

Factors Influencing User Satisfaction on Social Media Application among Undergraduates

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Abstract: In Malaysia, social media usage is incredibly high among youth, with a large proportion actively engaging with applications such as TikTok, Instagram, WhatsApp and Facebook. They use these platforms daily and often spend several hours online. This study aims to investigate the factors (informativeness, entertainment, sociability and perceived convenience) that influence undergraduate students' satisfaction with social media applications. A structured questionnaire was administered to 268 undergraduate students using simple random sampling. The data were then analysed using SPSS software, employing descriptive statistics, Pearson Correlation and multiple linear regression to evaluate the significance of the proposed predictors. The findings revealed that all four factors significantly and positively influence user satisfaction. The study offers valuable insights into behavioural drivers of social media satisfaction among Malaysian undergraduates. These findings may be helpful for future researchers and developers seeking to design more engaging and user-friendly social media platforms.

Keywords: entertainment, informativeness, perceived convenience, users' satisfaction, sociability

1 Introduction

Technological advancement, particularly in social media applications, has profoundly transformed global social interaction, communication, and entertainment. In Malaysia, social media plays a vital role in the digital lifestyle of its citizens, with students being among the most active users. As of 2024, 83.1% of Malaysians are active social media users and increment of 4.6% compared to 2023 [1]. Each social media platform serves different purposes and offers unique features designed to fulfill user needs. For example, WhatsApp remains the most widely used platform, engaging 90.7% of users aged 16 to 64 [2]. Students also rely heavily on social media for socialising, entertainment, learning about current issues, and academic-related activities [3]. Beyond networking, platforms such as TikTok, YouTube, Facebook, Twitter, WhatsApp, and Instagram now play an important role in supporting e-learning and knowledge sharing. According to [4], the flexibility, interactivity, and accessibility of social media enhance students' awareness and engagement in educational activities contributing to a more dynamic learning environment.



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While the integration of social media into students' daily and academic lives expanded rapidly during the COVID-19 pandemic, this widespread adoption has also introduced new challenges. During lockdowns, students increasingly relied on social media to maintain social connections and access educational resources, with TikTok alone recording approximately 315 million downloads in the first quarter of 2020 [5] and 150 million daily active users with each accessing the platform 4.7 times per day and 22% spending over an hour daily [6]. However, the surge in usage has coincided with a rise in user dissatisfaction due to negative experiences such as the spread of misinformation, cyberbullying [7] and exposure to harmful content [8]. These issues can adversely affect students' mental well-being and ultimately reduce the perceived value of these platforms. This contrast between high usage and rising dissatisfaction highlights the need to better understand the factors that influence user satisfaction among student populations.

To examine these issues more systematically, it is essential to define the core concepts underpinning this study. Social media refers to an online environment where individuals interact to establish relationships and share information, experiences, and interests [9]. Common platforms such as TikTok, YouTube, Instagram, and WhatsApp enable communication, content creation, and information exchange. Within this context, user satisfaction is a key determinant of continued platform use. It encompasses emotional fulfillment, ease of use, and performance aspect of digital platform. According to [10], satisfaction represents the perceived level of contentment derived from a product, service, or an online social environment. In social media settings, user satisfaction reflects the extent to which the system meets users' needs and expectation [11]. Satisfaction occurs when user's expectations are fulfilled, whereas dissatisfaction is often triggered by negative experiences may prompt users to switch to alternative platforms.

Previous studies have identified several key factors that may influence satisfaction with social media platforms. Informativeness refers to the degree to which content satisfies users' needs for relevant and valuable information. The transition from traditional to digital media has made social media a primary source for real-time information and knowledge acquisition [12]. Informative content not only educates but also enhances satisfaction by meeting users' cognitive and practical needs. For example, [13] found that TikTok serves as an effective educational platform, allowing students to learn and enjoy content simultaneously. Empirical findings further show that informativeness significantly predicts TikTok user satisfaction [10], while [14] reported a strong positive correlation information sharing and satisfaction among Malaysian students.

