Harnessing Social Media for Independent Learning: Insights from Higher Education Students

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Abstract

The utilisation of social media has changed the educational landscape by providing a flexible and innovative platform for students' self-directed learning. This study aims to explore the impact of social media as a source of self-directed learning on undergraduate students at the Faculty of Teacher Training and Education, Pattimura University, Indonesia. Using a quantitative-descriptive approach, data was collected from 166 students through a structured questionnaire. The results showed high usage of social media for learning, with platforms such as YouTube, Instagram, and WhatsApp being the most frequently used. Students utilise social media to complete academic tasks, expand their knowledge, and improve their digital competence, reflecting the potential of social media as an adaptive and effective learning tool. This research highlights the role of social media in supporting the principles of andragogy and lifelong learning, and identifies various benefits, including collaboration, creativity and problem-solving. However, it also reveals challenges such as distraction and the validity of online information. The results provide practical recommendations for educational institutions to optimise the use of social media in the learning process, including through digital literacy training and integration into the curriculum. The findings offer important insights for the development of innovative digital education that supports students' learning needs in the modern era.

Keywords: *Social Media, Self-Directed Learning, Digital Education.*

Introduction

The global learning landscape in the twenty-first century is transforming, shaped by digital communication tools and ubiquitous network applications, alongside changes in learners' characteristics, needs, and demands. Information technology has emerged as a powerful force driving educational reforms, with social media rapidly evolving as a learning tool (Assefa et al., 2023; Purnama & Asdlori, 2023; Rautela et al., 2022). Many teachers and students consider social media an essential element in overall learning, as a crucial space for exchanging information on contemporary topics (J. Abbas et al., 2019; Ashraf et al., 2021). Beyond its ability to facilitate information exchange anytime, anywhere, digital learning tools and technologies address the limitations of traditional classrooms, offering faster learning environments, quicker assessments, and increased engagement (Lacka & Wong, 2019; Samed Al-Adwan et al., 2020; Sleeman et al., 2019).

Despite the rapid advancements in education, some faculty members still firmly believe that traditional classrooms are the most effective way to enhance student competencies (Al-Rahmi et al., 2021; Samed Al-Adwan et al., 2020; Sobaih et al., 2022). However, with the increasing pace of education, physical classroom spaces have become barriers to learning, evident at the University of Houston, where only about 10% of students reside on campus, and approximately 90% are commuter students. The average commuting distance for students is about 18 miles one way, with nearly 90% of them having part-time or full-time jobs. Therefore, integrating technology has become necessary to meet their learning needs (Ansari & Khan, 2020; Eom, 2022; Mardiana, 2019). The Educause Center for Applied Research [ECAR] found that around 67% of surveyed students acknowledge the significant role of mobile devices and social media in their academic performance and career enhancement (Ansari & Khan, 2020; Jagannathan & Vezhaventhan, 2022).

In the current era, individuals continuously embrace new technologies, information, lifestyles, and languages as they live in a global society. The younger generation is particularly urged to leverage virtual social media sites such as Facebook, Twitter, TikTok, and YouTube, often due to their popularity (A. Abbas

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et al., 2019; Suhail, 2023). They believe that staying current on these virtual platforms elevates their status. However, in today's world, virtual social media influences the language acquisition of young learners (Tomilina & Maloivan, 2020; Zainal & Rahmat, 2020). Due to the prevalence of digital social media among the younger population, they may intentionally or unintentionally adopt language patterns from these platforms (Alghamdi & Sabir, 2019; F. U. Khan et al., 2023). In 2021, 99% of children aged 3 to 17 years utilized the Internet (Carrion et al., 2022) and the latest data from Statista (2020) indicates around 3.96 billion global social media users (Ansari & Khan, 2020; Maghfur et al., 2020).

Social media comprises services that enable users to generate and share content online, including social networks that facilitate managing relationships in online communities (Purnama & Asdlori, 2023). Social media's positive impact needs exploration to identify its potential reflections in various aspects of life (Greenhow et al., 2019). It is considered revolutionary for teaching and learning due to its open, communicative, and social nature (Ansari & Khan, 2020; Rahman et al., 2020). Social media platforms have become highly interactive spaces where students can share and discuss ideas and information (Zarzycka et al., 2021). Utilizing social media in learning and teaching facilitates interactions between teachers and students and among students (Chaudhuri et al., 2023; Ohara, 2023). Moreover, social media learning platforms enable parents to monitor their children's progress if they can access their work, fostering more significant interaction among students, teachers, and parents/caregivers (M. N. Khan et al., 2021). Social media is a learning platform that enhances the learning environment by facilitating collaboration and communication between students and teachers, influencing learning and performance (Liu et al., 2022; Sarwar et al., 2018).

YouTube is the most widely used platform, with 89% of children using it, and Instagram is one of the rapidly growing social media platforms, boasting around 700 million users as of April 2022 (Bozzola et al., 2022). However, social media usage seems limited to online videos (61%) compared to other social media sites like Facebook (4%) or Twitter (2%) (Lozano-Blasco et al., 2023). Significantly, instructors reporting these social technologies in class restrict it to instructor posts rather than student-generated content (Cataldo et al., 2021). Digital media usage, from online gaming to smartphone/tablet or internet access, has revolutionized societies worldwide (Richards, 2021). In the UK alone, according to data from Ofcom, 95% of individuals aged 16 to 24 own a smartphone, checking it an average of every 12 minutes. Estimates suggest that 20% of all online adults spend over 40 hours per week online (Helbach & Stahlmann, 2021). Digital media, especially the Internet, has become a crucial aspect of our modern lives (Coates et al., 2019).

