EFFECT OF SOCIAL MEDIA ON MALAYSIAN EDUCATION: A MIXED-METHOD STUDY

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Abstract:

This study investigates the impact of social media on Education among Malaysian students through a mixed-method survey of 48 respondents. The research aimed to identify the positive and negative effects of social media, assess its overall impact on learning, and explore the challenges it presents in academic settings. The results reveal that social media enhances communication, critical thinking, engagement, and access to educational resources. The integration of artificial intelligence (AI) was also found to reduce human error and personalize learning experiences. However, issues such as distraction, addiction, and mental health challenges were also identified. The findings suggest that while social media provides powerful tools for modern education, practical guidance and digital literacy training are crucial to mitigate its negative impacts. The study concludes that with appropriate management, social media can be a transformative tool for enhancing educational quality and student performance in Malaysia.

Introduction

Today, there has been a significant rise in social media usage among young students in Malaysia. The use of social media can have both positive and negative effects on individuals. That's why using social media should be done wisely. According to Saleh et al. (2025), social media can influence people's intentions and behavior towards sustainability. Social media also has a positive impact on academics by providing a scope for interaction between peers, supervisors, and perceived ease of use, as well as perceived usefulness in Malaysia (Rahimi et al., 2014). Through collaborative learning in institutions, the full use of social media can be made (Rahimi et al., 2015). This was demonstrated by surveying 323 participants to investigate the relationship between social media, collaborative learning, and academic performance, using structural equation modeling with collaborative learning as the mediating variable (Rahimi et al., 2015). A study by Krishnan and Sajilan (2014) suggests that social media has an impact on the decisions of pre-university students to attend private universities for their studies. This was demonstrated by the Theory of Reasoned Action (TRA), which identified attitude and subjective norms as moderator variables that play a key role in students' decisions about choosing a university. Social media can be used to make universities more attractive and influence students' decisions about choosing a university. A survey conducted by Helau & Rahim (2014) among 30 undergraduate and postgraduate students at Universiti Teknologi Malaysia, which included a total of 30 questions, found that the majority of participants agreed that social media had a positive impact on their academics. This research aims to investigate the effect of social media on the academic performance of Malaysian students.

The main research objectives of this study are:

a) To identify the positive and negative effects of social media on Malaysian education.
b) To assess the impact of social media in Malaysian education using qualitative and quantitative analysis.
c) To determine the issues and challenges of Education in Malaysia in the presence of social media.

Literature Review

Types of social media used by the students are:

YouTube

YouTube is widely used globally for educational purposes. Today, anyone can learn about any topic of interest using YouTube. A study conducted by Habes et al. (2019) among 360 students in Jordon showed that the use of social media has a positive impact on the academic performance of university students through e-learning platforms. Maziriri et al. (2020) surveyed 377 students through non-probability sampling from selected universities. They found a strong relationship between intention to use YouTube and adoption of YouTube as an educational tool. In addition, they found that perceived usefulness had a greater impact on students' perception of learning than perceived ease of use.

Telegram

The use of Telegram is becoming increasingly popular among students pursuing open-distance learning and on-campus studies. A study on the use of Telegram among open-distance learning students was conducted by Yusof and Abdullah (2025) with a sample size of 60 students. This research was a quasi-experimental study on fifth-year open-distance learning students in Malaysian tertiary institutions. From this research, it was concluded that students in the experimental group showed significant improvement in argumentative writing and qualitative study. Telegram Messenger encouraged participation and made the writing process more engaging and interactive (Yusof & Abdullah, 2025). The use of the Telegram application in vocabulary learning among students of various languages is gaining increasing popularity. A study by Shah et al. (2025) on evaluating the effectiveness of Telegram chatbots in learning vocabulary of the English language was conducted. This study concluded that Telegram chatbots were effective and demonstrated increased engagement in learning English vocabulary. Another study, conducted by Sithiravel et al. (2025), found that the use of the Telegram application for Arabic vocabulary learning requires more Arabic vocabulary acquisition to enable comprehension and provide focus.