Besides informativeness, entertainment is another factor contributing to social media engagement, often serving as a form of escapism and relaxation [14]. Students use social media to relieve academic stress and experience enjoyment in their daily routines [10]. Study by [15] found that entertainment significantly influences satisfaction and loyalty among TikTok users, while [14] reported a strong positive correlation ($r = 0.793$) between entertainment and satisfaction. Similarly, [16] concluded that entertainment motivations have a greater influence on satisfaction than information seeking, as enjoyable content fosters positive emotional responses that enhance user loyalty. While sociability reflects users' ability to connect, communicate, and engage with others through social media. This includes commenting, messaging, and content sharing, which fosters a sense of community and belonging. Studies by [14] and [15] demonstrate that enhanced social interaction contributes to deeper emotional attachment and continued use of social media platforms.

Lastly, perceived convenience refers to how easily users can navigate and complete tasks within application [15]. Evidence from mobile and e-learning contexts shows that convenience and ease of use significantly predict satisfaction [17] and [18]. As social media platforms increasingly integrate e-commerce features such as TikTok Shop and Instagram Shop, convenience has become even more relevant. [19] observed that combining social networking with shopping functions enhances convenience, thereby increasing satisfaction by minimising the need to switch between platforms.

Despite the growing body of research on social media usage and satisfaction, several gaps remain. Most existing studies examine general social media users or working adults, with limited focus on undergraduate students, who represent a distinct and highly active demographic with unique

behavioural patterns [10]. In Malaysia, [1] reported that 69% of university students used Facebook, while 93% used YouTube and WhatsApp, indicating high engagement for academic collaboration, communication, and entertainment. Given these trends, it is essential to identify the factors influencing user satisfaction among university students.

2 Method

A. Study Design and Data Collection

This study used a cross-sectional research design in gathering data from undergraduate students. From a total of 881 undergraduate students who enrolled at Universiti Teknologi MARA Cawangan Kelantan, Kota Bharu Branch, 268 students were selected as respondents. This study employed simple random sampling technique and sample selection by using random number generator. Then, questionnaires that comprise of demographic information, user's satisfaction, informativeness, entertainment, sociability, and perceived convenience were then distributed in Google Form using Whatsapp application to all 268 selected undergraduates.

B. Statistical Analysis

The collected data were cleaned and analysed using Statistical Package of Social Sciences (SPSS) software. Descriptive analysis, Pearson correlation and multiple regression analysis applied in this study to describe demographic information, to examine relationship between factors as well as to determine significant factors that contribute to user's satisfaction. In order to perform correlation and regression analysis, assumptions checking on residuals and multicollinearity is checked to ensure the model adequacy. It was found that all assumptions are fulfilled and model adequacy checking accepted since there is a normal and constant for residuals, and multicollinearity do not exist. For this study, the level of significance was set at $p\text{-value} < 0.05$ and using 95% confidence interval.

3 Result and Discussion

A. Descriptive Analysis

A summary of the respondents' demographic profile is presented in Table 1. More than half of the participants are female, comprising 175 (65.3%) students while 93 (34.7%) were male. Most of the respondents are aged between the 22-23 years old, representing 126 students (47%). In contrast, the smallest age group consist of students below 20 years old with only 3 (1.1%) respondents.

In terms of academic programmes, CDCS/CS241 reported the highest participation, with 86 (32.1%) students, whereas only 8 (3.0%) students are from CDCS/CS291 program. Semester-wise distribution shows that Semester 5 had the largest proportion of respondents, with 111 (41.4%) students, while Semester 1 has the fewest participants with just 5 students taking part in this study.

TikTok appear as the most favored platform, with 143 respondents (53.4%) choosing it, significantly surpass other applications. Instagram ranked second with 37 respondents (13.8%), followed closely by YouTube at 34 respondents (12.7%) and X (formerly Twitter) with 32 respondents (11.9%). While Facebook and others application show much lower levels of favouritism, with 10 respondents (3.7%) and 11 respondents (4.1%), respectively. WhatsApp are the least popular social media application choose by respondents with only 1 respondent (0.4%).