As of January 2023, there are at least 167 million social media users in Indonesia, meaning that 78% of the 212.9 million internet users in Indonesia utilize social media, accounting for approximately 60.4% of the total population (Nurfalah et al., 2023). Moreover, 153.7 million social media users are aged 18 and above, falling within the range of university students. Legally, students are categorized as adults with the autonomy to develop their potential in higher education as intellectuals, scientists, practitioners, and professionals (Khadimally, 2021; Prasojo & Yuliana, 2021). Consequently, the application of adult learning theory or Andragogy should be implemented in the higher education learning process (Melnychenko, 2020). Self-directed learning is one form of implementing Andragogy, allowing individuals to analyze their learning needs with or without external support (Amien et al., 2023; Fahimah et al., 2023).

With the evolution of time and easy access to information and technology in the education world, students can leverage social media for self-directed learning purposes (et al., 2019). Students are expected to take responsibility for their learning needs through various educational content accessible via social media (Ashraf et al., 2021). Social media offers numerous opportunities for higher education institutions to enhance student learning (Al-Rahmi et al., 2021). Students can prioritize self-directed learning to become lifelong learners (Moges et al., 2023; Rautela et al., 2022). Despite being widely used by students (Aleksandrova & Parusheva, 2019), most higher education institutions still need to leverage social media entirely, considering it solely as a communication tool (Ansari & Khan, 2020; Purnama & Asdlori, 2023).

This study is crucial for several reasons. First, it addresses the gap in understanding how social media can be effectively utilized as a tool for self-directed learning, particularly in higher education contexts. While social media is widely recognized for its role in communication and entertainment, its potential as a learning

resource remains underexplored (Greenhow et al., 2019; Liu et al., 2022). By investigating students' perceptions and usage patterns, this research provides insights into how social media can be integrated into educational strategies to foster critical and reflective thinking skills.

Second, the study highlights the importance of aligning educational practices with the digital habits of modern learners. With the majority of students actively engaging on social media platforms, understanding how these platforms can support learning is essential for designing effective and engaging educational experiences (Al-Rahmi et al., 2021; Ashraf et al., 2021). This alignment is particularly relevant in the context of adult learning theory (Andragogy), where self-directed learning plays a pivotal role in lifelong education (Melnychenko, 2020; Fahimah et al., 2023).

Third, the findings of this study can inform educators and policymakers about the potential of social media to bridge the gap between formal education and informal learning. By leveraging social media's interactive and collaborative features, educators can create more dynamic and inclusive learning environments that cater to diverse student needs (Zarzycka et al., 2021; Chaudhuri et al., 2023). This is especially important in regions like Indonesia, where social media penetration is high, and students are increasingly relying on digital tools for learning (Nurfalah et al., 2023).

Finally, this research contributes to the broader discourse on digital literacy and the role of technology in education. As digital media continues to shape how information is accessed and shared, understanding its impact on learning processes is critical for preparing students to navigate the complexities of the digital age (Richards, 2021; Coates et al., 2019). By examining the intersection of social media, self-directed learning, and critical thinking, this study offers valuable insights into how educational practices can evolve to meet the demands of the 21st century.

Consequently, social media has lost its significant contribution to self-directed learning as many students fail to recognize its potential beyond entertainment, relying solely on classroom instruction (Aleksandrova & Parusheva, 2019; Murniati et al., 2023). This research aims to explore how students perceive and utilize social media for self-directed learning, especially given that many view instructional materials provided in class as the primary source of knowledge enhancement

Literature Review

Social media is not only a learning tool but also an infrastructure that supports self-directed learning as a whole. By implementing social media-based learning strategies, dynamic learning environments, and strengthening digital communities and trust, students can significantly improve their learning outcomes. This study provides a new perspective in utilizing social media for self-directed learning that is relevant to the needs of the 21st century. The following concept map presents social media as a learning resource,
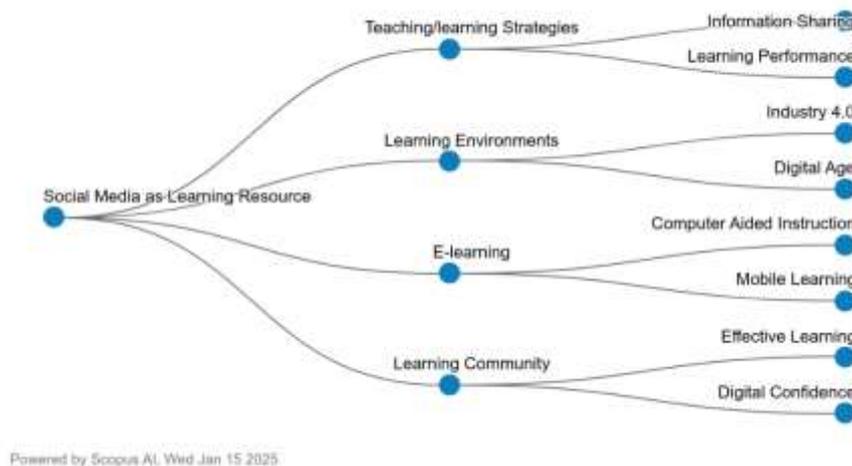
Figure 1. Concept Map Media Social

Social Media as a Transformative Learning Resource

Social media has transformed from a communication tool to a significant learning resource in the digital era. In the context of self-directed learning, social media offers seamless accessibility, allowing students to access information anytime and anywhere. Platforms such as YouTube, Instagram and LinkedIn have become interactive digital libraries, providing learning opportunities based on videos, articles or online discussions. This is supported by Kaplan and Haenlein (2010), who state that social media has great potential to support learning through interactivity and wide distribution of information.

