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Abstract

This study aims to identify the selection factors of the TikTok application as an informal learning medium, to analyze the relationship between the use of the TikTok application and its potential as an informal learning medium, and to identify the effect of the use of the TikTok application on the motivation and interest in learning for Geography Education students of Universiti Pendidikan Sultan Idris. The quantitative approach and questionnaire method were used in this study. The study sample consisted of 210 Geography students using a simple random sampling technique. Descriptive analysis (mean, percentage, standard deviation) and inferential analysis (Spearman Rho correlation) were used to answer each research question. The findings of the study show that the main factor for students to choose TikTok as an informal learning medium is because TikTok has interesting content or videos. Next, the main potential of using the TikTok application as an informal learning medium is that students can find out about current issues either in the country or abroad. The effect of using the TikTok application on the interest and motivation to learn has a positive effect on students because the results of the study show that students enjoy using the TikTok application as a learning medium. In conclusion, TikTok has demonstrated potential as an effective informal learning medium for students. The implications of this study may serve as a reference for researchers and future researchers, as well as for educators and curriculum developers to consider integrating digital platforms like TikTok into educational strategies to enhance student engagement and learning motivation.

Keywords: TikTok Application, Informal Learning Medium, Geography Education, Digital Learning

INTRODUCTION

The TikTok application is a renowned social media platform that has evolved into a global phenomenon. TikTok users can record short videos ranging from one to five minutes in length. As of early 2022, the number of TikTok users aged 18 and above in Malaysia reached 14.59 million. This data indicates that 48.23 percent of the social media user population are TikTok users (Arwansyah & Arifki, 2023). Essentially, nearly 20 percent of the world's population today has downloaded the app, making it one of the most prominent social media platforms in existence. Several factors contribute to the increase in TikTok users, one of which is that the app is accessible for free (Nurdiyanah, 2022). TikTok began to gain significant global attention following the implementation of movement control orders worldwide due to the COVID-19 pandemic in 2020. The movement control orders enforced in affected countries led to a surge in TikTok usage, particularly for creating short videos and as an advertising platform for entrepreneurs (Nurdiyanah, 2022). The use of the TikTok application is said to stimulate and provide

valuable input to its users. Moreover, since the onset of the COVID-19 pandemic, the teaching and learning process has changed, prompting educators to become more creative by using TikTok as a teaching and learning medium (Aminuddin Zaki et al., 2021). This application is considered useful as a channel for information, education, online business, and the development of talents and creative skills. Consequently, the presentation of subjects in short video formats, often perceived as boring in school, can become engaging. The general public, particularly students taking geography, can now learn about the subject not only in school but also through social media while at home. In this context, informal learning refers to learning that occurs outside of formal academic settings such as schools or universities and is typically self-directed, spontaneous, and often influenced by media, peers, or personal interest. Informal learning allows learners to access knowledge at their own pace and convenience, often through digital platforms such as TikTok.

This study focuses on Geography Education students at Universiti Pendidikan Sultan Idris (UPSI) because they are future educators who are likely to integrate digital tools in their own teaching. Furthermore, geography is a subject rich in current and real-world issues, which are frequently discussed on social media. Thus, Geography Education students represent a relevant group for exploring the pedagogical potential of TikTok in enhancing motivation, engagement, and understanding through informal learning. Therefore, there is a growing need for a comprehensive study on the use of the TikTok application among the population in this country. Hence, this study involves the experiences of students using TikTok as an informal learning medium.

LITERATURE REVIEW

Video-Based Teaching

China-based company Bytedance launched TikTok, a short video application, in early September 2016. Zhang Yiming initially introduced TikTok under the name Douyin. In its early days, TikTok recorded 100 million users and over one million video views per day. This surge in popularity led to TikTok's expansion beyond China under the more attention-grabbing name, TikTok. TikTok functions similarly to YouTube as a video creation tool but shares more similarities with Instagram compared to other social media platforms (Omar & Dequan, 2020). This is because both TikTok and Instagram are social networking sites that allow access to short videos, leaving comments, and likes for user interaction with the created videos. Additionally, users can communicate with each other using the direct messaging system (Omar & Dequan, 2020). The use of media in the education process has the potential to enhance students' understanding in more detail and make learning activities more diverse. Videos have been used across various media to support student learning.

The term "video" is defined as a medium that simultaneously presents audio and graphics (Shephard, 2003). Essentially, videos are similar to television, but the concept of video has evolved over the past six decades. Educational videos are one of the mediums that can be used to assist in achieving the planned teaching and learning process. In the past, using video media was costly, but today, educators can create their own instructional videos based on their ideology and creativity through social media. The use of videos can increase student engagement and motivation for learning. Therefore, educators should effectively apply this technology to teaching and learning. For instance, educators can use videos as a practical tool to improve the quality of existing conventional methods in the classroom. There are five main motives for using the Internet: seeking information, spending time, convenience, entertainment, and interpersonal utility, all of which influence user satisfaction. These findings demonstrate that the Internet and TikTok are essential sources of entertainment for society. The TikTok trend positively impacts user satisfaction (Sharabati et al., 2022). This study highlights that social network trends foster interpersonal relationships by allowing individuals to connect with like-minded peers. Interpersonal skills, in this context, refer to the cognitive strategies and communication techniques employed during social interactions to achieve specific outcomes.