Table 1: Respondents' Demographic Characteristics (n=268)

Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	93	34.7
Female	175	65.3
Age		
Less than 20 years	3	1.1
20 – 21 years	118	44.0
22 – 23 years	126	47.0
More than 23 years	21	7.8
Course		
BA 240/270	33	12.3
BA 242/272	34	12.7
BA 249/279	61	22.8
BA 250/280	46	17.2
CDCS/CS241	86	32.1
CDCS/CS291	8	3.0
Semester		
1	5	1.9
2	6	2.2
3	39	14.6
4	75	28.0
5	111	41.4
6	32	11.9
Favorite social media apps		
TikTok	143	53.4
Instagram	37	13.8
Youtube	34	12.7
X/Twitter	32	11.9
Facebook	10	3.7
Whatsapp	1	0.4
Others	11	4.1
Duration on social media (day)		
Less than one hour	10	3.7
1 – 2 hours	48	17.9
3 – 4 hours	76	28.4
More than 4 hours	134	50.0

Regarding daily time spent on social media, half of respondents (134 students) reported using social media for more than 4 hours a day, making it the highest usage duration. This was followed by 76 students (28.4%) who use social media for 3-4 hours daily, and 48 students (17.9%) who use it 1-2 hours. Only 10 respondents (3.7%) reported using social media for less than 1 hour per day. In short, it revealed that most respondents dedicated a significant amount of time to social media, with half of them exceeding 4 hours usage per day, indicating a high level of engagement with social media applications daily.

B. Correlation Analysis

Table 2 presents the Pearson's Correlation results between dependent variable (users' satisfaction) and independent variables - informativeness, entertainment, sociability, and perceived convenience. All p-values were less than 0.05 level of significant, indicating statistically significant correlation between user satisfaction and independent variables (informativeness, entertainment, sociability and perceived convenience). The correlation was positive, with values of 0.709, 0.626, 0.470 and 0.692 respectively for informativeness, entertainment, sociability and perceived convenience. Therefore, it can be concluded that users' satisfaction is significantly and positively associated with all four independent variables.

Table 2: Result of Pearson Correlation Coefficient

Variable	Pearson Correlation, r	p-value
User Satisfaction * Informativeness	0.709	<0.00001
User Satisfaction * Entertainment	0.626	<0.00001
User Satisfaction * Sociability	0.470	<0.00001
User Satisfaction * Perceived Convenience	0.692	<0.00001

These results are consistent with prior study. [10] similarly reported that informativeness is a key driver of users' satisfaction, particularly on platforms with educational content such as TikTok, Twitter/X and LinkedIn. In addition, the current finding also aligns with [15] that found entertainment is a significant factor for satisfaction and influence users' continuous intention to use applications.

C. Multiple Linear Regression

This study employed multiple regression analysis using enter method to determine significant predictors for users' satisfaction on social media application. The predictors were informativeness, entertainment, sociability and perceived convenience. As shown in Table 3, the overall regression model was statistically significant ($F=166.461$, $p\text{-value}<0.0001$), indicating that the predictors have significant effect on predicting users' satisfaction.

Table 3: Result of Model Significant

Model	F statistics	p-value
Regression (Enter Method)	166.461	<0.00001

Table 4 presents the summary of regression coefficients for each of predictors. All four variables demonstrated statistically significant effects on user satisfaction, with the p-values values of <0.001 for informativeness, 0.004 for entertainment, 0.029 for sociability, and <0.001 for perceived convenience. Since all p-values were below the 0.05 significance threshold these finding confirm that all variables were important predictors of users' satisfaction on social media application and should be retained in the final model.