Twitter

The use of Twitter for educational purposes is also becoming increasingly prevalent worldwide. In Bangladesh, students utilized Twitter for their studies, resulting in an improvement in their grades (Chaudhary, 2025). Another survey by Almalki et al. (2025) investigated the effect of an interactive platform, such as X (Twitter), on students' learning of mathematical concepts. This study suggests that educators must bridge the gap between theoretical knowledge and practical application to foster a deeper understanding of mathematics concepts among students.

Facebook

Facebook is an effective tool in education. Like learning the English language, it served as an effective tool. According to a study by Dugho and Sumayo (2025), it was found that learning through Facebook resulted in actual performance of students being higher than their perceived effectiveness in developing their viewing skills. Facebook helped me understand grammar, tenses, modals, and questions. It was concluded that educators should utilize Facebook as an

effective tool for teaching grammar. Facebook not only helped in learning language, but it also helps in learning mathematical concepts (Ogbonnaya et al., 2025).

Instagram

Instagram is becoming increasingly common as an educational platform for learners. In research by Escamilla-Sanchez et al. (2025), Instagram was found to be an effective platform for learning human histology in medical education. There was a significant improvement in the final exam marks of medical students compared to those who did not participate in learning through Instagram. Another study by Martínez-Domingo et al. (2025) among 391 students at the University of Granada further confirmed that Instagram, when used as an educational tool, improved digital competence among students.

Tiktok

TikTok has emerged as one of the leading social media platforms for education. TikTok has been successfully applied in various domains, including physical Education, medical Education, and language learning. It also enhanced students' participation, motivation, improved academic performance, and addressed mental health issues (Yang et al., 2025). Another study by Marti et al. (2025) revealed that TikTok helped students learn concepts in Data structures and algorithms. It helped in developing soft skills among students and enabled them to take ownership of their learning experience.

Methodology

This research consists of qualitative and quantitative forms of questionnaires asked to 48 respondents, who are students, unemployed, and employed in Malaysia. This research was conducted using a Google survey form. Universiti Sains Malaysia conducted a study to determine the positive and negative impacts of social media in Malaysian universities. The questionnaire consists of a total of 18 qualitative and quantitative research questions. This also includes demographic questions (level of study and employment status). The quantitative questionnaires, as statistical analysis provides scholars with the opportunity to obtain meaningful insights through mean results (Carroll, 1991). The qualitative questionnaires are included to understand the overall impact of social media on Malaysian education, the effect of artificial intelligence on education, the challenges posed by social media to Malaysian Education, and the role of social media as a tool in Malaysian Education.

Results

Demographic Profile

A total of 48 respondents has participated in the survey. 70.8% of the respondents hold a bachelor's degree, 18.8% hold a diploma degree, 8.3% are A-level or STPM students, and 2.1% of respondents are from a foundation. The statistics in Figure 1 also support this.
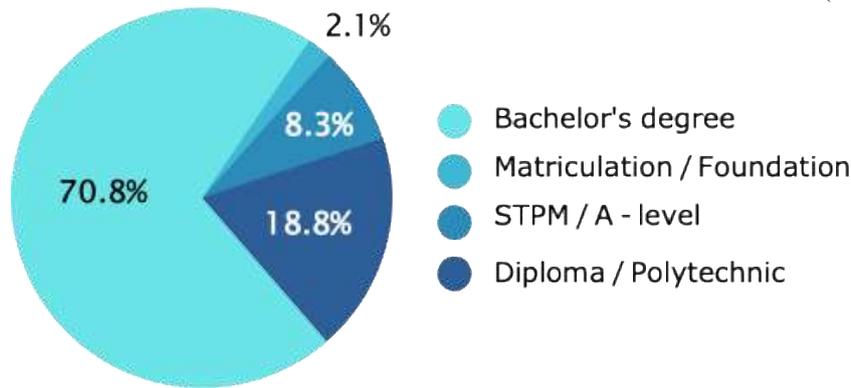
Figure 1: Demographic Details About the Education Level