Teaching and Learning Strategies in Social Media

The use of social media in learning strategies creates a more dynamic and contextualised learning experience. Through online discussion features, student-to-student collaboration and media-based material enrichment, students can maximise their learning outcomes. Junco (2012) revealed that students' active participation in social media-based activities contributes positively to academic engagement and performance. This strategy is also relevant to the needs of digital learning in the Industry 4.0 era, where technology adaptability skills are crucial (Selwyn, 2016).

Creating Engaging Learning Environments

Learning environments integrated with social media provide flexibility and convenience for students. In the context of self-directed learning, social media enables learning across geographical boundaries, connecting students with experts or communities of learners around the world. This is important in the Digital Age, where learning is no longer limited to conventional classrooms. According to Al-ahmi et al. (2015), the use of social media in e-learning has been shown to increase learning motivation and collaborative interaction between students.

Fostering a Learning Community

One of the main advantages of social media is its ability to form learning communities. In these communities, students not only share information but also support each other to achieve learning goals. This learning community strengthens students' Digital Confidence, which is an essential skill for successful independent learning. Dabbagh and Kitsantas' (2012) study shows that social media can create an environment that supports community-based learning effectively, integrating formal and informal learning.

Enhancing Mobile and E-Learning

The rise of mobile device-based learning through social media allows students to learn anytime and anywhere. WhatsApp, Telegram and similar platforms facilitate efficient collaboration as well as rapid distribution of learning materials. Kearney et al. (2012) found that mobile device-based learning with social media integration encouraged student engagement and improved the overall learning experience.

Methods

Research Approach

- Quantitative Approach: The study used survey methods to measure the impact of social media use on students' self-directed learning. (Creswell, 2014).

- Descriptive Approach: To analyse social media usage patterns, frequency, and platforms used.

Type of Research

Descriptive-Correlational: Explaining the relationship between social media usage and students' self-directed learning.

Research Instruments

Questionnaire: Based on a 5-point Likert scale to measure intensity of social media use, platform type, and impact on learning.

Population and Sample

Population: Undergraduate students at the Faculty of Teacher Training and Education, Pattimura University.

The population of this study consists of undergraduate students at the Faculty of Teacher Training and Education (FKIP), Pattimura University. These students represent future educators, making them a relevant group for investigating how social media can be harnessed for independent learning. Since the role of educators is crucial in shaping learning strategies, understanding their engagement with social media as a self-directed learning tool is essential.

Sample: 166 students, consisting of 66 males and 100 females from four departments.

The study's sample comprises 166 students, consisting of 66 males and 100 females, selected from four different departments within FKIP Pattimura University. The sample is designed to provide a diverse representation of students, ensuring a balanced perspective on how different individuals engage with social media for learning purposes.

The selection of this sample may have been conducted using random sampling to ensure equal representation, or stratified sampling, considering factors such as gender and department affiliation. By including students from multiple departments, the study ensures that findings are not biased toward a single discipline, offering broader insights into how social media supports self-directed learning across different educational backgrounds.

By analyzing this sample, the research aims to uncover patterns, challenges, and benefits associated with leveraging social media as a tool for independent learning among higher education students. The findings will contribute to enhancing digital learning strategies, supporting educators and institutions in integrating social media effectively into academic environments.

Sampling Technique

Stratified Random Sampling to ensure representation from each department (Fraenkel et al., 2012).

Data Analysis

Descriptive: Using SPSS to calculate mean, median, mode, and standard deviation.

Inferential: Correlation test to evaluate the relationship between the independent (social media use) and dependent (self-directed learning) variables.

Indicator Variable

- Use of Social-Media: Frequency, duration, platform type.

- Independent Learning: Ability to analyse learning needs, complete assignments, and seek additional learning resources.

Research Stages

Graphic 1. Research Stages
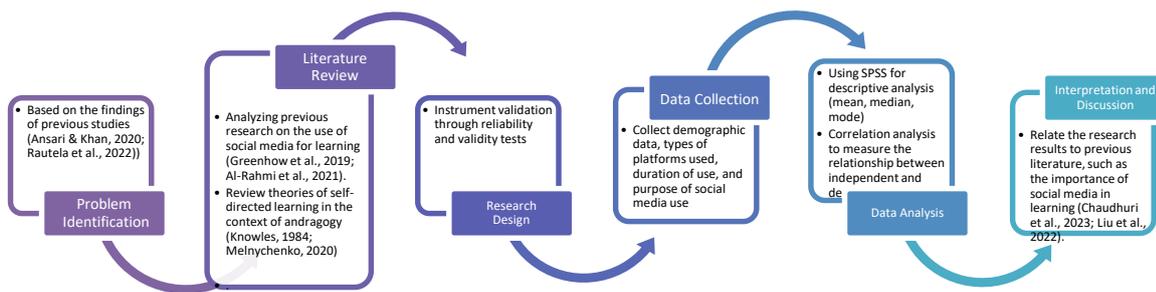
Results

Utilization of Social Media as a Source of Independent Learning by FKIP Unpatti Students Using Social Media as a Means of Self-Learning. The results of the descriptive analysis indicate that the level of social media usage as a means of self-learning by FKIP Unpatti students is relatively high, with values ranging between 4 and 5 on a 5-point scale, which implies that using social media as a source of independent learning for students can be effectively utilized to assist them in completing assignments from the campus and expanding their knowledge, thus developing their potential through social media as a source of independent learning. For more clarity, please refer to Table 1.