Table 4: Summary of Regression Coefficient

Variable	Coefficient	t statistics	p-value
Constant	0.440	2.004	0.046
Informativeness (X_1)	0.400	7.757	<0.001
Entertainment (X_2)	0.146	2.880	0.004
Sociability (X_3)	0.068	2.204	0.029
Perceived Convenience (X_4)	0.307	5.206	<0.001

Dependent variable (Y): User Satisfaction

Hence, the multiple linear regression equation represents the final model for this study is as follows:

$$\hat{y} = 0.440 + 0.400X_1 + 0.146X_2 + 0.068X_3 + 0.307X_4 \quad (1)$$

where

Y : users' satisfaction

X_1 : informativeness

X_2 : entertainment

X_3 : sociability

X_4 : perceived convenience

Based on Eq. (1), this indicates that when the social media application is positively good in term of informativeness, entertainment, sociability, and perceived convenience, the users' satisfaction towards the application will also higher or well said as highly satisfied. his result is consistent with previous studies such as [10] and [14] which reported that users are satisfied with social media applications

because it provides lot of information that delivered effectively through texts, videos as well as photos. However, [15] suggested in their study that social media applications may not always be useful tool to gain information, but it still significantly influences users' satisfaction. [18] underlined that perceived convenience is critical in shaping student satisfaction either directly or indirectly influencing continued use of learning or digital platforms.

The presents findings further support the work by [14] and [15], who found that entertainment and sociability were significantly affect users' satisfaction in using social media applications. Entertainment offer users to escape themselves from stress and quick relaxation from any works while sociability can be assessed through social media application where they used to connect with each other's and community. Thus, this shows that entertainment and sociability were crucial factor encouraging users' satisfaction especially among university students.

D. Model Fitness

Table 5: Result of Model Fitness

Model	R-Square	Adjusted R-Square
Regression (Enter Method)	0.744	0.740

The findings of R-Square (0.744) and Adjusted R-Square (0.740) are presented in Table 5. These values indicates that 74.4% of total variation in users' satisfaction can be explained by the four predictors - informativeness, entertainment, sociability and perceived convenience, while the remaining 25.6% is explained by the other factors. Similarly, the Adjusted R-Square 74.0% of the variation is explained after adjusting for the number of predictors, since the value of R-Square close to 1 this indicates that the model is good fit.

4 Conclusion

In conclusion, the findings revealed that 53.4% of undergraduates of Universiti Teknologi MARA Cawangan Kelantan, Kota Bharu Branch selected TikTok as their preferred social media platform rather than other social media applications making it the most popular choice among respondents. In contrast, WhatsApp was the least favored social media application with only 0.4% preference. The analysis also showed that a substantial number of respondents (134 students) spend more than 4 hours daily on social media application, whereas only 10 students used social media less than one hour daily.

This study further examined the relationship between informativeness, entertainment, sociability, perceived convenience and the user's satisfaction using Pearson Correlation analysis. The results demonstrated that all four variables are positively significant correlated with users' satisfaction. Multiple regression analysis was then conducted to determine which factors are significantly influencing users' satisfaction on social media applications. The multiple linear regression analysis confirmed that all predictors, informativeness, entertainment, sociability and perceived convenience have a significant relationship toward users' satisfaction. The most important variable in this study was informativeness as it had coefficient value larger than other variable, followed by perceived convenience, entertainment and sociability.

This highlights that social media developer should design applications that easier to navigate and use, as well as promote their applications more on educational contents. But at the same time, they should balance it with elements of entertainment and social interaction to maintain the platform's interactivity and user engagement.

