequency	Percent	Frequency	Percent
Always	64	17.9	15	31.3
Frequently	44	12.3	8	16.7
Occasionally	75	20.9	9	18.8
Rarely	90	25.1	13	27.1
Never	85	23.7	3	6.3
Total	358	100.0	48	100

The table 2 below shows that a high number of respondents, at 41%, own a smartphone. Another 34% indicated that they have access to a family smartphone. These two are the primary ways students gain access to social media sites. Only 17% of respondents indicated no access to social media. Smartphones and cyber shops are the commonly used gadgets by high school students to access and engage in various web-based media activities easily. This may cause a decline in students' participation in learning activities as they focus on their smartphones. According to Koca & Berk (2019), Android phones, iPhones, and tablets are thought to be the most common methods for students to acquire simple web access and participate in various web-based media network activities.

Table 2: Students response on mode of social media access

Mode of social media access	Frequency	Percent
Own Smart Phone	150	41.9
School Computer	13	3.6
Cyber Shops	7	2.0
Family Smart Phone	124	34.6
None	64	17.9
Total	358	100.0

The respondents were asked to name their favourite social media sites. According to Table 3 below, the majority of respondents, at 28%, indicated that their favourite is Facebook, followed by WhatsApp at 26% and TikTok at 22%. Only 10.5% of respondents named educational social sites as among their favourites. This indicates that social media use among students is primarily for non-educational purposes. This aligns with research findings by Chang et al. (2019), which suggest that high school students' most preferred online media sites tend to be individualised communication and entertainment platforms. This indicates students' biased interests towards entertaining sites and social chatting platforms, rather than engaging learning sites. Quality learning experiences may be compromised as learners are exposed to adult-only sites that are not age-restricted. Further examining students' social media use habits, respondents were asked how often they interact via mobile social media for educational purposes. The results show that, to a small extent, students use mobile social media for educational purposes.

Table 3: Favourite social media sites

Frequency of social media	Frequency	Percent
Facebook	102	28
WhatsApp	94	26
Tiktok	81	22
X(Twitter)	9	2.5
Educational	38	10.5
All above	30	9
None	4	2
Total	**358**	**100.0**

Table 4 below asserts that the majority of respondents, at 35%, indicate that they always use social media during their leisure time. A further 34% indicated that they spend less than 1 hour daily on social media. Only 15% of the respondents said they use social media between 1-2 hours daily, while very few admitted using it for more than 3 hours a day. According to the findings, students rarely engage in important activities such as instructional and research tasks during their leisure time, and others often partake in social media at ordinary times. This makes it difficult for them to concentrate for two or three hours without monitoring and responding to texts on these informal networks. According to Koca & Berk (2019), Android phones, iPhones, and tablets are considered the most common means for students to obtain simple web access and participate in various web-based media network activities.

Table 4: Hours spent by students on social media daily

Hours spent on social media daily	Frequency	Percentage
Less than 1 hour	123	34.4
1-2 hours	57	15.9
3-4 hours	31	8.7
More than four hours	21	5.9
Always leisure time	126	35.2
Total	358	100.0

Table 5 below evaluates the impact of mobile social media use on students' time on outdoor games. The majority of respondents indicated that social media use decreases the time spent on outdoor games. 27.7% stated that it always decreases the time allocated to outdoor games, 9.8% indicated a frequent reduction, 13.1% reported an occasional reduction, and 13.7% mentioned a rare decline. However, only 35.8% of respondents indicated that mobile social media use does not affect the time spent on outdoor games. A majority of teachers, at 72.0%, stated that mobile social media use leads to a decline in students' engagement in outdoor activities. Only 22% indicated that social media use rarely influences outdoor activity time, while 6% stated that social media use has no influence on students' outdoor activities.

This explains the reduced levels of participation in co-curricular activities and the low interest in exploring outdoor activities. Only a small number of respondents indicated that social media use has increased students' interest in co-curricular activities such as music and drama performances. Overall, both teachers and students agree that there is a high usage of mobile social media among students. This usage negatively impacts students' outdoor activities. Outdoor play is imperative for holistic development and sustained motivation in related learning activities. The findings align with study findings by Hinkley et al. (2020), who found that screen time, including social media use, is inversely related to physical activity levels among children and adolescents. The study revealed that as screen