Basic concepts related to interpersonal communication include self-notion, attitudes, personality, values, and goals. These skills help create an individual who is capable and confident when interacting with the public. According to Nichita et al. (2021), 60% of teenagers think they can use the

TikTok application for academic purposes. Liang (2021) noted that spending a lot of time on TikTok can affect learning plans and work schedules, leading to impaired academic performance. The rapid and widespread development of information and communication technology affects all aspects of life, including education. This technological advancement has changed the way people learn. The learning process now extends beyond the physical confines of the classroom, embodying globalization and lifelong learning. The use of media in education enhances students' understanding and creates more diverse learning activities.

The advantages of using the TikTok application

The era of globalization, which has led to the development of social media, has encouraged society to actively engage in building communities through internet networks. These media networks include social platforms, such as the TikTok application. Researchers have conducted numerous studies involving TikTok users worldwide. In a study by Saputra et al. (2020), the focus was on the benefits of TikTok as a mood booster. The research highlighted TikTok's effectiveness in enhancing user mood. Furthermore, Saputra et al. (2020) also noted that the distinct effects and diverse music options available for creating creative videos contribute to TikTok being a way to uplift users' moods. Hasiholan et al. (2020) examined the use of TikTok as a medium for disease prevention campaigns, such as promoting handwashing during the COVID-19 pandemic. Their study found that younger users were particularly inclined to engage with straightforward and accurate handwashing campaign videos. Deriyanto & Qorib (2018), in their study, examined the perceptions of students at Tribhuwana Tunggadewi University regarding the use of the TikTok application. The study's findings indicated a positive perception of TikTok's benefits, noting its potential as a platform for entertainment, information, and communication.

On the negative side, there was dissatisfaction among users regarding the app's safety system. According to Deriyanto & Qorib (2018), an inefficient banning system allowed for easy uploading of negative content. Moreover, TikTok has assisted individuals in entertaining themselves during movement control orders amid the COVID-19 pandemic at the end of 2019 (Utami et al., 2021). The TikTok application can lead individuals, especially teenagers, to become addicted, causing them to behave inappropriately for their age. Valiana's study shows that TikTok users often dare to stand out to attract attention from others. For instance, they may showcase their sexuality by wearing provocative clothing to garner views, comments, feedback, and a high number of likes compared to other TikTok users. Excessive use of social media can influence culture, lifestyles, and perspectives. Moreover, TikTok users often exhibit narcissistic behavior, as noted by Devri Aprilian et al. (2019), who found that individuals with such tendencies tend to perceive themselves as superior, engage in excessive selfadmiration, believe they do not require others' assistance, and display a lack of sensitivity to others' needs or feelings. Weimann and Masri (2023) identified the presence of extremism on TikTok, evident in user-generated videos, comments, symbols, and images. Among the most prevalent categories is anti-Semitic content, which reflects hostile or prejudiced attitudes toward Jewish people and often manifests in forms of persecution or harassment based on religion, ethnicity, or race. This situation indicates that to some extent, TikTok contains elements of hatred towards certain issues. It underscores weaknesses in the application's security systems. The use of the TikTok application has led to the spread of misinformation regarding the COVID-19 vaccine (Basch et al., 2021).

Research indicates that more than 100 vaccine-related videos became trending topics on TikTok, amassing over 35 million views, with 38 of them actively discouraging vaccination against COVID-19 (Basch et al., 2021). The influence of anti-vaccine groups on the platform poses a serious threat to vaccination campaigns, particularly among adolescents, who represent the largest proportion of TikTok users. Consequently, the spread of misinformation and exposure to violent content on TikTok presents significant challenges for safeguarding adolescent users.

Informal Learning

Learning is an active engagement process that evolves through experience. It encompasses what individuals do when they seek to understand the world. Learning may also involve the development or reinforcement of skills, knowledge, understanding, awareness, values, ideas, and feelings, or the enhancement of cognitive capacities. Non-formal teaching provides a framework that allows students

to rest, in contrast to formal teaching, where teachers structure their views on aspects of demonstrating, informing, teaching, and directing with the goal of controlling what students learn. The most significant difference between teaching and learning methods is that non-formal learning methods are more student-centered compared to formal teaching methods, which are teacher-centered. There are three types of non-formal learning: self-directed learning, incidental learning, and social learning. There are several examples of each type of non-formal learning that pertain to children, formal learning environments, social issues or history, acquiring specific skills, and local politics.

