Analyzing the factors affecting nano-learning behavior of college students on TikTok

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Abstract: This study investigates the growing influence of TikTok as a platform for delivering concise educational content, known as nano-learning. The research explores how key factors such as perceived credibility, perceived informativeness, and learner-content interaction influence students' attitudes and intentions toward using TikTok for educational purposes. By employing the Theory of Reasoned Action (TRA) as a theoretical framework and utilizing Partial Least Squares Structural Equation Modeling (PLS-SEM) for data analysis, the study provides a comprehensive understanding of the relationships between these factors. An online questionnaire was administered to 180 Filipino undergraduate students quantitatively. Results indicate that perceived credibility and learner-content interaction positively influence attitude, attitude and social norms positively influence behavioral intention, and perceived informativeness positively influences learner-content interaction but not attitude. These findings highlight TikTok's potential as a supplementary learning tool, though its current use for educational purposes remains limited.

Keywords: TikTok, nano-learning, perceived credibility, perceived informativeness, learner-content interaction, TRA

1. Introduction

In the exponentially growing age of technological interconnectedness, social media platforms have become central to how we interact with other people. One of the growing social media applications would be TikTok, which gained immense popularity during the COVID-19 pandemic. With its short-form video content, TikTok attracted a global audience, and its user base skyrocketed from 1.2 billion to 1.5 billion users, reflecting a growth rate of 16% between 2022 and 2023 (Dunn, 2024). Beyond entertainment, TikTok has evolved into a platform where educational content thrives, often called "nano-learning". Nano-learning refers to delivering bite-sized educational information, typically lasting only a few seconds to a few minutes. On the other hand, another e-learning method called micro-learning comprises short-term learning activities to achieve a learning goal (Khlaif & Salha, 2021). The key difference between the two is the content length, where the former is consumed in less than 5 minutes and the latter is 15-30 minutes.

However, there is still more room for identifying underlying factors and utilizing TikTok as a knowledge source due to its novelty and sparse literature on the topic (Garcia et al., 2022; S. Wang et al., 2024). Multiple factors can be considered, such as determining whether the information being disseminated is credible, informative, and built on interactions that promote knowledge construction. Factors such as this have yet to be considered regarding the usage of TikTok for nano-learning. Our study aims to bridge the gap in existing research by understanding how factors like perceived credibility, perceived informativeness, and learner-content interaction affect nano-learning behavior of college students on TikTok.

2. Literature Review and Theoretical Foundations

2.1 The Emergence of TikTok

TikTok was introduced to the public in 2017 by ByteDance and has dominated social media ever since. TikTok is one of the most popular applications today and has served its purpose of expressing and inspiring creativity and bringing joy through short-form mobile videos (Dilon, 2020). In a study by Miltsov (2022), TikTok mainly attracts the attention of young audiences. Moreover, the application also contains several features, such as the ability to create videos, view, share, and like and comment on a video. Usually, the content being seen and shared on TikTok is lip-syncing, DIY, funny, GRWM (Get Ready with Me) videos, vlogs, etc. As mentioned, the videos created are short-term videos, and now, the application enables users to create videos with three different time durations: 15 seconds, 60 seconds, and 10 10-minute (Yang & Zilberg, 2020).

2.2 TikTok for Nano-learning

As TikTok serves as a platform for interaction and creativity in an online community, some studies explore how TikTok can be an effective pedagogical tool through nano-learning (Khlaif & Salha, 2021; Zulkifli et al., 2022). In a study by Carpenter et al. (2024), they revealed that educators perceive TikTok positively and beneficially, wherein the app lets them find ideas, informs their teaching, and allows them to more richly experience teaching practices due to the video-based format in comparison to text or image-based content. This shows how the platform shows educators the potential to shape their teaching and engage in providing educational videos. Another study by Khlaif and Salha (2021) highlights that students have a positive attitude toward using the application to acquire knowledge and skills daily. With TikTok's diverse content creation, any topic can be easily shared in a concise and digestible video, whether it be a fun fact, an excerpt, or a formula. Another aspect that leverages TikTok as a platform for nano-learning would be its collaborative nature. (Nguyen & Diederich, 2023) utilized the Interaction Analysis Model (IAM), which describes that knowledge is socially constructed, and their study reveals that TikTok can support reciprocal learning between educators and audiences. This shows how the platform can foster a collaborative learning environment where educators and audiences can engage in dialogue, share insights, and co-construct knowledge. It further reinforces its role as a dynamic tool for reciprocal teaching and learning in a digital space. With the promising potential that TikTok brings to the field of education, it must still be understood that there can be negative implications or abuse in its usage if done haphazardly (Khlaif & Salha, 2021), such as reduced focus and excessive TikTok use (Regasa & Ettisa, 2023).