Table 1. Descriptive Analysis Output of the Variable Usage of Social Media as a Means of Self-Learning Using IBM SPSS Statistics 25.

Statistics		I use social media as a means of communicating and learning media independently	I use social media not only as a medium for independent learning but as a medium for entertainment
N	Valid	335	335
	Missing	0	0
Mean		4.21	4.09
Median		4.00	4.00

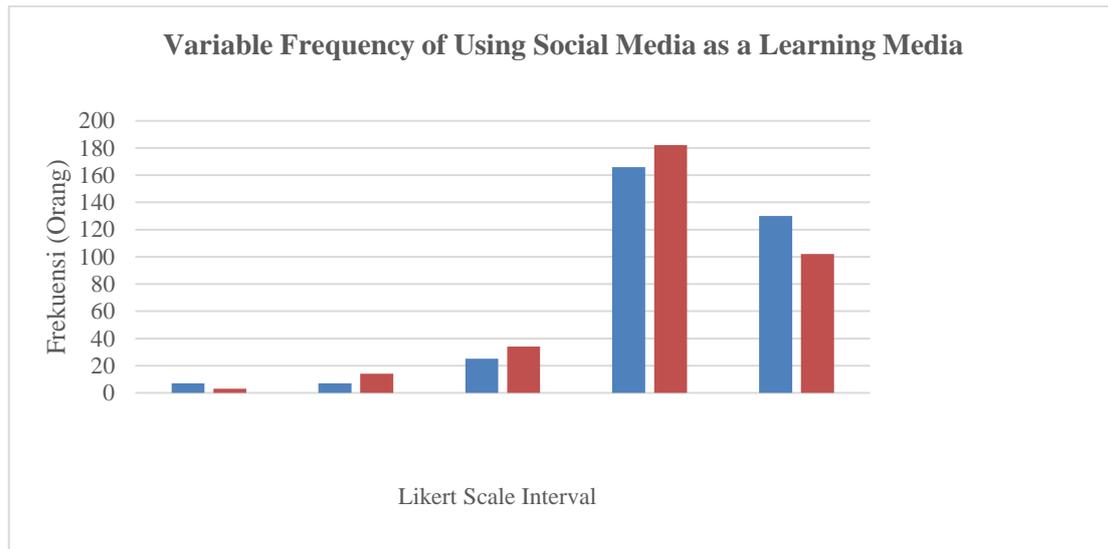| Mode	4	4
Std. Deviation	,832	,804
Variance	,693	,647
Range	4	4
Minimum	1	1
Maximum	5	5
Sum	1410	1371

Figure 1. Frequency of Social Media Usage as Learning Media

Utilization of Social Media in Fulfilling Independent Learning Needs

The results of the descriptive analysis indicate that FKIP Unpatti students are highly active and can use social media for more than 2 hours to meet their independent learning needs. Based on the frequency, the level of social media usage is relatively high, with values ranging between 3, 4, and 5 on a 5-point scale, which means that students are very active in using social media, capable of utilizing it for more than 2 hours per day indicates that students use social media as a source of independent learning and leverage it for other needs throughout the day. For further clarification, refer to Table 2.

Table 2. Descriptive Analysis Output of the Frequency of Social Media Usage as a Means of Independent Learning Using IBM SPSS Statistics 25.

Statistics		I actively use social media every day to fulfil my learning needs independently	I use social media more than 2 hours a day to fulfil my learning needs independently
N	Valid	335	335
	Missing	0	0
Mean		3.91	3.99
Median		4.00	4.00
Mode		4	4
Std. Deviation		1,005	,973
Variance		1,010	,946
Range		4	4
Minimum		1	1