The Application of TikTok as a Learning Media

Educational media, such as the TikTok application, is one of the methods or tools used in the teaching and learning process. Its purpose is to stimulate learning patterns to support the success of teaching and learning processes. Learning process comprises five main components: teachers, learning materials, educational media, students, and learning objectives. Educational media, on the other hand, refers to tools, materials, or systematically organized teaching materials used by teachers and students in the learning process. Therefore, educational media is an integral part of the learning system that cannot be separated. Without educational media, the learning process would not be possible because at least one medium is used to deliver the teaching materials. In today's era of technological development, media and the internet serve many purposes, including facilitating communication, obtaining and disseminating information, and providing learning opportunities, among others. For example, the TikTok application offers information and learning features.

The Table 1 illustrates the features of the TikTok application that have the potential to serve as learning media (Julianto, 2022). The lifestyle of the younger generation, also known as Generation Z, is notable for their trend of using smartphones as a primary tool for information-seeking. This includes accessing social media and utilizing it for learning purposes, especially with the abundance of educational videos available on platforms like TikTok today. Teenagers deeply integrate social media into their daily lives, making it a powerful learning medium. Particularly, students can benefit from the use of YouTube and TikTok as educational tools. This can enhance learning motivation and creativity, making social media an effective resource for learning (Kamhar & Lestari, 2019).

 Characteristics
 Function

 Voice recording
 Recording audio during video creation using the TikTok application

 Video recording
 Recording a video using the TikTok application prior to uploading

 Backsound
 Adding background music available from storage media within the TikTok application

 Edit
 Refining and editing the drafted video

 Share
 Sharing a video from the TikTok application to other applications.

 Duet
 Collaborating with other TikTok users in video production.

Table 1 Characteristics found in the TikTok application

Previous studies conducted by Awang et al. (2022) indicate that the use of the TikTok application has a positive impact on students and provides effective learning materials. TikTok is utilized through short, information-packed videos that are visually appealing, thereby capturing students' interest and motivating them to learn. The application significantly influences teenagers' academic performance (Nichita et al., 2021). In their study, 60% of teenagers stated that TikTok can be used for academic purposes. Furthermore, research from the Philippines (Ngilangil, 2022) highlights that many students at Surigao del Norte State University, Surigao City (SNSU), frequently watch TikTok videos. The video content and music types impact their engagement on TikTok, prompting them to comment on videos that capture their attention. These comments, whether positive or negative, reflect the content of the TikTok videos.

RESEARCH METHODOLOGY

In general, this study employs a descriptive quantitative approach to investigate the potential use of TikTok applications as a non-formal learning medium. The quantitative approach involves methods of computation and variable analysis when conducting research (Apuke, 2017). This study employs a quantitative approach to collect data from respondents, utilizing a survey method to gather information relevant to the research questions. Surveys are conducted by distributing questionnaires face-to-face to respondents at the study site. The research design serves as a guide on the methods and procedures for data collection and planning to achieve research objectives. The study is structured as a descriptive survey, employing a questionnaire as the research instrument. A random sampling technique will be utilized, where each population listed in the sampling frame has an equal chance of being selected as a sample. The rationale for using this method is to ensure the researcher obtains necessary information based on the research questions, as the sample comprises geography education students at UPSI. The use of questionnaires is one method that can save time in gathering data within a short timeframe. Generally, questionnaires are practical and effective measurement tools for survey studies, especially those involving large populations.

The data collected and the findings from such studies can provide information to achieve the predefined objectives, as this method is chosen based on its suitability with the study design and practicality in obtaining valuable feedback from study respondents. A well-designed questionnaire can effectively measure and gather data, thus addressing the research questions. Therefore, the questionnaire design process requires careful consideration, as poor design may lead to invalid and meaningless findings. The next stage focuses on the data collection aspect. The required data for this study is gathered from two main sources: primary data and secondary data. Primary data refers to original data collected directly by the researcher in order to test the study's effectiveness. In this study, primary data is obtained through a questionnaire administered to second- to eighth-semester geography students at Universiti Pendidikan Sultan Idris. A total of 210 out of 460 students were selected using a simple random sampling method based on Krejcie and Morgan (1970) guidelines.

The questionnaire items consist of four main sections distributed to respondents through an online platform, specifically Google Forms. During the data analysis stage, the Statistical Package for the Social Sciences (SPSS) software package is utilized to perform calculations and analyse the collected data. Therefore, descriptive statistics are employed to analyse the demographic data of respondents, including gender, age, ethnicity, marital status, educational level, and semester. This method is also used to analyse the study findings based on the predefined objectives. The descriptive statistics method aims to summarize the characteristics of variables in the study and is used to generalize the data results from the sample to the study population. This study employs inferential statistical analysis using Spearman's correlation test, in addition to descriptive statistics, to investigate the relationship between the use of TikTok applications and their potential as a non-formal learning medium for geography education students at Universiti Pendidikan Sultan Idris.