H1: Perceived Credibility positively influences Attitude

Hovland and Weiss's (1951) source credibility model discusses how the credibility of endorsers is a key factor influencing people's attitudes, beliefs, and behavior. Credibility significantly affects how people perceive information and is defined as the trustworthiness of the person sharing the information. According to Kirkpatrick & Lawrie (2024), TikTok is one of the most popular and fastest-growing digital platforms. Recent reports also indicate that TikTok has become a reliable source of news and information. The study also noted that one of the most affected demographics is women, suggesting that most young women use TikTok as a source of information, significantly influencing their decisions and beliefs.

H2: Perceived Informativeness positively influences Attitude

The quality of information plays a pivotal role in shaping how people engage with the content they encounter. Informativeness encompasses clarity, relevance, overall quality of information, and how effectively it is communicated to the intended audience. The usefulness of information was determined to influence attitude significantly (Watkins, 2017). Previous

research has also demonstrated the positive impact of TikTok's short-form video content on informativeness and information reception. TikTok's approach of delivering information through concise videos has been well-received, leading to increased optimism and a more positive attitude towards learning and sharing information (Sharabati et al., 2022).

H3: Perceived Informativeness positively influences Learner-Content Interaction.

Learner engagement is the willingness and desire to engage and achieve a successful learning experience (Gray & Diloreto, 2016). In addition, it has also been referred to as the level of interest demonstrated by an individual and how they interact with the topics being taught and presented to them (Bilocura et al., 2023). Successful TikTok content is determined by engagement or content interaction. This depends on how the conveyor presents the information.

It can be said that perceived informativeness plays an important role in influencing learner-content interactions (Watkins, 2017). When users find a piece of content valuable and informative, they will most likely pay attention and engage with it. Users may now engage by commenting, liking, and sharing short-form video content.

H4: Learner-Content Interaction positively influences Attitude

The transactional distance theory by Moore discusses how distance can serve as a pedagogical phenomenon that educators must overcome (Kuo et al., 2014). One of the prominent frameworks of interaction consists of learner-content interaction, which is defined as the one-way process of elaborating on educational content. A study by Yélamos-Guerra et al. (2022) on using TikTok for learning by English Studies students at the University of Málaga proved that engagement through the platform developed their digital competencies and positive perception. This shows how TikTok can foster active engagement with educational content, leading to more positive attitudes toward integrating social media in academic environments.

H5: Attitude positively influences Behavioral Intention

Familiarity can provide information and experience to shape attitudes and influence behavioral intention. This was proven by research conducted by Pozzo et al. (2024), which measured the impact of TikTok for teaching international business intelligence in Peru and Colombia. The results of their study highlighted that the students' perceptions of the platform influenced their performance and TikTok usage. With this, it can be said that the attitudes of the students' usage of TikTok can positively influence their behavioral intentions in using the application for nano-learning.

H6: Social Norm positively influences Behavioral Intention

With the rise of social media platforms among people, especially the younger generation, using technologies is highly likely to be driven by social trends. This was proven by the study on the impact of TikTok user satisfaction by Sharabati et al. (2022), which revealed that increased trendiness and sense of belonging positively influence a user's satisfaction and, in effect, their intention to use the platform. Hence, it can be said that social norms such as trendiness and a sense of belonging can directly influence the behavioral intentions of using TikTok for educational purposes.

H7: Behavioral Intention positively influences Behavior

Existing research has highlighted that utilizing informational learning tools can boost students' interest in learning, which then leads to influencing their behavior (Zhang & Zhang, 2024). This aligns with the understanding that behavioral intention is shaped by learning interest and is a

key predictor of actual behavior. As students engage with these tools, their interest increases, enhancing their intention to apply the knowledge or skills they acquire, influencing their behavior.

