

**INTERNATIONAL JOURNAL OF
EDUCATION, PSYCHOLOGY
AND COUNSELLING
(IJEPC)**www.ijepe.com**SOCIAL MEDIA IMPACT ON THE PHYSICS STUDENTS**Mohd Zaki Mohd Yusoff^{1*}, Haslinda Abdul Hamid²¹ School of Physics and Material Studies, Faculty of Applied Sciences, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia
Email: zaki7231@uitm.edu.my² Department of Applied Sciences, Universiti Teknologi MARA, 13500 Permatang Pau, Pulau Pinang, Malaysia
Email: hasli8366@uitm.edu.my

* Corresponding Author

Article Info:**Article history:**

Received date: 25.10.2022

Revised date: 31.10.2022

Accepted date: 15.12.2022

Published date: 18.12.2022

To cite this document:Mohd Yusoff, M. Z., & Abd Hamid, H. (2022). Social Media Impact on The Physics Students. *International Journal of Education, Psychology and Counseling*, 7 (48), 383-392.**DOI:** 10.35631/IJEPC.748029This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)**Abstract:**

In this work, we have to investigate the relationship the factor that interfere the focus study and academic achievement for the physics subject and the student performance and what are the preferable tool for the learning process. We have distributed a google form questionnaire to 48 students who have registered for the PHY443 course. The statistical analysis on the findings was evaluated by using the Statistical Package for Social Science (SPSS). We have discovered that messaging apps like WhatsApp and Telegram can support students' academic progress and also boost their involvement in classroom discussions. WhatsApp and Telegram are suitable platforms since they utilize less bandwidth to address the problem of low connection among students. Using programmes like Telegram may be an effective teaching strategy to include students in the teaching and learning process at a school or institution.

Keywords:

Learning Media; Telegram Social Media; WhatsApp Social Media; Google Classroom.

Introduction

The presence of social media has had a great impact on the quality of student learning today. There is no doubt that there are many good and bad effects of the use of social media by students today. Social media provides a variety of information that is easily available by just touching the screen of an electronic device. The misuse of social media today is very serious and it has a very serious impact on the development of generations of the world community. Social media can be a very important source of information, but it can also be a great threat to internet users,

by providing wrong information (Gupta et al., 2020). Nowadays, in the context of connecting education, the influence of social medias on education is becoming significant. Social medias and education can benefit one another if used wisely. Social medias are always presenting new educational opportunities to students by providing a variety of information that is easily available by just touching the screen of an electronic device.

These platforms give students the chance to interact, communicate, access information, and do research. Social media is the most powerful means of communication, allowing students to communicate from all over the world. One of the factors influencing these varying prospects and how social media is altering education is its acceptability in daily life. Social medias have evolved into an essential component of a student's social life. In many institutions, it is now recognized as a learning platform that improves student's involvement and capacities. Students are inspired and encouraged to learn through the usage of social media platforms in the classroom. Major factors that contribute to educational progress include simple access to e-books, online notes, and learning through video conversations. One of the finest methods to study from reputable organizations while being in any location is through distance learning, which social media has made feasible. This study will analyze the effects of utilizing social medias for Physic students at university level.

Literature Review

The level of internet usage around the world has increased dramatically, especially since the outbreak of covid-19, which has had a maximum impact on people's lifestyles. Malaysia is also not exempt from one of the countries that is experiencing lifestyle changes based on the use of the internet for daily life. Among the sectors affected by the spread of the covid-19 disease is the education system. Technology is becoming a daily aspect of people's life in the current period, where social media and social networks have a significant impact on how people behave. Social media and networking websites are among the constantly developing innovations in the field of information technology. A new paradigm of social interaction communication patterns, for instance, is provided by Facebook, LinkedIn, Twitter, Youtube, WhatsApp, I-learn (Hadi et al., 2020), MOOC (Wang & Zhu, 2019), google classroom (Kumar, Bervell & Osman, 2020), Telegram (Khalil & Rambech, 2022), Zoom (Nadezhda, 2020), Microsoft Teams (Alameri et al., 2020), Google Meet (Gleason & Heath, 2021). In other words, "social media" refers to computer technology intermediaries that enable the development and exchange of concepts, awareness, professional interests, knowledge, and other forms of expression via social networks and online communities. Social media users create a lot of valuable content that is vital to the existence of social networks and other social media platforms. This content includes posts, comments, digital images, shared videos, and all other online interaction data. Internet-connected laptops or mobile devices are typically used by social media users to access social media services. One benefit of technology innovation is that it allows students to communicate with one other to exchange ideas, express opinions, adapt lessons, and discuss content.