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References

- [1] A. Siddharta, *Active Social Media Users as Percentage of the Total Population in Malaysia from 2016 to 2024*, Statista, 2024. [Online]. Available: <https://www.statista.com/>. [Accessed: Nov. 10, 2025].
- [2] S. Howe, *Social Media Statistics for Malaysia*, Meltwater, 2024. [Online]. Available: <https://www.meltwater.com/>. [Accessed: Nov. 10, 2025].
- [3] E. Veronica and O. A. Thomas, "Students involvement in social media: The engagement triangle in South-East universities, Nigeria," *Journal of Social Science for Policy Implications*, vol. 7, no. 2, pp. 33–40, 2019.
- [4] R. Agyenim-Boateng, A. Amankwaa, and R. O. Boateng, "The impact of social media on student academic life in higher education," *Global Journal of Human-Social Science: G Linguistics & Education*, vol. 16, no. 4, 2016.
- [5] B. Team, *TikTok Statistics You Need to Know*, Backlinko, 2024. [Online]. Available: <https://backlinko.com/>. [Accessed: Nov. 10, 2025].
- [6] X. Zhang, Y. Wu, and S. Liu, "Exploring short-form video application addiction: Socio-technical and attachment perspectives," *Telematics and Informatics*, vol. 42, 2019.
- [7] C. Christine, G. Lie, and R. S. Putra, "Waspada terhadap penyalahgunaan media sosial," *Jurnal Penelitian Dan Pengabdian Masyarakat Indonesia*, vol. 3, no. 1, 2024.
- [8] M. Abu-Sharida, "Why harmful posts on social media should be regulated," *International Review of Law*, vol. 10, no. 2, pp. 241–258, 2021.
- [9] N. Rao, V. David, and V. Kalyani, "A study on positive and negative effects of social media on society," *Journal of Science and Technology*, vol. 7, no. 10, pp. 2456–5660, 2022.
- [10] A. A. A. Sharabati, S. Al-Haddad, M. Al-Khasawneh, N. Nababteh, M. Mohammad, and Q. Abu Ghoush, "The impact of TikTok user satisfaction on continuous intention to use the application," *Journal of Open Innovation: Technology, Market, and Complexity*, vol. 8, no. 3, 2022.
- [11] J. Li, K. Dowpiset, and C. Nuangjamnong, "Influencing factors of user satisfaction of short video social media on Douyin platform," in *Proceedings of the BSSS Conference 2023: One-Day Hybrid International Conference on Resurgence of Economy Post COVID-19—The Next Normal*, Mar. 27, 2023. [Online]. Available: <https://ssrn.com/abstract=4433474>. [Accessed: Nov. 10, 2025].
- [12] M. Arisanty, G. Wiradharma, and I. Fiani, "Optimizing social media platforms as information dissemination media," *Jurnal ASPIKOM*, vol. 5, no. 2, p. 266, 2020.
- [13] N. Adnan and B. Morat, "University students' perceptions of using TikTok in education: A preliminary study," *International Journal of Practices in Teaching and Learning (IJPTL)*, vol. 2, no. 2, pp. 30–35, 2022.
- [14] I. S. C. Ilias, S. Ramli, M. Wook, and N. A. Hasbullah, "Factors influencing users' satisfaction towards image use in social media: A PLS-SEM analysis," *International Journal of Interactive Mobile Technologies*, vol. 16, no. 15, pp. 172–186, 2022.
- [15] L. Ma, J. Feng, Z. Feng, and L. Wang, "Research on user loyalty of short video app based on perceived value—Take TikTok as an example," in *Proc. 16th Int. Conf. Service Systems and Service Management (ICSSSM)*, 2019.
- [16] J. J. Al-Menayes, "Motivations for using social media: An exploratory factor analysis," *International Journal of Psychological Studies*, vol. 7, no. 1, 2015.
- [17] M. Amin, S. Rezaei, and M. Abolghasemi, "User satisfaction with mobile websites: The impact of perceived usefulness (PU), perceived ease of use (PEOU) and trust," *Nankai Business Review International*, vol. 5, no. 3, pp. 258–274, 2014.

- [18] L. A. Hussein and M. F. Hilmi, "The influence of convenience on the usage of learning management system," *The Electronic Journal of E-Learning*, vol. 19, no. 6, pp. 504–515, 2021. [Online]. Available: <https://www.ejel.org>.
- [19] X. Lin, X. Wang, and N. Hajli, "Building e-commerce satisfaction and boosting sales: The role of social commerce trust and its antecedents," *International Journal of Electronic Commerce*, vol. 23, no. 3, pp. 328–363, 2019.