Figure 1 shows a modified TRA model that will serve as the basis of our research on the factors affecting nano-learning behavior of college students on TikTok. It incorporates the key constructs of perceptions, interactions, attitudes, and social norms in students' behavioral intentions when using the platform for nano-learning.
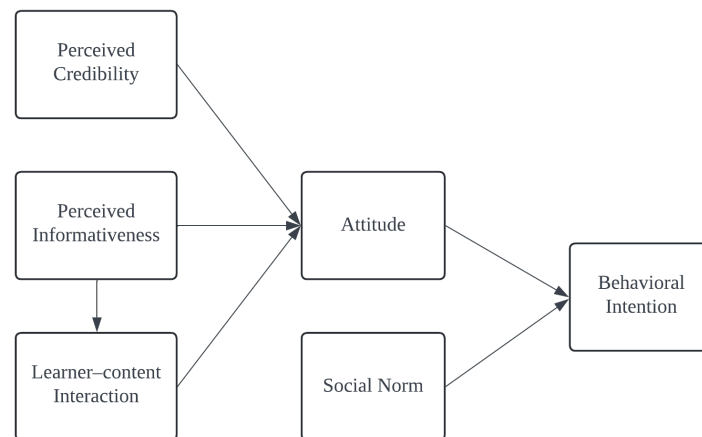

Figure 1. Modified TRA Framework.

3. Methodology

3.1 Method and Demographics

Our study uses a quantitative method to understand how perceived informativeness, perceived credibility, and learner-content interaction affect the adoption of TikTok as a nano-learning platform among college students in the Philippines. This specific demographic was targeted because of the significant role of social media in their daily lives (Escamilla-Fajardo et al., 2021). Additionally, TikTok was chosen due to its reputation for its short-form video content, and its popularity rose in 2020 (Escamilla-Fajardo et al., 2021). The survey was conducted online through the platform Google Forms.

3.2 Questionnaire

The questions for each of the six (6) constructs in our structural model were adapted from several established studies. For perceived informativeness (4) and perceived credibility (3), we utilized questions from Kim and Han's (2014) research on the impact of smartphone advertising on customer attraction. On the other hand, the questions on learner-content interaction (3) were drawn from Kuo et al.'s (2014) study titled "Interaction, Internet self-efficacy, and self-regulated learning as predictors of student satisfaction in online education courses." Lastly, attitude (3), social norms (3), and behavioral intention (3) were adapted from Huang's (2016) study on factors influencing students' use of cloud services in learning. In addition to these constructs, we included questions focusing on demographic information, such as age, gender, and TikTok usage frequency for both general and educational use.

To assess the reliability and validity of the determined constructs, the PLS-SEM algorithm was applied to the responses of a pilot test conducted with an audience of 31 participants. Cronbach's Alpha, Composite Reliability (rho_a and rho_c), and Average Variance Extracted (AVE) values were determined using SmartPLS 4 and validated to ensure that Cronbach's Alpha and Composite Reliability exceed 0.7. In contrast, AVE exceeds 0.5

(Hair et al., 2019). The results indicate that the constructs meet the recommended thresholds, with the lowest Cronbach's Alpha at 0.876, the lowest Composite Reliability at 0.882 (rho_a) and 0.919 (rho_c), and the lowest AVE at 0.739. This suggests that the questionnaire exhibits internal consistency and convergent validity. The results of the validity testing are shown in Table 1 – Instrument Validation Results.

Table 1. *Instrument Validation Results*

Construct	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Behavioral Intention	0.994	0.995	0.996	0.988
Learner–Content Interaction	0.896	0.898	0.928	0.764
Perceived Credibility	0.876	0.905	0.923	0.800
Perceived Informativeness	0.882	0.882	0.919	0.739
Social Norm	0.982	0.982	0.988	0.965
Attitude	0.898	0.905	0.936	0.830

4. Results and Discussion

4.1 Participant Demographics

The survey was conducted between October and December 2024, targeting undergraduate students in the Philippines. In a sample of 180 participants, a majority (52.2%) were aged 22–23 years, followed by those aged 20–21 years (28.9%), 18–19 years (12.8%), 24-25 years (5%), and 26 and above (1.1%). In terms of gender distribution, most respondents were male (52.2%), followed by female (47.2%), and a small proportion (0.6%) opted not to disclose their gender.

Additionally, respondents exhibited varied engagement levels with TikTok. On average, 22.8% of participants equally reported using TikTok for less than 1 hour, 3-5 hours, and 6–9 hours per week, while 19.4% used it for 1–2 hours, and 12.2% spent more than 10 hours. In terms of using TikTok for learning purposes, the majority (55.6%) reported spending less than 1 hour per week, followed by 27.2% spending 1–2 hours, 11.7% spending 3–5 hours, and only a small percentage spending 6–9 hours or more than 10 hours weekly. These findings reflect both the general popularity of TikTok and its relatively limited use as a learning tool among respondents.