Students' transition to adulthood is significantly impacted by the use of social networking sites and other forms of social media. One benefit of social media is that it exposes people to user-generated information, programs, and ideas at a young age. This has sparked further technological advancements and enhanced understanding among the student population. The proliferation of social media, however, has also led to a rise in student distress and a profound disruption of the social environment that supports learning and flourishing in students (et al.,

2019). Network-based learning has been promoted as a result of how technology has affected education to make collaboration possible no matter how far away they are. There is no doubt that there are many good and bad effects of the use of social media by students today.

The social network makes use of many media, such as laptops and smartphones. Although student engagement with social media can enhance student learning, challenges arise when social media is included into an academic course. According to Kolhar et al. (2021), social networking sites draw students' attention before diverting it to unsuitable and non-educational activities, such as pointless chit-chatting. We can infer that social networking sites may negatively impact a student's academic career and learning opportunities. Social networks are primarily used by students and teenagers to kill time and for the sake of amusement, but it has been determined that using the internet for educational purposes and any appropriate task, such as online tutorials, online lectures, and downloading educational materials, is very beneficial (Bhumika et al., 2022). However, using the internet exclusively for social networking is very pointless and possibly dangerous. Therefore, it is crucial to look at the goals for which social media platforms are utilized given the expanding number of such sites and the significant need for social media within university students. Examining student usage trends of social media was the goal of this study.

Methodology

This study's first focus was on the students' backgrounds, specifically their gender and the internet services they have access to at home or at school. We also want to know what internet information sources they use and what challenges they encounter when utilizing the internet at home or at a place of study. The type and extent of their use of social media at home or at their place of study will thereafter be our main emphasis. We also looked into the social media interests of the students, namely the platforms they always utilize when studying at home. The effects of utilizing social media on their studies and exam scores will next be examined, as well as their perspectives on the subject.

In this study, data collection is through a quantitative method, that is, it is done by survey using a questionnaire as the main instrument for this study. The questionnaire method proved effective and accelerated the collection of the necessary information (Chua, 2011). In this research, we have adapted the questionnaire form that has been produced by Kirin et al. (2022) in his study "Impak Negatif Media Sosial Terhadap Akademik Pelajar: Kajian Kes Pelajar UTHM". We have distributed a google form questionnaire to 48 students who have registered for the PHY443 course.

In this research questionnaire, it is divided into 3 main parts, namely Part A is related to the demographics of the respondents, part B refers to the level of social media use and the last part, which is part C is related to the effect of social media use on students. Part B uses a Likert scale that is 1-never, 2-rarely, 3-sometimes, 4-frequent and 5-very frequent. Part C also uses a Likert scale which is 1-strongly disagree, 2-disagree, 3-not sure, 4-agree and 5-strongly agree. The data and information obtained from the questionnaire have been analyzed using descriptive statistical methods such as frequency, percentage and mean.

Results and Discussion

For this survey, there are 48 students involved which 75% is female and 25 % is male students, as shown in Figure 1. These students are in the year 3, where this course is mandatory for them

to pass before taking any advance courses in the next semester. Majority student are from peninsular, and there are 2 students from Sabah state.

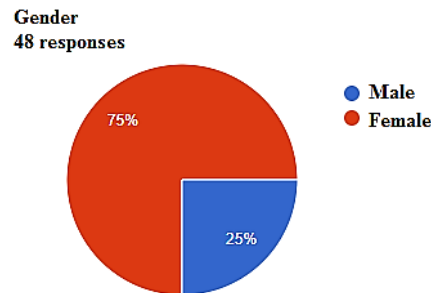


Figure 1: Respondent Gender

Figure 2 displays the various internet data collection sources that students have access to. A whopping 67.4% of them utilise prepaid phone cards to access the internet. The second option is mobile hotspot, which 58.7% of respondents claimed they use to access the internet. In contrast, 26.1% of respondents claimed to use broadband services, and only 6.5% claimed to use public hotspots.