FINDINGS AND DISCUSSION

Factors Influencing the Selection of TikTok as a Non-Formal Learning Medium

This study will address the objective of measuring factors influencing the selection of TikTok as a non-formal learning medium. Figure 1 illustrates the findings on factors influencing the selection of TikTok as a non-formal learning medium among geography education students at UPSI.

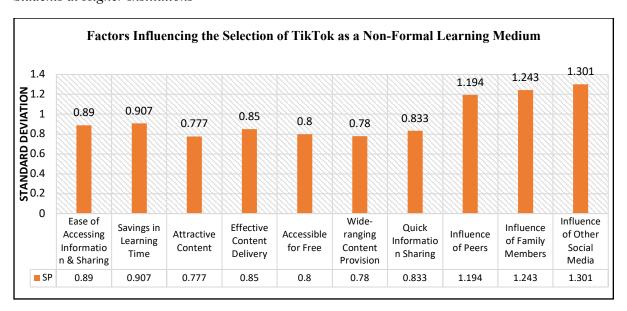


Figure 1 Factor influencing the selection of TikTok

Based on the conducted analysis, overall, geography students from semesters 2 to 8 at Universiti Pendidikan Sultan Idris stated that their reason for choosing TikTok as a non-formal learning medium is primarily due to the app's interesting content or videos. The study findings indicate that the standard deviation for the statement in the survey, "I choose TikTok as a non-formal learning medium because of the influence of other social media," is at the highest level, with a standard deviation value of 1.301. Respondents who strongly disagreed and disagreed numbered 10 and 81 individuals, representing percentages of 4.8% and 38%, respectively. A total of 24 respondents, or 11.4%, indicated uncertainty. On the other hand, for those who agreed and strongly agreed, the total respondents were 46 and 49 individuals, accounting for percentages of 21.9% and 23.3%, respectively. A high standard deviation indicates that more respondents disagreed or strongly disagreed compared to those who agreed or strongly agreed with the statement. Therefore, the study findings suggest that the statement "I choose TikTok as a non-formal learning medium because of the influence of other social media" is not a significant factor influencing the selection of TikTok as a non-formal learning medium among geography education students at UPSI.

Meanwhile, for the statement with the lowest standard deviation, the study found that the statement "I choose TikTok as a non-formal learning medium because of its interesting content or videos" recorded the lowest standard deviation value at SP=0.777. Regarding this statement, only two respondents (1%) strongly disagreed. For those who disagreed, six respondents, totalling 2.9%, indicated their disagreement. Additionally, seven respondents, equivalent to 3.3%, were uncertain about the statement. On the other hand, for those who agreed and strongly agreed, there were 74 and 121 respondents, respectively, making up percentages of 35.22% and 57.6%. A low standard deviation indicates that the number of respondents who chose agree and strongly agree is higher compared to those who chose disagree and strongly disagree. The statement in B3 is supported by a study conducted by Utami et al. (2021), which suggests that TikTok can serve as an entertainment medium for the public, especially among students.

Therefore, the statement "I choose TikTok as a non-formal learning medium because of its interesting content or videos" is a primary factor for geography education students in selecting TikTok as a non-formal learning medium. All items in the questionnaire regarding the variables of factors influencing the selection of TikTok as a non-formal learning medium among geography education students at UPSI achieved a high level of agreement from respondents. Consequently, the data collection results using the questionnaire method and analysis using SPSS indicate that the factor "I choose TikTok as a non-formal learning medium because of its interesting content or videos" recorded the highest number of respondents agreeing, with a mean score of M = 4.45 and a standard deviation of SP = 0.778. Therefore, the study findings are consistent with previous research, which suggests that

each video content presents concise, creative, and engaging learning methods that attract TikTok users' attention (Husain et al., 2021).

The Relationship Between the Use of TikTok Application and Its Potential as a Non-Formal Learning Medium

The main objective of this study is to measure the relationship between the use of the TikTok application and its potential as a non-formal learning medium. Figure 2 presents the study findings on the potential use of TikTok as a non-formal learning medium among geography education students at UPSI." If you need further assistance or have more questions, feel free to ask.