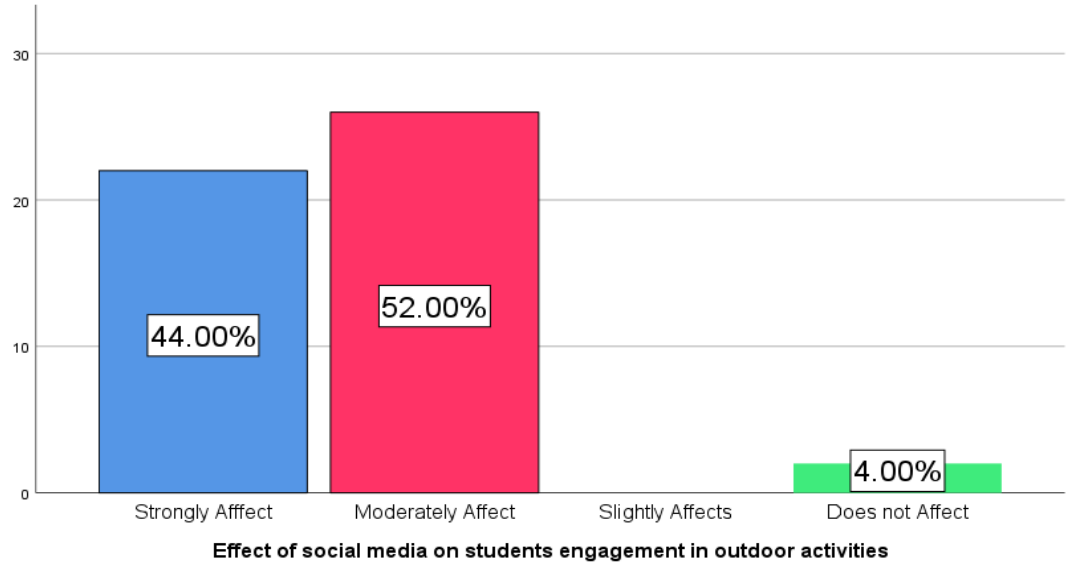
time increases, the time spent on physical activities decreases. This shift not only affects physical health but also limits opportunities for social interactions and skill development that occur during outdoor play. In agreement, Przybylski and Weinstein (2021) add that exposure to passive activities and the allure of social media platforms can create a preference for online interactions over physical activities.

Table 5: Influence of social media usage towards outdoor play time

Students' response	Frequency	Percent	Teachers' response	Percent
Yes, always it decreases outdoor Play time	99	27.7	34	72.0
Yes, frequently it decreases outdoor play time	35	9.8		
Yes, occasionally it decreases outdoor play time	47	13.1		
Rarely, it decreases outdoor play time	49	13.7	11	22.0
No, it does not affect outdoor play time	128	35.8	3	6.0
Total	358	100.0	48	100

Figure 1 below shows that while the teachers indicated that social media use affects students' outdoor activities, further evaluation revealed that a majority, at 52%, regarded this influence as moderate, whereas 44% perceived it as strong. Consequently, screen time, including social media use, is inversely related to physical activity levels among students. Responses from school principals confirmed that with increased social media usage, a majority of students prefer to remain indoors during sports periods, citing fatigue or lack of interest, which was less common in the past. Additionally, school-organised outdoor programmes, such as nature walks, physical education (P.E.) sessions, and inter-school sports competitions, have experienced lower participation rates. Some students express reluctance to engage in these activities, as they would rather spend their time watching online videos, chatting with friends, or participating in virtual gaming.

Figure 1: Principals' response on level of social media influence on students' outdoor activities



Qualitative data analysis

Shift from Traditional Hobbies to Online Engagements

The interviewees expressed that they have observed changes in students' interests and recreational preferences. Many noted that students are increasingly drawn primarily to online digital sites instead of engaging in traditional hobbies such as playing outdoor games. These include TikTok dance challenges, YouTube logs, and online gaming communities, essentially replacing the physical activities that students once enjoyed. This trend illustrates a cultural shift among the youth, where digital platforms are becoming the primary outlets for entertainment and self-expression.

Reduced Interpersonal Interaction

While social media has introduced new forms of self-expression and creativity, it has also diminished direct interpersonal interactions. Many principals have noted that students now prefer digital communication to face-to-face engagements, particularly during social events or free time at home. This preference for virtual communication has reduced students' participation in physically and socially engaging hobbies, limiting their opportunities to develop interpersonal skills through traditional peer interaction.

Digital Dependency and Decreased Physical Activity

The immersive and addictive design of social media platforms has contributed significantly to what interviewees describe as digital dependency. Students become increasingly absorbed in virtual interactions, leading to a noticeable decline in outdoor activities. This digital immersion often shifts students' priorities away from physical engagement, resulting in less participation in sports, physical education, and co-curricular activities. According to studies by Boone and Leadbeater (2020), Twenge and Campbell (2020), and Stiglic and Viner (2020), increased screen time, especially on social media, strongly correlates with reduced physical activity and outdoor play among students. Consequently, many principals report that students today exhibit signs of fatigue or disinterest in outdoor school programmes, which were previously popular and well-attended.

Conclusions

The research concluded that the majority of students have access to mobile smartphones and frequently use social media sites. The use of social media by students impacts their learning activities by diminishing their physical engagement in outdoor activities such as games and fieldwork.

Facebook, WhatsApp, and TikTok rank among students' favourite sites and are rarely employed for educational purposes. Non-educational use of social media often distracts students from participating in meaningful learning activities. The study highlighted that the addictive nature of mobile social media platforms can lead to excessive use, consequently reducing the time available for educational pursuits. Additionally, the quality and educational value of games on social media platforms vary widely. While some games can support educational objectives, many are designed primarily for entertainment, offering little to no educational benefit.

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