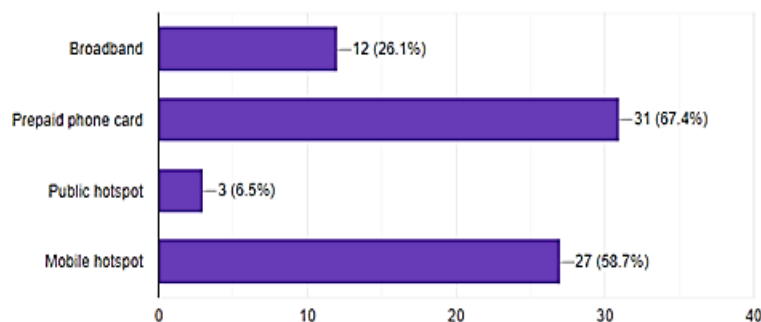


Figure 2: Internet Data Sources

Figure 3 displays the proportion of students who experience issues with internet connectivity at home or at their place of study. It was discovered that while 52.1% of them had no trouble receiving facilities or connecting to the internet at home or at their place of study, 47.9% of them thought it was challenging to access the internet.

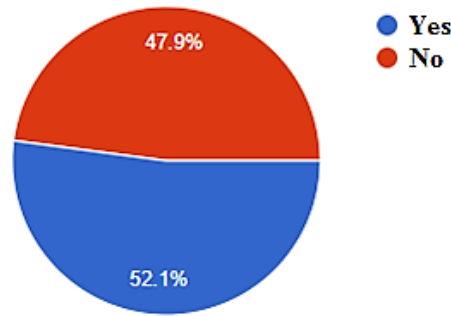


Figure 3: Internet Accessibility

The reasons of issues with internet connection are shown in Figure 4, and students are asked to determine the issue's root cause. According to research, 92.9% of students said that a slow internet connection was to blame for their lack of access to the internet. Server downtime, which accounts for 28.6% of the problem, is the second factor. Last but not least, 21.4% of people do not have access to the internet. Teenagers who use the internet also tend to favor solitude over spending time with their families (Hanif, 2013). Internet usage has a bad impact on family dynamics as a result. As a result, technology can either improve or worsen familial relationships. Students today have the financial means to purchase internet access because it is essential to their capacity to study and even do their jobs. The majority of children rely on online learning starting in secondary school and primary school due to COVID-19 that occurred during the past two years. Online and distant learning are now commonplace and an alternate form of education. Students are more likely to use the internet for lengthy information searches and are better able to understand the material than they would in a traditional classroom setting.

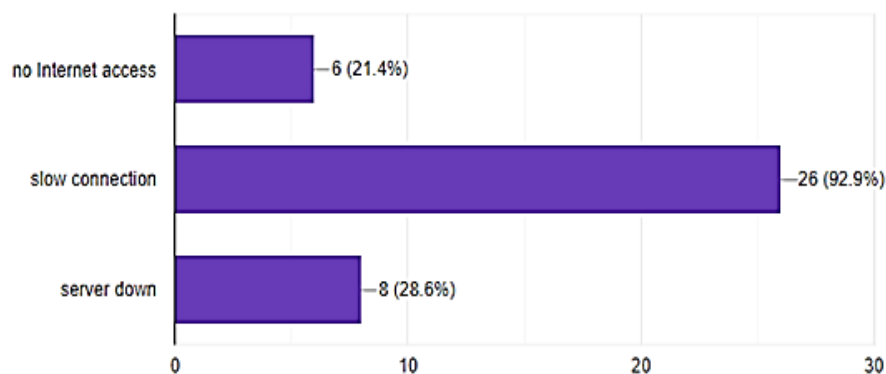


Figure 4: Internet Connection Issues

Table 1 displays the frequency of use of social media platforms for interacting with friends, exchanging information, and having fun during relaxation. We found that 74.5% of students said they use WhatsApp frequently. Following it are Twitter, Instagram, and Tik Tok, with respective shares of 66%, 63.8%, and 44.7%.