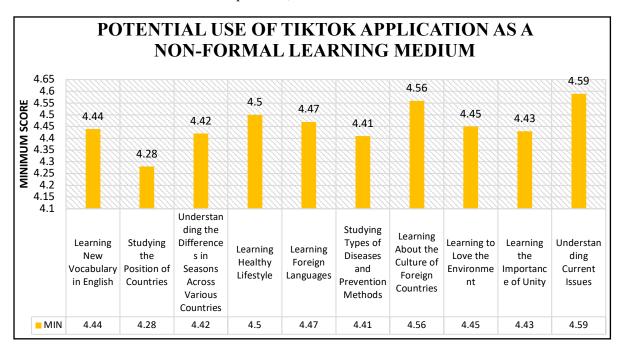


Figure 2 Potential use of TikTok as a non-formal learning medium

Based on the interpretation of scores on the five-point Likert scale used in this study, the findings indicate that the minimum score for the statement "I can learn about current issues through the TikTok application" is at the highest level, with a minimum score of 4.59. In this statement, the number of students who strongly disagree and disagree is equal, with two respondents at 1% each. Six respondents indicated uncertainty, accounting for 2.9%. The number of respondents who agreed totals 61 (29%), while 139 students strongly agreed. Several factors, including TikTok content that frequently features news on current issues, whether domestic or international, influence this trend. These findings align with a study by Awang et al., 2022, which suggests that easy access to information, entertainment, and knowledge facilitates global communication and interaction without any barriers or interruptions. Meanwhile, the study shows that the statement "I can learn and remember the positions of countries in the world through the TikTok application" recorded the lowest minimum score of 4.28. For this statement, three respondents, totaling 1.4%, disagreed. Additionally, 5.7% of geography education students at UPSI strongly disagreed, comprising 12 students. Eleven respondents (5.2%) expressed uncertainty. Students who agreed with the statement amounted to 39%, totaling 82 individuals, while 48.6% strongly agreed, amounting to 102 students. This trend is influenced by many respondents stating that they use TikTok primarily to alleviate boredom, entertain themselves, and improve their mood (Rizgillah & Akhiyat, 2021). Based on the study results talked about in the purpose of looking into the link between using the TikTok app and its potential as a casual learning tool for UPSI geography students, all the variable items got a high level of agreement from those who responded. Consequently, the data collection results using the questionnaire method and analysis using SPSS indicate that the statement "I can learn about current issues through the TikTok application" received the highest number of respondents agreeing, with a mean score of M = 4.59 and a standard deviation of SP = 0.688.

Therefore, the study findings align with prior research, suggesting that individuals can easily access information, entertainment, and knowledge, thereby facilitating communication and interaction not only in Malaysia but globally without any barriers or interruptions (Awang et al., 2022).

Analysis of Spearman's Rank Correlation: The Relationship Between TikTok App Usage and Its Potential as a Non-Formal Learning Medium

To address the second objective of analyzing the relationship between TikTok app usage and its potential as a non-formal learning medium, inferential analysis involving Spearman's correlation are employed to assess the strength of this relationship. Spearman's correlation analysis is utilized to examine the linear relationship between two variables measured on an ordinal scale. This test explains the strength of a positive or negative relationship, as well as whether it is statistically significant. This method of data analysis will be employed to determine the relationship between TikTok app usage and its potential as a non-formal learning medium. A correlation coefficient of 0.0 indicates very low reliability, while a value approaching 1.0 signifies very high reliability (Mohd Najib, 2003). Table 2 presents the correlation values and their interpretation on the correlation scale.

 Table 2 Scale of the strength of correlation between variables

Correlation Scale	Interpretation	
0.00-0.20	Very low correlation that can be disregarded.	
0.21-0.40	Weak and low correlation.	
0.41-0.60	Moderate correlation.	
0.61-0.80	High and strong correlation.	
0.81-1.00	Very high and very strong correlation.	

The test results will indicate whether there is a relationship between the ordinal-scale variables, specifically the relationship between the TikTok application's usage and its potential as a non-formal learning medium. The research hypothesis is based on the second research question, which explores whether there is a relationship between the use of the TikTok application and its potential as a non-formal learning medium for geography students at UPSI. The hypothesis for this test is: Ho¹: There is no relationship between the use of the TikTok application and its potential as a non-formal learning medium.

The Spearman Rho correlation analysis, as presented in Table 3, examines the relationship between TikTok's use and its potential as an informal learning medium for geography education students at UPSI. The analysis results for the potential in item C1, "Learning new English words through the TikTok application," indicate a correlation coefficient value of 1.000 (rs = 1.000) with a probability value of .001, tested at a significance level of 0.05. This probability value is found to be smaller than the significance level (p < 0.05). The resulting correlation value for item C1 indicates a very high and strong correlation. The potential in items C2 and C3, "Learning to remember where countries are in the world through the TikTok app" and "Learning about the different seasons in different countries through the TikTok app"—shows the same correlation coefficient value of 0.711 (rs = 0.711) with a probability value of .001, tested at a significance level of 0.05.

Table 3 Analysis of the correlation between the use of the TikTok application and its potential as a non-formal learning medium

Variable	Item	The Potential of Using the TikTok Application as a Non-formal Learning Medium	Correlation Value (rs)	Significant (p)	Strength of Correlation
	C1	Learning new English vocabulary through the TikTok application.	1.000	<.001	Very Strong
	C2	Learning to memorize the locations of countries in the world through the TikTok application.	.711**	<.001	Strong

continued

Use of the TikTok Application	С3	Gaining knowledge about seasonal differences in various countries through the TikTok application.	.711**	<.001	Strong
	C4	Learning about healthy lifestyle habits through the TikTok application.	.716**	<.001	Strong
	C5	Learning a foreign language through the TikTok application.	.672**	<.001	Strong
	C6	Learning about types of diseases and their prevention methods through the TikTok application.	.709**	<.001	Strong
	C7	Learning about foreign cultures through the TikTok application.	.686**	<.001	Strong
	C8	Learning to appreciate the environment through the TikTok application.	.688**	<.001	Strong
	C9	Learning about the importance of unity through the TikTok application.	.696**	<.001	Strong
	C10	Gaining awareness of current issues through the TikTok application.	.650**	<.001	Strong