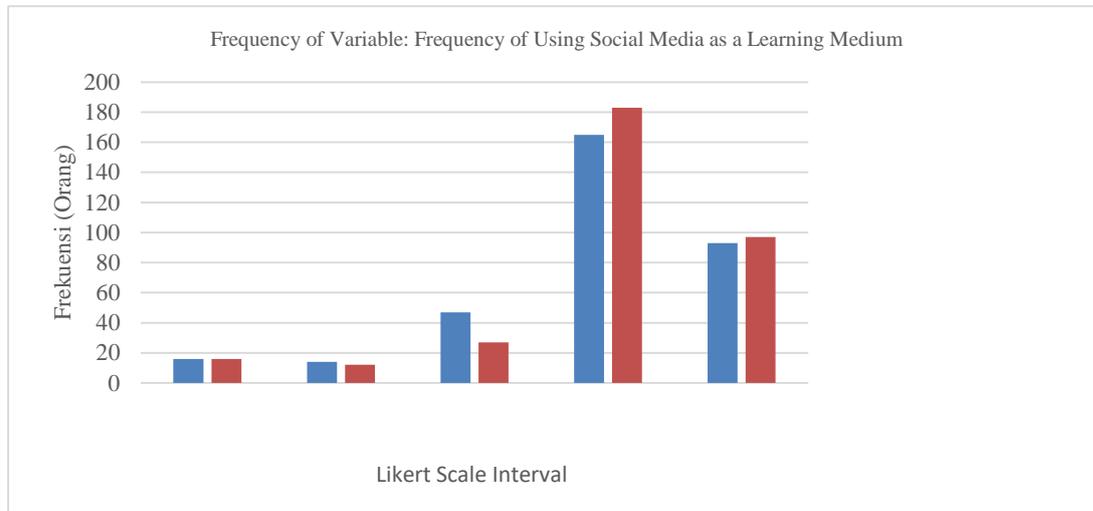| Maximum	5	5
Sum	1310	1338

Figure 2. Frequency of the Variable Frequency of Social Media Usage as Learning Media

Types of Internet Facilities Used by Students

The results of the descriptive analysis show the types of facilities students use to access the Internet for connectivity, primarily through wifi and data packages. Based on the results, most students prefer using the wifi facilities provided on campus to connect to the Internet, with the highest usage level falling within the range of 4 and 5 on a 5-point scale, indicating that students are more inclined to utilize the campus wifi network to connect to the internet and access information and knowledge on social media. For further clarity, refer to Table 3.

Table 3. Descriptive Analysis Output of the Types of Internet Facilities Used by Students Using IBM SPSS Statistics 25.

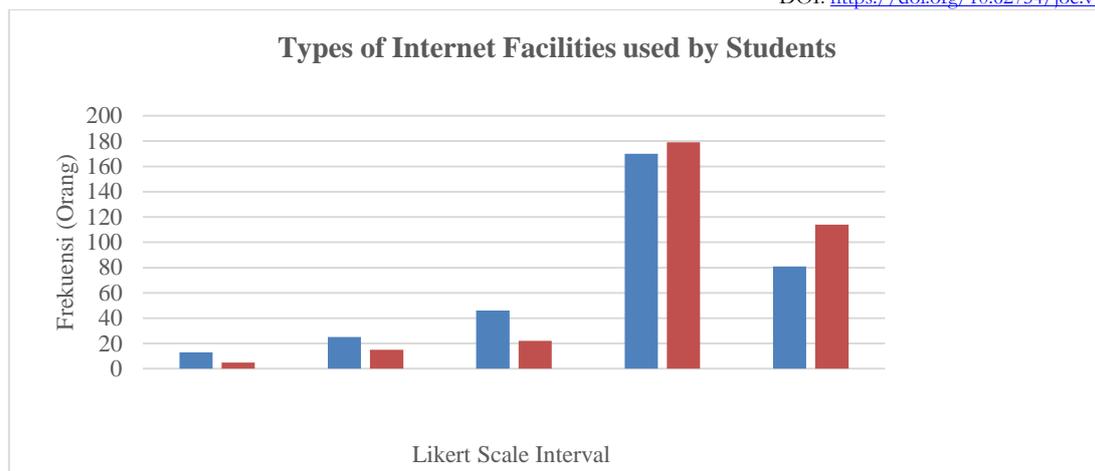| Statistics		I connected to access the Internet using a data package	I use campus wifi facilities to access the Internet
N	Valid	335	335
	Missing	0	0
Mean		3.84	4.14
Median		4.00	4.00
Mode		4	4
Std. Deviation		1,002	,838
Variance		1,004	,702
Range		4	4
Minimum		1	1
Maximum		5	5
Sum		1286	1387

Figure 3. Frequency of the Variable Types of Internet Facilities Used by Students

Types of Devices Used to Access the Internet

The results of the descriptive analysis demonstrate a high perceived benefit regarding the use of gadgets or smart devices (within the range of 4.5 on a 5-point scale), indicating that students can connect to the Internet by utilizing various devices, such as laptops, notebooks, PCs, to access social media. Students can leverage technological advancements, especially gadgets or smart devices, to interact with others and meet their learning needs on campus. For further details, refer to Table 4.

Table 4. Descriptive Analysis Output of the Types of Devices Used to Access the Internet Using IBM SPSS Statistics 25.

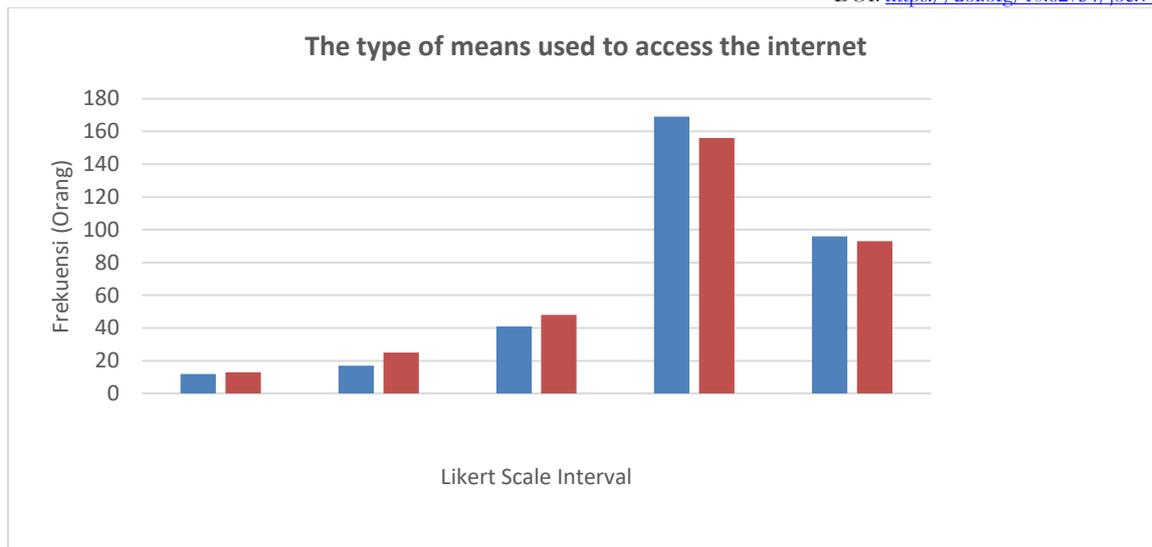| **Statistics**		I use a computer (laptop, notebook, PC, and others) to access social media	I use my cellphone to access social media
N	Valid	335	335
	Missing	0	0
Mean		3.96	3.87
Median		4.00	4.00
Mode		4	4
Std. Deviation		,967	1,027
Variance		,935	1,055
Range		4	4
Minimum		1	1
Maximum		5	5
Sum		1325	1296