Table 1: The Frequency of Use of Social Media Apps

Item	Scale					Mean	SD
	1	2	3	4	5		
WhatsApp	0	0	0	12 (25.5%)	35 (74.5%)	4.73	0.449
Instagram	0	3 (6.4%)	4 (8.5%)	9 (19.1%)	31 (66%)	4.44	0.897
Tik Tok	4 (8.5%)	1 (2.1%)	3 (6.4%)	9 (19.1%)	30 (63.8%)	4.21	1.304
Twitter	3 (6.4%)	5 (10.6%)	8 (17%)	10 (21.3%)	21 (44.7%)	3.88	1.265
Facebook	4 (8.5%)	20 (42.6%)	10 (21.3%)	6 (12.8%)	7 (14.9%)	2.81	1.214

According to Figure 3 and Figure 4, due to their rural location and limited family resources, students were reported to have internet connection issues. Students are unable to properly follow online learning due to the issue of unstable internet and the absence of high-speed internet availability. This affects both the ongoing interaction between students and lecturers and the low levels of student participation in online lectures. Learning activities in online classes are frequently disrupted and rendered unproductive due to the lack of two-way communication between students and instructors. In contrast to online classes, it is thought that students still need to learn in physical classrooms. Therefore, it can be inferred that students still have internet issues as a result of their financial situations and technical difficulties. Students can more easily communicate with lecturers and their classmates in physical classes. To ensure that students can understand and follow the course with success, lecturers face a significant problem in getting them to organize their study time effectively and engage completely in online lectures. From Table 1, the most popular app used by students is WhatsApp. In Malaysia, 98.7% of participants stated WhatsApp is their favorite communication application, while only 27.7% choose WeChat, according to Statistika.com. Students are likely to continue using a social media platform like WhatsApp as long as they believe it can help them with their learning (Mulyono et al., 2021). The majority of students use WhatsApp for learning and other activities since it is incredibly user-friendly (Amry, 2014). Additionally, WhatsApp offers a number of features that are easier for instructors and students to employ to increase comprehension (Bouhnik, & Deshen, 2014).

Table 2 displays how using social media affects students' academic performance. It was found that 56.3% of students agreed that social media made students lazy to review lessons and ignore assignments. Besides, 37.5% of students agreed that the influence of social media has caused interest in reading to decrease. However, 35.4% of students strongly disagree that social media is the cause of class absence. Whereas, 29.2%, 25% and 22.9% are not sure, disagree and agree that social media can cause decreased brain and cognitive development, respectively. Finally, 43.8% agreed that social media can cause addiction among students.

Figure 5 shows how frequently students use social media platforms for learning. According to our research, 93.8% of students are more interested in using Google Classroom for learning sessions. Then comes learning through video applications, such as the YouTube channel, which is followed by two-way communication, such as telegram and WhatsApp, which are respectively represented by 64.6% and 58.3%. Only 12.1% and 4.2% of students, respectively, expressed a positive opinion of the Google Meet and Microsoft Team programmes. Hussaini et. al,(2020) reported the Google Classroom is successful at increasing students' access to and attention to learning. The knowledge and skills acquired through Google Classroom encourage students to become active learners, and as a digital tool, it gives both students and parent's useful feedback (Hussaini et. al, 2020). Google Classroom is a Learning Management System (LMS) that the company provides for instructors. This application offers a prime location to interact with students, post queries, and create homework. Google Classroom supports web - based learning for modern digital students in a society that is becoming more and more virtual (Sudarsana et al., 2019). University students utilize the Google Classroom to simplify tasks, improve teamwork, and promote communication. Using a mobile app or the web, we may access Google Classroom. Numerous applications, like Gmail, Google Docs, and Google Calendar, are already linked with Google Classroom.