^{**} Significant at the level of <0.05 (2-tailed)

This probability value is found to be smaller than the significance level (p < 0.05). The resulting correlation values for items C2 and C3 indicates a high correlation. Furthermore, the analysis results for the potential in item C4, "Learning about healthy lifestyles through the TikTok application," indicate a correlation coefficient value of 0.716 (rs = 0.716) with a probability value of .001, tested at a significance level of 0.05. This probability value is found to be smaller than the significance level (p < 0.05). The resulting correlation value for item C4 indicates a high correlation. The next item (C5), "Learning foreign languages through the TikTok application," shows analysis results indicating a correlation coefficient value of 0.672 (rs = 0.672) with a probability value of .001, tested at a significance level of 0.05.

This probability value is found to be smaller than the significance level (p < 0.05). The resulting correlation value for item C5 indicates a high and strong correlation. The analysis results for the potential in item C6, "Learning about different diseases and ways to prevent them through the TikTok application," indicate a correlation coefficient value of 0.709 (rs = 0.709) with a probability value of 0.01, tested at a significance level of 0.05. This probability value is found to be smaller than the significance level (p < 0.05). The resulting correlation value for item C6 indicates a high correlation. The analysis shows that for item C7, "Learning about other cultures through the TikTok app," the correlation coefficient is 0.686 (rs = 0.686), the probability is 0.001, and the significance level is 0.05. This probability value is found to be smaller than the significance level (p < 0.05). The resulting correlation value for item C7 indicates a high correlation. The potential in item C8—"Learning to appreciate the environment through the TikTok app" had a correlation coefficient value of 0.688 (rs = 0.688), a probability value of 0.01, and was tested at a significance level of 0.05. This probability value is found to be smaller than the significance level (p < 0.05). The resulting correlation value for item C8 indicates a high correlation.

For the next item (C9), "Learning how important unity is through the TikTok app," the analysis shows that there is a correlation of 0.696 (rs = 0.696) and a probability value of.001, as tested at a significance level of 0.05. This probability value is found to be smaller than the significance level (p < 0.05). The resulting correlation value for item C9 indicates a high correlation. The final item (C10) is "Learning about current issues through the TikTok application." The potential analysis results for item C10 indicate a correlation coefficient value of 0.650 (rs = 0.650) with a probability value of.001, tested at a significance level of 0.05. This probability value is found to be smaller than the significance level (p < 0.05). The resulting correlation value for item C10 indicates a high correlation.

Based on the findings of the study, the overall analysis of all variable items, which examined the relationship between the use of the TikTok application and its potential as an informal learning medium, shows significant results. The SPSS data analysis, specifically the Spearman Rho correlation, rejects the hypothesis that there is no significant relationship between the TikTok application's use and its potential as an informal learning medium. This is because all items analyzed have a significant value

of 0.01, tested at a significance level of 0.05. This probability value is found to be smaller than the significance level (p < 0.05). Therefore, the resulting correlation values for all items indicate a strong and high correlation.

Impact of TikTok Application Usage on Learning Interest and Motivation

"The impact of TikTok application usage on learning interest and motivation is the main objective to be measured in this study. Figure 3 shows the research findings on the effects of TikTok application usage on learning interest and motivation among geography education students at UPSI." Based on the interpretation of the Likert scale scores used, this study's findings indicate that the minimum score for the statement "I enjoy using TikTok as a medium for non-formal learning" is at the highest level, with a minimum value of 4.44. For this statement, the number of students who chose strongly disagree or disagree is the same, with two respondents each, accounting for 1%. Nine students chose unsure or neutral, representing 4.3% of respondents. The number of students who indicated they agree is 85, making up 40.5%. Meanwhile, the total number of respondents who strongly agree is 112, accounting for 53.3%. This phenomenon is influenced by several factors, such as the compelling content on TikTok that captures the attention of geography education students at UPSI. Yao's (2021) research reveals that TikTok customises its video content on the 'for your page' to cater to individual interests. Students who use TikTok typically gravitate towards educational content that enriches their knowledge. This is because each video on TikTok presents concise, creative, and dense learning methods, which engage TikTok users (Husain et al., 2021).