Figure 2 below shows the employment status of the respondents. Among the 48 respondents, 85.4% them are students, 12.5% are unemployed, and 2.1% are employed.
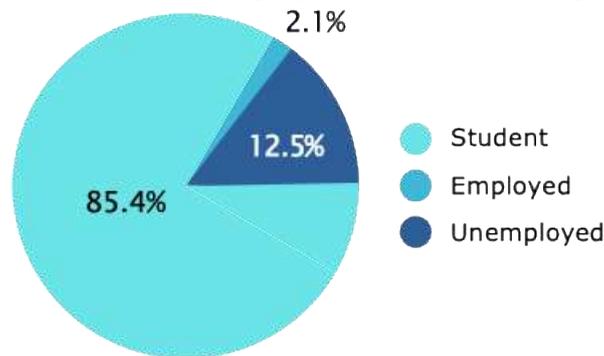

Figure 2. Demographic Profile of Employment Status

Mixed-Method Analysis

In the mixed-method analysis analysis, students will be asked to fill the google survey form.

The Effect of Social Media on Malaysian Education

Figure 3, Figure 4, Figure 5, Figure 6, Figure7, and Figure 8 show the results for the survey questions, which were based on the analysis: "The effect of social media on Malaysian Education". Under this, six questions were asked to the student in survey form as given below: "Is social media the best way for the teacher to stay in touch with students?"
1. "Apps that are frequently used on social media"
2. "Did social media assist in studies?"
3. "Have a positive impact on knowledge sharing and access to education resources."
4. "Excessive use of social media negatively impacts students' academic performance?"
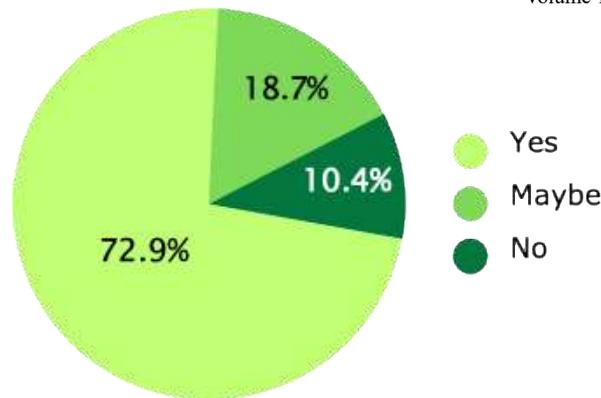5. "Social media can decrease face-to-face interactions among students."

Figure 3

Figure 3 above shows that 72.9% of the students agreed that "social media is the best way for the teacher to stay in touch with students". While 18.7% of them were unsure, 10.4% of the students disagreed.
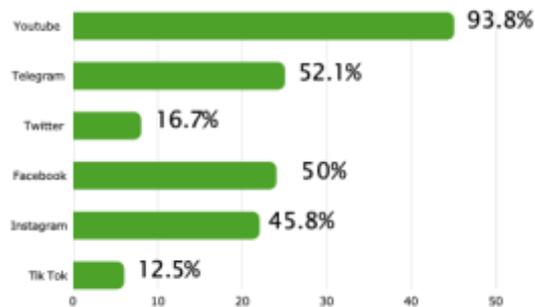

Figure 4

Figure 4 above shows the most used app on social media. 98.8% of the students used YouTube on social media. While 52.1% of them used Telegram, 50% used Facebook, and 45.8% used the Instagram app on social media. Only 16.7% and 12.5% of students used Twitter and TikTok on social media.
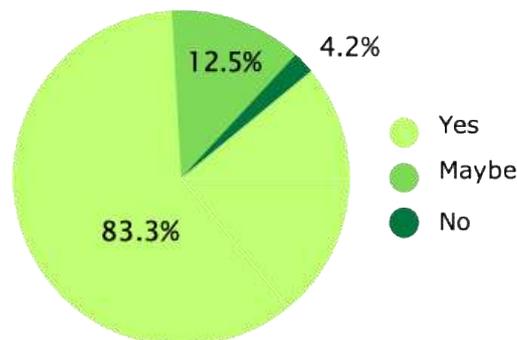