Table 2: Social Media Use's Effects on Academic Achievement

Item	Scale					Mean	SD
	1	2	3	4	5		
Lazy to revise and neglect assignments	3 (6.3%)	8 (16.7%)	6 12.5%	27 (56.3%)	4 (8.3%)	3.44	1.070
Interest in reading decreased	2 (4.2%)	15 (31.3%)	10 (20.8%)	18 (37.5%)	3 (6.3%)	3.10	1.057
Skipping (absent) class	17 (35.4%)	15 (31.3%)	9 (18.8%)	5 (10.4%)	2 (4.2%)	2.17	1.155
Decreased brain and cognitive development	7 (14.6%)	12 (25%)	14 (29.2%)	11 (22.9%)	4 (8.3%)	2.85	1.185
Addiction	1 (2.1%)	7 (14.6%)	7 (14.6%)	21 (43.8%)	12 (25%)	3.75	1.062

Students like watching YouTube videos because they may master difficult ideas through them and also develop their language and comprehension skills. While students may focus more on their learning abilities, teachers don't have to spend as much time explaining challenging topics and ideas to them. YouTube is a useful learning platform for lone learners to participate in the on learning in school, work, or everyday life with minimal cost and great flexibility in time and place due to the abundance of educational information (Zhou et al., 2020).

Applications like Telegram and WhatsApp can be helpful for student learning and can increase student participation in learning through talks in these applications. WhatsApp and Telegram are appropriate platforms to address students' poor connectivity issue because they consume less bandwidth. To engage students in the teaching and learning process at a school or institution, using applications like Telegram can be a valuable teaching tool (Yaakob, & Abd Rahman, 2016).

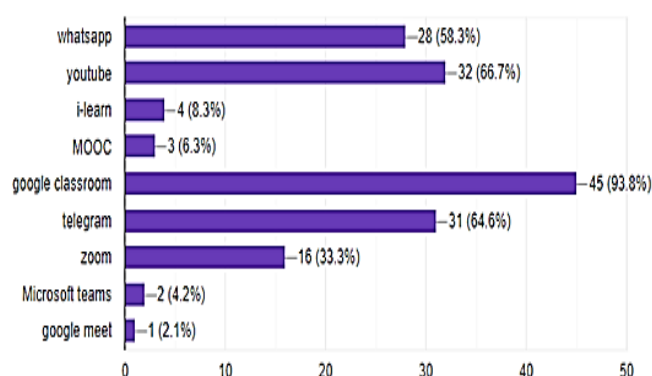


Figure 5: Media Social Uses

Conclusion

As a conclusion, we have effectively analysed the link between the variables that affect academic success for the physics topic, student performance, and the best tools for the teaching and learning process. Students at universities use Google Classroom to streamline activities, enhance collaboration, and foster communication. Students' academic success can be assisted by WhatsApp and Telegram, which can help increase their participation in class discussions. Because they use less bandwidth, WhatsApp and Telegram are appropriate platforms for addressing the issue of poor connectivity among students. A school or institution's use of the Telegram as a teaching tool might be a successful way to include students in the teaching and learning process.

References

- Alqahtani, S. M., Bhaskar, C. V., Vadakalur Elumalai, K., & Abumelha, M. (2018). Whatsapp: An Online Platform for University-Level English Language Education. *Arab World English Journal (AWEJ)* Volume, 9.
- Amry, A. B. (2014). The Impact Of Whatsapp Mobile Social Learning On The Achievement And Attitudes Of Female Students Compared With Face To Face Learning In The Classroom.
- Alameri, J., Masadeh, R., Hamadallah, E., Ismail, H. B., & Fakhouri, H. N. (2020). Students' Perceptions of E-Learning Platforms (Moodle, Microsoft Teams And Zoom Platforms) In The University Of Jordan Education And Its Relation To Self-Study And Academic Achievement During COVID-19 Pandemic. *Journal ISSN*, 2692, 2800.
- Bhumika, T., Jyoti, Neha, G., & Santosh, K. (2022). Impact of Social Media on Student Life. *I-Manager's Journal On Information Technology*, 11(1), 35.
- Bouhnik, D., & Deshen, M. (2014). Whatsapp Goes To School: Mobile Instant Messaging Between Teachers And Students. *Journal Of Information Technology Education. Research*, 13, 217.