Figure 4. Frequency of the Variable Types of Devices Used to Access the Internet

Level of Understanding Among Students Regarding the Use or Operation of Social Media

The results of the descriptive analysis indicate that not all students can operate or use social media effectively. Many students still require assistance from friends or others to operate gadgets or smart devices to connect to the Internet. Additionally, students still need to fully develop the ability to analyze information related to learning, as a score of 4.5 on a 5-point scale suggests a need for more understanding among students regarding the use and utilization of technology. It shows that the level of understanding and utilization of social media as a smart device needs to be better comprehended and still requires assistance from others to access the Internet. For further details, refer to Table 5.

Types of Social Media Used by Students for Independent Learning Needs

The results of the descriptive analysis show that students are proficient in using social media; however, not all applications on social media are utilized for independent learning needs. Only a few applications on social media are dedicated to independent learning needs, and the usage level is relatively high (within the range of 4 and 5 on a 5-point scale), indicating that students can utilize specific applications available on social media for their independent learning needs. For further details, please refer to the table below:

Table 5. Descriptive Analysis Output of the Level of Understanding Among Students Regarding the Use or Operation of Social Media Using IBM SPSS Statistics 25.

Statistics						
		I can operate the facilities (computer, laptop, notebook, cellphone, and others) to connect and access the Internet on	I still need to be able to operate the facilities (computer, laptop, notebook, cellphone, and others) to access the Internet and social media properly, and I	I understand the Internet and social media well and can analyze learning-related information.	I need a better understanding of the Internet and social media. I still need to filter and analyze the information I get on social media, so I need direction. .	I need a better understanding of the Internet and social media. I still need to filter and analyze the information I get on social media, so I need direction.

		social media well.	still need assistance from other people.			
N	Valid	335	335	335	335	335
	Missing	0	0	0	0	0
Mean		3.93	3.88	4.21	4.12	3.95
Median		4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4
Std. Deviation		0.985	0.967	0.781	0.763	0.870
Variance		0.971	0.936	0.611	0.582	0.758
Range		4	4	4	4	4
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5
Sum		1316	1301	1411	1379	1322

Table 6. Descriptive Analysis Output of the Types of Social Media Used by Students for Independent Learning Needs Using IBM SPSS Statistics 25.

Statistics

		I use all applications on social media for learning needs	I do not use all the applications on social media for learning needs	I use Facebook	I often use the Instagram application	I use YouTube social media	I often use the TikTok application	I often use Snack Video social media	I often use Google Chrome for social media	I often use the Zoom Meeting application	I often use the Google Classroom application	I often use WhatsApp social media to create a WhatsApp group (WAG)
N	Valid	335	335	335	335	335	335	335	335	335	335	335
	Missing	0	0	0	0	0	0	0	0	0	0	0
Mean		4.16	4.06	3.90	4.18	4.27	4.18	3.92	4.16	3.82	3.82	4.08
Median		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode		4	4	4	4	4	4	4	4	4	4	4
Std. Deviation		,862	,815	,883	,716	,705	,822	1,012	,808	,997	,997	,770
Variance		,742	,664	,780	,513	,496	,676	1,024	,653	,994	,994	,593
Range		4	4	4	4	4	4	4	4	4	4	4
Minimum		1	1	1	1	1	1	1	1	1	1	1

Maximum	5	5	5	5	5	5	5	5	5	5	5
Sum	1392	1361	1306	1400	1430	1401	1314	1395	1279	1279	1366

Based on the results of the research conducted across 17 study programs, the types of social media platforms used by student respondents for independent learning sources are as follows: Students who use social media platforms for independent learning include the following percentages for each application: Facebook application (10.75%), Instagram application (11.64%), Youtube application (12.84%), Tiktok application (11.94%), Snack Video application (10.45%), Google Chrome application (12.24%), Zoom meeting application (9.55%), Classroom application (9.55%), Whatsapp application (11.04%) indicates that student respondents primarily use the YouTube platform (12.84%) as their primary source for independent learning, compared to other social media platforms. Meanwhile, the least utilized platforms for independent learning are Zoom meetings and Classroom, at 9.55%. This statement can be seen in the figures and tables below.