Figure 5

Figure 5 shows that 83.3% of the students agreed that social media assists in their studies, whereas only 4.2% of them disagreed that social media could assist in their studies.
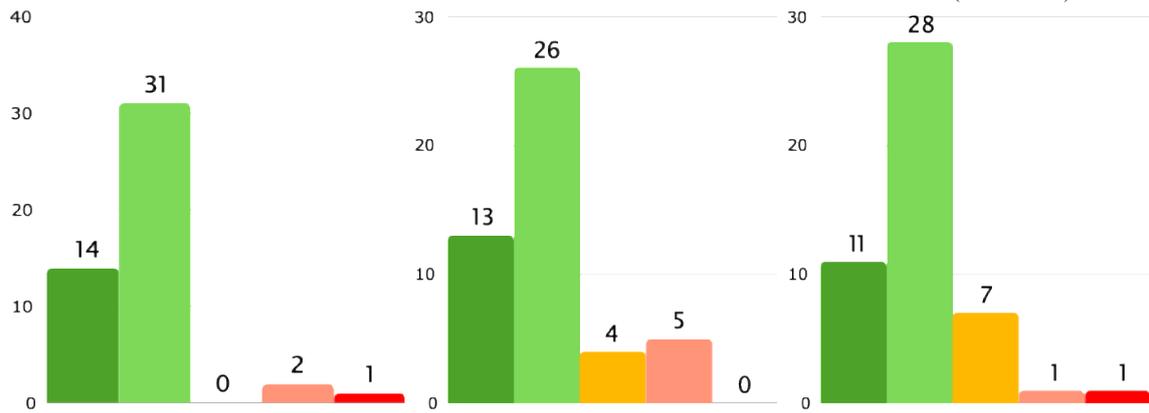
Figure 6 Question (4)   **Figure 7 Question (5)**   **Figure 8 Question (6)**

● Strongly Agree   ● Agree   ● Neutral   ● Disagree   ● Strongly Disagree

As shown in Figure 6, the majority of the students (45) agreed that social media has a positive impact on knowledge sharing and access to educational resources. In Figure 7, the majority of the students decided that (39) excessive use of social media hurts academic performance. As shown in Figure 8, the majority of students (39) agreed that social media reduces face-to-face interactions among students.

Impact Of Social Media (Artificial Intelligence) On Education

To access the "Impact of social media (Artificial Intelligence (AI)) on education," the following questions were asked to the students in survey form:

7)   Does the use of AI reduce human error in students' assessments?
8)   Does AI effectively personalize learning experiences for students' needs?
9)   Does AI have a positive impact on education?
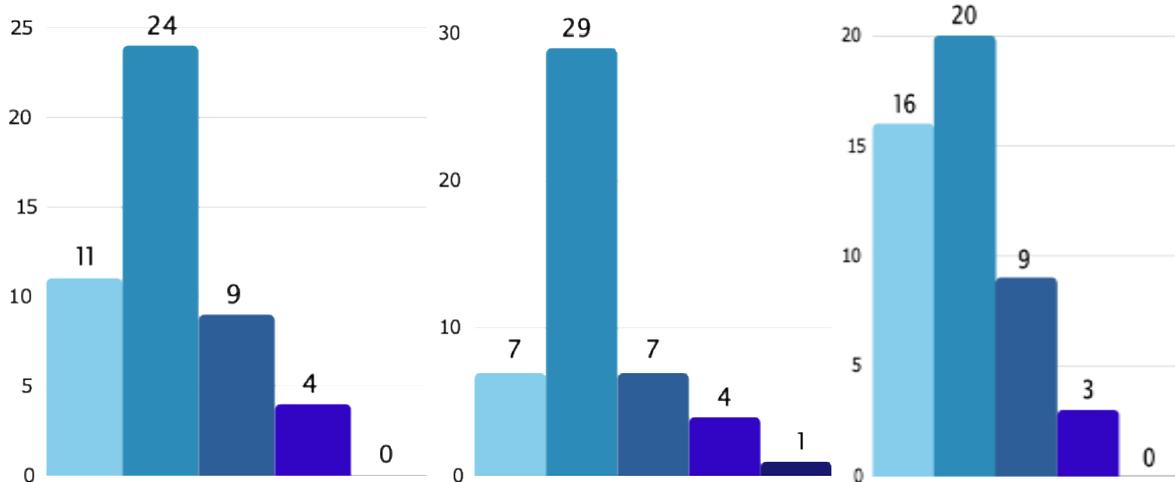

Figure 9 Question (7)   **Figure 10 Question (8)**   **Figure 11 Question (9)**

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Figure 9 shows the results for question (7), and the majority (35) of the students agreed that AI reduced human error in students' assessment. Figure 10 shows the result of question (8), and most of the students (36) agreed that AI effectively personalizes learning experiences for students' needs. As shown in Figure 11, the result for question (9) indicates that most students (36) agreed that AI has a positive impact on education.