Furthermore, studies like Utami et al. (2021), which concluded that TikTok serves as an entertainment medium, especially among students, can support the significant number of respondents who agreed. This finding is also corroborated by Awang et al. (2022), who found that TikTok usage positively impacts students and encourages effective learning practices. TikTok's format of short, information-rich videos with captivating visuals effectively stimulates students' interest in learning and serves as a motivational tool for them. The study findings indicate that the statement "TikTok application makes it easier for me to master a subject being studied" recorded the lowest mean score with a value of 4.25. For this question, the number of students who chose "strongly disagree" and "disagree" was the same, with three students each accounting for 1.4%. For the "unsure" scale, the number of respondents who expressed uncertainty was 23, equivalent to 11%. The number of respondents who agreed was 90, representing 42.9%. Additionally, 91 geography education students stated that they strongly agreed, accounting for 43.3%. This is because many respondents reported that their primary reasons for using TikTok were to alleviate boredom, entertain themselves, and enhance their mood (Rizqillah & Akhiyat, 2021).

Utami et al. (2021) concluded that the TikTok application can serve as an entertainment medium for the community, particularly among university students during the COVID-19 pandemic. Therefore, university students are more likely to choose TikTok as a medium for entertainment and gaining knowledge, but not for mastering a specific subject matter. Based on the study findings, all aspects of the variables, including the effect of using the TikTok application on motivation and interest in learning among geography Education students at UPSI, achieved a high level of agreement from respondents. The data obtained by questionnaires and analyzed using SPSS demonstrated that the statement "I enjoy using the TikTok application as an informal learning medium" received the highest number of respondents agreeing. The mean score for the above assertion was M = 4.44, with a standard deviation of SD = 0.71. Hence, the findings of this study align with prior research, indicating that students utilize the TikTok platform as a means of acquiring knowledge. This is due to the fact that each video on TikTok offers brief, creative, and concise learning strategies that positively captivate the app's users (Husain et al., 2021).

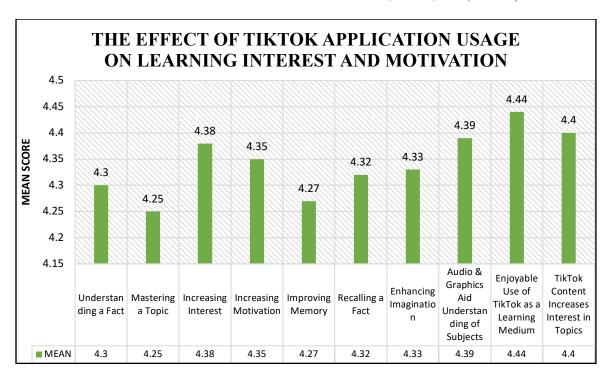


Figure 3 The effects of TikTok application usage on learning interest and motivation

CONCLUSION

Overall, this study successfully achieved its objectives by examining the potential use of TikTok as an informal learning medium among Geography Education students at Universiti Pendidikan Sultan Idris (UPSI). The findings indicate a positive perception, with students selecting TikTok primarily for its engaging content and its ability to deliver current and relevant geographical issues. Furthermore, the study shows that the use of TikTok enhances students' interest and motivation in learning. These results highlight TikTok's potential as a supplementary educational tool, especially in supporting informal, self-directed learning. This study contributes to the growing body of research on digital learning platforms by emphasizing their applicability in subject-specific contexts such as geography. Future research may explore the effectiveness of different content types on learning outcomes, or investigate how TikTok can be integrated into formal curricula. Educators and curriculum developers may also consider leveraging such platforms to increase student engagement and foster lifelong learning habits in a digital age.

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DATA AVAILABILITY STATEMENT

The author's confirm that the data supporting the findings of this study are availability within the article.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this work, the author(s) used QuillBot to check grammar. After using this tool, the author(s) reviewed and edited the content as necessary and take full responsibility for the final content of the publication.