Objectives of Using Social-media as a Means of Independent Learning: The results of the descriptive analysis show that students use social media for various purposes related to independent learning. These include obtaining and disseminating information, socializing and expanding friendship networks, inspiring and motivating oneself to study, completing assignments given by lecturers, sharing information related to learning with peers, conducting online academic activities, expressing hobbies and creativity, storing documents such as photos and videos, and utilizing advanced technology for online selling. These purposes are rated within the range of 3, 4, and 5 on a 5-point scale, indicating that students use social media not only as a place for independent learning but also for various other purposes, such as expanding friendships, finding inspiration, and expressing creativity. For further details, please refer to Table 7.

Table 7. Descriptive Analysis Output of the Objectives of Using Social Media as a Means of Independent Learning Using IBM SPSS Statistics 25.

Statistics

		Media for finding and disseminating information	Socializing media for expanding friendship networks	Media inspiration related to learning motivation	Media for completing assignments (journals, articles, and others).	E-learning media	Media with various 'Share' features to share educational-related videos	Lecture media	Media to enhance creativity and channel hobbies	Social media is the primary means of learning	Social media as a platform to store documents in the form of photos and videos related to learning	Selling other people's merchandise available on online shopping applications
N	Valid	335	335	335	335	335	335	335	335	335	335	335
	Missing	0	0	0	0	0	0	0	0	0	0	0
Mean		4.20	4.12	4.10	4.16	4.19	4.07	4.05	4.04	4.07	4.07	3.96

Median	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode	4	4	4	4	4	4	4	4	4	4	4
Std. Deviation	.759	.848	.818	.790	.777	.832	.869	.845	.788	.871	.923
Variance	.575	.719	.669	.625	.604	.693	.755	.714	.620	.759	.852
Range	4	4	4	4	4	4	4	4	4	4	4
Minimum	1	1	1	1	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5	5	5	5	5
Sum	1408	1381	1375	1393	1404	1363	1357	1355	1365	1363	1327

Discussion

Utilization of Social Media as a Self-Learning Source by FKIP Unpatti Students

Based on the research results, the level of social media use as a means of self-learning by FKIP Unpatti students is relatively high, indicating that students not only use social media for communication but also consider it a self-learning source outside the classroom. This aligns with findings that show university students effectively use social media for both academic and non-academic purposes, with no significant difference in usage based on gender or school ownership. Furthermore, the use of social media in higher education is increasingly recognized for its role in enhancing communication, collaboration, and overall learning experiences, although challenges like distraction and privacy concerns remain (Karayigit & Parlade, 2023; Zulfiqar et al., 2022).

In the current educational paradigm, students must be responsible and independent learners. Professors are facilitators, motivators, and dynamic figures, providing foundational knowledge. Students must seek various learning sources, including books, scholarly journals, the Internet, magazines, newspapers, and more. With its development, the Internet has transformed information access and communication, breaking the limitations of space and time.

Frequency of Social Media Usage to Fulfill Self-Learning Needs

The research indicates that students are highly active in using social media, spending more than 2 hours daily to meet their learning needs. This high level of social media usage implies that students not only utilize it as a self-learning source but also for various other purposes, such as entertainment and content creation. Social media has become a primary necessity for individuals, aligning with findings that emphasize the significant role of social media in enhancing e-learning and self-directed learning in higher education. Additionally, social media platforms like YouTube, TikTok, and Instagram have been recognized as valuable tools for creative expression and informal learning, supporting the development of students' digital literacy and self-learning skills (Nasome et al., 2022; Oh et al., 2020; Sobaih et al., 2022).

Types of Internet Facilities Used by Students to Access Social Media

The research shows that students utilize various internet access facilities, including personal data packages and campus-provided wifi networks. Most students prefer using the wifi provided by the campus, indicating the importance of ensuring reliable and accessible wifi facilities to support students' independent learning. This aligns with findings that highlight the effectiveness of campus wifi networks in enhancing students' learning experiences and engagement. Additionally, the availability of strong internet infrastructure is crucial

for supporting research activities and improving academic performance, as demonstrated in various studies on internet usage in educational settings (Amponsah et al., 2022; Ohei & Brink, 2021; Yuan, 2021).

Media Used to Access the Internet

Students use laptops, notebooks, PCs, and smartphones to access the Internet and social media. Among these, smartphones are the most commonly used devices. This preference for smartphones suggests that these devices have become essential tools for accessing information, learning materials, and engaging in social interactions. Research indicates that smartphones significantly impact students' academic learning, enhancing their learning skills, participation in discussions, and academic performance. Additionally, smartphones are increasingly being used as ICT literacy media and learning resources among college students, facilitating information search and content management. Furthermore, the adoption of smartphones in education has proven beneficial in improving students' public speaking skills and keeping them engaged in the learning process (Basha et al., 2022; Benard et al., 2021; Isa et al., 2023).

Students Understanding of Social Media Usage or Operation

The research reveals that within the scope of FKIP Unpatti, most students are proficient in operating devices like computers, laptops, notebooks, and smartphones to connect to the Internet and access social media. However, many students still require assistance in navigating social media and critically analyzing the information they receive. This is consistent with findings that emphasize the importance of cybersecurity awareness among students due to the increasing risk of cybercrimes, particularly in educational settings. Moreover, the use of social media among students has been linked to various risks, including exposure to cyberbullying and privacy violations, necessitating greater awareness and education in safe digital practices (Basha et al., 2022; Benard et al., 2021; Isa et al., 2023).