Social Media as An Education Tool in Malaysia

Under this topic, four survey questions were asked of the students to assess whether social media is an effective educational tool.

(10)   The integration of social media in education has led to increased student engagement.
(11)   The use of social media has enhanced students' critical thinking.
(12)   Social media has improved communication in Malaysian institutions.
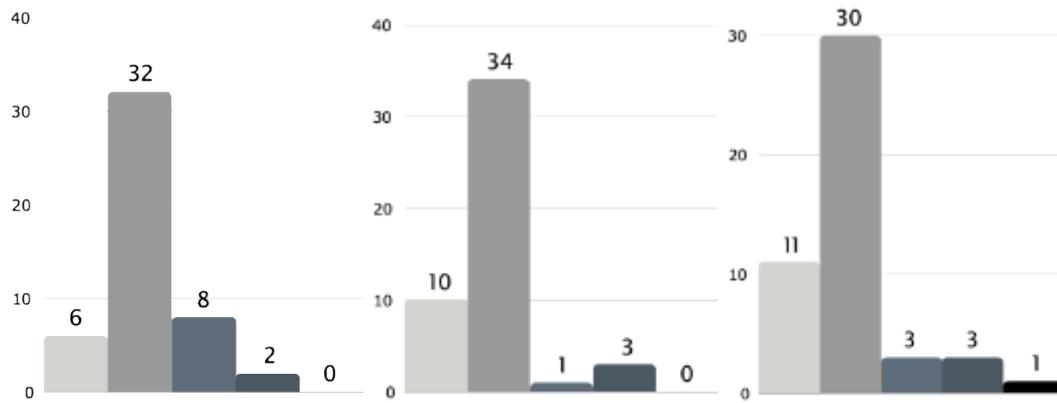(13)   Should we use social media for teaching purposes?

Figure 12 Question (10)   **Figure 13 Question (11)**   **Figure 14 Question (12)**

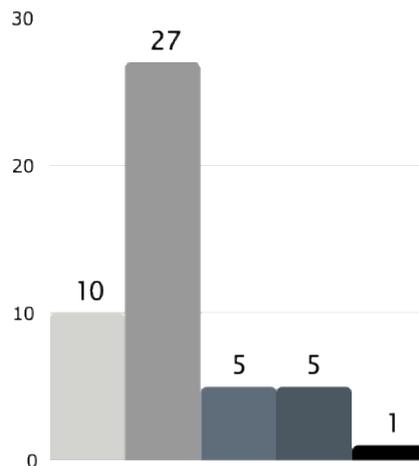**Figure 15 Question (13)**

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

Figure 12 shows the result for question (10), where most students (38) agreed that social media has increased their engagement. Figure 13 represents the result for the questionnaire (11), and the majority of the students (44) agreed that social media helps enhance critical thinking among students. Forty-one of the students agreed that social media has improved communication in Malaysian institutions (as shown in Figure 14). Thirty-seven of the students decided that teachers in Malaysian institutions should use social media for teaching purposes.

Challenges Of Social Media on Malaysian Education

To explore the challenges of social media on Malaysian education, the following three potential questions were asked:

(14)   Social media contributes to reducing focus among students during class
(15)   Social media addiction among students poses a challenge to their mental health.
(16)   Guidance and training can help students utilize social media more effectively for educational purposes.
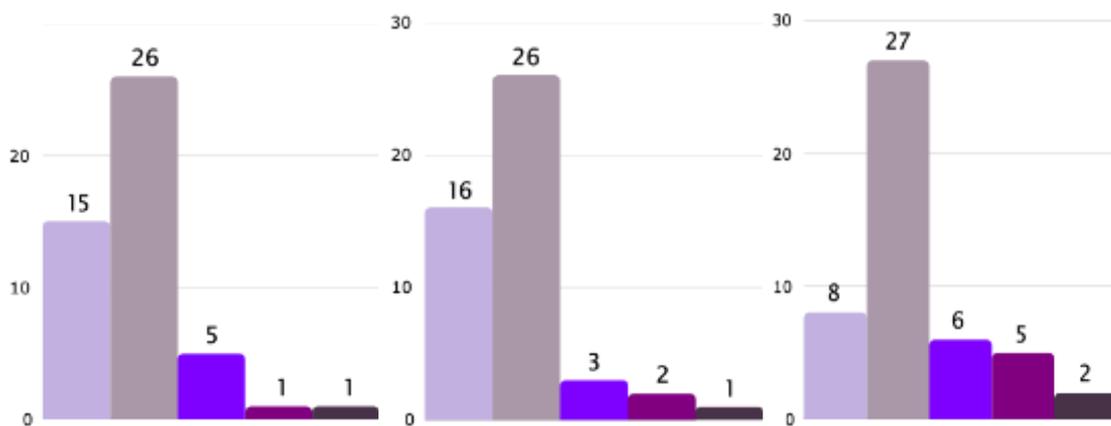

Figure 16 Question (14)   **Figure 17 Question (15)**   **Figure 18 Question (16)**

Strongly Agree   Agree   Neutral   Disagree   Strongly Disagree

From the above results it is clear that majority of the students agreed that social media contributes to reduce focus in the studies (Figure 16), social media is a addiction and can adversely affect the students mental health (Figure 17) and with proper training and guidance students can learn to use social media in effective way (Figure 18).

Discussion

From the above results, it can be interpreted that social media has both positive and negative impacts on students' education. As per the demographic profile of the respondents, it can be observed that most of them are pursuing their bachelor's degrees and are students. As most of the respondents are undergraduate students in Malaysian institutions, this data is relevant for the research. From the qualitative and quantitative survey questionnaires, it can be seen that most respondents agreed that social media is the best way for teachers to stay in touch with students. This finding is in line with the research by Saini & Mir (2023), where they agree that

social media is the best way for knowledge sharing and staying in touch with each other. YouTube is the most widely used social media platform for educational purposes (Jamaluddin & Abdullah, 2024). Social media not only motivates students in their studies but also aids them in their academic pursuits and facilitates knowledge sharing to a great extent. (Hrastinski & Aghaee(2012), Siliuis et al. (2010), Astleitner & Schlick (2025)). Social Media (AI) has a positive impact on students' education and not only helps in reducing human error but also helps in giving students a personalized learning experience (Shahzad, 2025; Ellikkal & Rajamohan, 2025; Xu, 2024), Saleem et al. (2025). Social media has also increased critical thinking among students and increased their engagement in studies (Galindo-Domínguez et al., 2025; Saleem et al., 2025).

Although social media has many advantages, it also presents some challenges. Social media has a negative impact on the mental health of students and reduces their focus (Feng et al., 2025; Brahme, 2025). It can even lead to addiction in some cases (Feng et al., 2025), but with proper training and guidance, this can be improved.

Conclusion

This study concludes that social media plays a significant role in shaping the academic experiences of Malaysian students. It enhances communication, supports collaborative learning, promotes critical thinking, and facilitates personalized Education through AI integration. Platforms like YouTube, Telegram, and Facebook are especially effective educational tools. However, challenges such as addiction, reduced focus, and mental health concerns must be addressed to maximize the benefits. Educators and policymakers should promote digital literacy, responsible use, and structured guidance to ensure social media remains a constructive force in education. Ultimately, when managed effectively, social media can significantly improve student engagement and academic success in Malaysian education.

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Ethics Statement:	This study is a preliminary study and was conducted in accordance with ethical research standards. Informed consent was obtained from all participants prior to data collection. Participation was voluntary, and respondents were assured of confidentiality and anonymity. The data collected were used solely for academic purposes.
Author Contribution Statement:	All authors contributed significantly to the development of this manuscript. Ambareen khan was responsible for the conceptualization, methodology, and analysing the results. Nurul Maziah Mohd Barkhaya handled the revision of article. Mageswaran Sanguman contributed to the literature review, and drafting of the manuscript. Mohammad Nishat Akhtar helped in funding of this article and data collection.

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