REFERENCES

- Aminuddin Zaki, N. S., Poniran, N. A., & Hussain, A. (2021). TikTok sebagai medium pengajaran terkini Bulletin]. Buletin ACIS, UiTM Cawangan Negeri Sembilan. Retrieved October 2021, from https://ir.uitm.edu.my/id/eprint/63785/
- Apuke, O. D. (2017). Quantitative Research Methods a Synopsis Approach. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, 6(11), 40-47. https://doi.org/10.12816/0040336
- Arwansyah, K., & Arifki, B.W (2023). Impak penggunaan aplikasi tiktok terhadap gaya hidup pelajar UTHM Pagoh. *Malaysian Journal of Social Sciences and Humanities*, 8(2), 1-17. https://doi.org/10.47405/mjssh.v8i2.2137
- Awang, H., Khalid, M. A. S. M., Yin, A. W. & Ya'acob, C. H. (2022). The use of TikTok to enhance student participation in computer applications class. *Journal of Contemporary Social Science and Education Studies*, 2(2), 30–40. https://doi.org/10.5281/zenodo.10199330
- Basch, C. H., Meleo-Erwin, Z., Fera, J., Jaime, C., & Basch, C. E. (2021). A global pandemic in the time of viral memes: COVID-19 vaccine misinformation and disinformation on TikTok. *Human Vaccines & Immunotherapeutics*, 17(8), 2373-2377. https://doi.org/10.1080/21645515.2021.1894896
- Deriyanto, D., & Qorib, F. (2019). Persepsi mahasiswa universitas tribhuwana tunggadewi malang terhadap penggunaan aplikasi tik tok. *Jurnal Ilmu Sosial dan Ilmu Politik*, 7(2), 77-83. https://doi.org/10.33366/jisip.v7i2.1432
- Devri Aprilian, Y. E., & Afriyati, V. (2019). Hubungan antara penggunaan aplikasi tiktok dengan perilaku narsisme pada siswa sekolah menengah pertama. *CONSILIA: Jurnal Ilmiah BK*, 2(3), 220-228. https://doi.org/10.33369/consilia.2.3.220-228
- Weimann, G., & Masri, N. (2023). Research note: Spreading hate on TikTok. *Studies in Conflict & Terrorism*, 46(5), 752-765.10.1080/1057610X.2020.1780027
- Hasiholan, T. P., Pratami, R., & Wahid, U. (2020). Pemanfaatan media sosial tik tok sebagai media kampanye gerakan cuci tangan di indonesia untuk mencegah covid-19. *Communiverse: Jurnal Ilmu Komunikasi*, 5(2), 70-80. https://doi.org/10.36341/cmv.v5i2.1278
- Husain, N. H., Rozlin, I., & Mustafa, R. (2022). TikTok jadi platform masyarakat timba ilmu. Sinar Harian. https://www.sinarharian.com.my/article/227467
- Julianto, I. R. (2022). Potensi Aplikasi TikTok Sebagai Media Pada Mata Pelajaran Bahasa Indonesia. *Metamorfosa*, 11(1), 71–82. https://doi.org/10.46244/metamorfosa.v11i1.2065
- Kamhar, M, Y., & Lestari, E. (2019). Pemanfaat sosial media youtube sebagai media pembelajaran bahasa Indonesia di Perguruan Tinggi. *INTELIGENSI: Jurnal Ilmu Pendidikan*, *I*(2), 1-7. https://doi.org/10.33366/ilg.v1i2.1356
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. https://doi.org/10.1177/001316447003000308
- Liang, X. (2021). Research on how to perceive their behavior for international high school students based on using TikTok with semi-structured interview. In 2021, 6th International Conference on Social Sciences and

- Economic Development (ICSSED 2021). Atlantis Press, 543, 796-799. https://doi.org/10.2991/assehr.k.210407.151
- Mohd. Najib, A.G. (2003). Reka Bentuk Tinjauan Soal Selidik (Edisi Pertama). Universiti Teknologi Malaysia. Ngilangil, K. M. (2022). Tiktok on SNSU Students: Engagement and Influence. *International Journal of English Literature and Social Sciences*, 7(4), 150–155. https://doi.org/10.22161/ijels.74.22
- Nichita, A., Enache, D., & Andreescu, C. V. (2021). Tiktok The Influence School Performance and Social Life of Adolescents. Pro Edu. *International Journal of Educational Sciences*, 4(3), 62–70. https://doi.org/10.26520/peijes.2021.4.3.62-70
- Nurdiyanah, R. (2022). Terap adab dan etika semasa penggunaan TikTok. Media Permata. Retrieved from https://mediapermata.com.bn/terap-adab-dan-etika-semasa-penggunaan-tiktok/
- Omar, B., & Dequan, W. (2020). Watch, share or create: The influence of personality traits and user motivation on TikTok mobile video usage. *International Journal of Interactive Mobile Technologies*, 14(4), 121–137. https://doi.org/10.3991/ijim.v14i04.12429
- Rizqillah, Z. A., & Akhiyat (2021). Tiktokers: pembinaan identiti mahasiswa UIN KHAS Jember. *Advances in Humanities and Contemporary Studies*, 2(2), 107–111. https://doi.org/10.30880/ahcs.2021.02.02.011
- Saputra, V. R., Dhuatu, C. H., Giyato, G. (2020) Pemanfaatan Aplikasi TikTok sebagai mood *booster. Indonesian Fun Science Journal*, 2(1), 216-226. https://doi.org/10.56225/gjbesd.v1i1.7
- Sharabati, A. A. A., Al-Haddad, S., Al-Khasawneh, M., Nababteh, N., Mohammad, M., & Abu Ghoush, Q. (2022). The Impact of TikTok User Satisfaction on Continuous Intention to Use the Application. *Journal of Open Innovation: Technology, Market, and Complexity,* 8(3), 125. https://doi.org/10.3390/joitmc8030125
- Shephard, K. (2003). Questioning, promoting and evaluating the use of streaming video to support student learning. *British Journal of Educational Technology*, 34(3), 295-308. https://doi.org/10.1111/1467-8535.00328
- Utami, A. D. V. (2021). Aplikasi tiktok Menjadi media hiburan bagi masyarakat dan memunculkan dampak ditengah pandemi covid-19. *MEDIALOG: Jurnal Ilmu Komunikasi*, 4(1), 40-47. http://dx.doi.org/10.24127/sss.v6i2.2199