- Dwi Kurniati, R., Andra, D., & Distrik, I. W. (2019). The Role of Social Media In Learning Physics: Teacher And Student Perceptions. *Jurnal Pembelajaran Fisika*, 8(2), 159–166.
- Fynn, P. K., Kwegyiriba, A., & Mensah, R. (2021). Exploring The Use of Youtube and Its Implications to Teaching and Learning in Technical University Education In Ghana. *Journal of African Interdisciplinary Studies (JAIS)*: ISSN, 2523-6725.
- Gupta, L., Gasparyan, A. Y., Misra, D. P., Agarwal, V., Zimba, O., & Yessirkepov, M. (2020). Information And Misinformation On COVID-19: A Cross-Sectional Survey Study. *Journal of Korean Medical Science*, 35(27).
- Haniff Hassan, Jusang Bolong, Siti Zobidah Omar, Narimah Ismail & Musa Abu Hassan (2013) Implikasi Penggunaan Komputer Terhadap Pola Komunikasi Keluarga Dan Masa Berkomunikasi Dalam Keluarga Petani Melayu Di Malaysia. *Jurnal Elektronik Jabatan Bahasa & Kebudayaan Melayu*. Jilid 4.
- Hadi, N. Z. H., Safari, N. S., Azman, N. S. S., Ridzuan, A. R., & Ramlan, A. F. (2020). The Effectiveness of Using Blended Learning (I-Learn). *E-Journal of Media and Society (E-JOMS)*, 5(2), 89-107.
- Hussaini, I., Ibrahim, S., Wali, B., Libata, I., & Musa, U. (2020). Effectiveness of Google Classroom as a Digital Tool in Teaching and Learning: Students' Perceptions. *International Journal Of Research And Innovation In Social Science (IJRISS)*, 4(4), 51-54.
- Kumar, J. A., Bervell, B., & Osman, S. (2020). Google Classroom: Insights From Malaysian Higher Education Students' And Instructors' Experiences. *Education And Information Technologies*, 25(5), 4175-4195.
- Khalil, M., & Rambech, M. (2022). Eduino: A Telegram Learning-Based Platform and Chatbot in Higher Education. In *International Conference On Human-Computer Interaction* (Pp. 188-204). Springer, Cham.
- Köse, Ö. B., & Doğan, A. (2019). The Relationship Between Social Media Addiction And Self-Esteem Among Turkish University Students. *Addicta Turk. J. Addict*, 6, 175-190.
- Kolhar, M., Kazi, R. N. A., & Alameen, A. (2021). Effect of Social Media Use On Learning, Social Interactions, And Sleep Duration Among University Students. *Saudi Journal Of Biological Sciences*, 28(4), 2216–2222. <https://doi.org/10.1016/j.sjbs.2021.01.010>
- Nadezhda, G. (2020). Zoom Technology As An Effective Tool For Distance Learning In Teaching English To Medical Students. *Бюллетень Науки И Практики*, 6(5), 457-460.
- Gleason, B., & Heath, M. K. (2021). Injustice Embedded In Google Classroom And Google Meet: A Techno-Ethical Audit Of Remote Educational Technologies. *Italian Journal of Educational Technology*, 29(2), 26-41.
- Mulyono, H., Suryoputro, G., & Jamil, S. R. (2021). The Application of Whatsapp to Support Online Learning during the COVID-19 Pandemic in Indonesia. *Heliyon*, 7(8), E07853.
- Sudarsana, I. K., Putra, I. B. M. A., Astawa, I. N. T., & Yogantara, I. W. L. (2019, March). The Use of Google Classroom In The Learning Process. In *Journal Of Physics: Conference Series* (Vol. 1175, No. 1, P. 012165). Iop Publishing.
- Wang, K., & Zhu, C. (2019). MOOC-Based Flipped Learning in Higher Education: Students' Participation, Experience and Learning Performance. *International Journal of Educational Technology in Higher Education*, 16(1), 1-18.
- Yaakob, N., & Abd Rahman, M. J. (2016). Perspekti Guru Terhadap Penggunaan Media Sosial Dalam Pengajaran Dan Pembelajaran: Satu Tinjauan Di Sekolah Kebangsaan Ledang. *Universiti Kebangsaan Malaysia*, 1(12-17).

Zhou, Q., Lee, C. S., Sin, S. C. J., Lin, S., Hu, H., & Ismail, M. F. F. B. (2020). Understanding the Use of Youtube As A Learning Resource: A Social Cognitive Perspective. *Aslib Journal of Information Management*.