Types of Social Media Used for Self-Learning

The research identifies that most students use various social media applications effectively for learning. Not all applications are used for learning; however, students discern which suits their educational needs.

- Facebook: Used for interaction, expanding social networks, and obtaining information related to learning.

- Instagram: Utilized for capturing images, sharing videos, and accessing a wide range of information related to learning.

- YouTube: A popular platform for uploading and watching videos, serving as a valuable resource for learning materials.

- TikTok: Used for information dissemination, learning, entertainment, business, expanding social networks, and self-expression.

- Snack Video: A platform for creating and sharing short videos, stimulating creativity, and enhancing language skills.

- Google Chrome: Primarily used for browsing websites and accessing various information sources efficiently.

- Zoom Meeting: An essential application for virtual communication and participation in lectures, seminars, and other educational activities.

- Google Classroom: A platform for simplified creation, distribution, and assignment of tasks, fostering accessible communication between students and professors.

- WhatsApp: An instant messaging application used for communication, sharing information, and group discussions related to learning.

- This diversification of social media platforms reflects students' adaptability in utilizing different learning tools. Educators must recognize students' various platforms and leverage them effectively in the teaching-learning process.

- Benefits and Challenges of Utilizing Social Media for Self-Learning

The research findings highlight the advantages and challenges associated with using social media for self-learning by FKIP Unpatti students.

Advantages

- Accessibility: Social media provides easy access to a vast pool of information and resources, enabling students to learn beyond the limitations of time and space.

- Interactivity: Platforms like Facebook, Instagram, and YouTube offer interactive features that enhance engagement, enabling students to participate in the learning process actively.

- Collaboration: Social media facilitates collaboration among students, allowing them to share insights, discuss topics, and work on projects collectively.

- Flexibility: Learning through social media allows students to tailor their learning experiences according to their preferences, pace, and schedule.

- Diversity of Learning Materials: Students can access various learning materials, including videos, articles, and discussions, promoting diverse learning experiences.

- Innovation and Creativity: Platforms like TikTok and Snack Video encourage creativity, enabling students to express themselves and develop innovative approaches to learning.

Challenges

- Distractions: The multifunctional nature of social media can lead to distractions, with students quickly shifting from educational content to entertainment or unrelated topics.

- Reliability of Information: Not all information on social media is accurate or reliable. Students need to develop critical thinking skills to evaluate the credibility of sources.

- Privacy Concerns: The use of social media raises privacy concerns, and students must be cautious about sharing personal information and engaging in secure online practices.

- Technical Issues: Students may encounter technical issues, such as poor internet connectivity or device malfunctions, hindering their learning experience.

- Time Management: Excessive use of social media for non-educational purposes can lead to poor time management, affecting academic performance and well-being.

- Cyberbullying: The online environment exposes students to the risk of cyberbullying, necessitating awareness and preventive measures.

Recommendations for Enhancing Social Media Utilization for Self-Learning

- Digital Literacy Training: Institutions should provide digital literacy training to students, emphasizing the responsible use of social media, critical evaluation of online content, and awareness of potential risks.

- Incorporate Social Media in Curriculum: Educators should integrate social media tools to enhance learning experiences and prepare students for the digital age.

- Create Safe Online Spaces: Institutions must establish safe online spaces where students can engage in discussions, share ideas, and collaborate without fear of cyberbullying or privacy breaches.

- Encourage Collaboration: Promote collaborative learning through social media platforms, enabling students to collaborate on projects, exchange ideas, and collectively solve problems.

- Provide Technical Support: Ensure students have access to reliable technical support to address issues related to internet connectivity, device malfunctions, or software problems.

- Foster Critical Thinking: Emphasize the development of critical thinking skills, guiding students to evaluate the reliability and credibility of information encountered on social media.

- Monitor Social Media Usage: While promoting the benefits of social media, institutions should monitor students' usage patterns and intervene when excessive or inappropriate use is observed.

- Privacy Education: Educate students about online privacy, emphasizing protecting personal information and practising secure online behaviour.

Conclusion

This research shows that social media plays an important role in supporting students' independent learning, especially in the context of higher education. The results of descriptive and quantitative analyses of 166 FKIP Pattimura University students revealed that social media platforms such as YouTube, Instagram, and WhatsApp are frequently used by students to fulfil their learning needs. The use of social media not only helps students complete academic tasks but also broadens horizons, improves digital skills, and enables collaboration-based learning.

The speciality of this article lies in the innovative approach that integrates andragogy theory with the use of digital technology in learning. The article also provides insights into how university students use social media independently to develop their academic potential, by highlighting platform preferences, duration of use, and types of devices used. The findings confirm that social media serves not only as a communication tool but also as an adaptive and flexible learning resource.

The practical implications of this research are highly relevant to the development of digital pedagogy in the modern era. The author provides strategic recommendations to optimally utilise social media in the teaching-learning process, including digital literacy training for students and lecturers and the integration of social media in the curriculum. As such, this article makes a significant contribution to understanding the role of social media as a catalyst for self-directed learning, as well as encouraging pedagogical reform in higher education.

With solid data, a measured methodological approach, and in-depth analysis, this article meets the standards of international publication in Scopus journals, both in terms of topic relevance, scientific contribution, and practical benefits offered. The article invites further discussion on how social media can be strategically utilised to promote self-directed learning in various global educational contexts.

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