4.2 Structural Model Testing

We conducted a bootstrapping procedure using SmartPLS 4 to test our hypotheses and assess the significance of our model's relationships. Based on Table 2 – Hypotheses Testing Results' coefficient values (original sample and sample mean), H1, H2, H3, H4, H5, and H6 all demonstrate a positive relationship between their constructs. However, for a hypothesis to have a significant relationship, T-statistics should be above the critical value of 1.96, while P-values must be below 0.05 (Savitri et al., 2022). Given the results for H2, the relationship between perceived Informativeness and attitude is not statistically significant, as its T-statistic (1.05) falls below the critical value of 1.96 and its P-value (0.29) exceeds the 0.05 threshold.

These findings indicate that perceived credibility (H1) and learner-content interaction (H4) positively influence Filipino undergraduate students' attitude towards using TikTok for nano-learning. In addition, perceived informativeness positively influences learner-content interaction (H3) but does not significantly affect attitude (H2). Attitude (H5) and social norms (H6) also influenced behavioral intention to use the platform positively.

Table 2. *Hypotheses Testing Results*

Hypothesis	Original sample	Sample mean	Standard deviation	T statistics	P values
H1: Perceived Credibility -> Attitude	0.157	0.162	0.079	1.986	0.047
H2: Perceived Informativeness -> Attitude	0.082	0.079	0.078	1.050	0.294
H3: Perceived Informativeness -> Learner-content Interaction	0.761	0.761	0.036	21.412	0.000
H4: Learner-content Interaction -> Attitude	0.640	0.640	0.068	9.358	0.000
H5: Attitude -> Behavioral Intention	0.549	0.549	0.055	10.036	0.000
H6: Social Norms -> Behavioral Intention	0.375	0.375	0.063	5.965	0.000

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4.3 Discussion

Perceived credibility positively influenced attitudes towards TikTok use for nano-learning (H1). The platform's credibility is determined through elements like the "verification" badge, evidence, and content knowledge, which users find significant (Manangon, 2021). In support of this hypothesis, multiple studies (Belanche et al., 2021; Serman & Sims, 2023) suggest that the credibility of influencers affects viewer attitudes. Moreover, indicators such as original content, clear presentation, and analytic language establish credibility and encourage viewers to construct knowledge on the platform (Nguyen & Diederich, 2023).

Results also show a strong, significant relationship between perceived informativeness and learner-content interaction (H3), explaining that the informativeness of TikTok content greatly enhances how learners interact with educational material on the platform. In support of this, Kumar et al. (2021) highlighted how high-quality, informative content fosters meaningful interactions, creates an engaged learner, and improves learning outcomes. This highlights the critical role of creating educational content that is engaging and informative. Such active interaction fosters deeper engagement and leads to improved learning outcomes (C. Wang et al., 2022), maximizing the educational impact of the content.

A strong relationship between learner-content interaction and attitude (H4) is also evident, indicating that how people interact with the information from a TikTok greatly influences their attitude toward using the platform for learning. This is supported by multiple studies (El-Sabagh, 2021; Pei & Nian, 2024; Yélamos-Guerra et al., 2022). Consistent with this study, Pei and Nian (2024) found that middle school students in China perceive TikTok as an effective medium for language learning, enhancing their enthusiasm and engagement in the process. (Yélamos-Guerra et al., 2022) also adds in support, highlighting that engaging with social media platforms for education helps improve knowledge internalization and retention. (El-Sabagh, 2021) further supports this by stating that interactive and engaging content can enhance user attention and learning on TikTok.

Furthermore, findings also indicate a significant relationship between attitude and behavioral intention (H5). These results suggest that students who regularly utilize TikTok to learn new concepts or ideas and find its use effective often incorporate the platform in their learning habits, making it one of the most go-to applications for information. Recent studies in Peru indicate that familiarity with TikTok significantly influences students' behavioral intentions, suggesting that frequent interactions on TikTok enhance students' reliance on the platform for quick learning on new concepts (Pozzo et al., 2024).

Additionally, a moderately significant relationship between social norms and behavioral intention (H6) suggests that social influences shape students' intentions to use TikTok. (Sharabati et al., 2022) supports this, claiming that trendiness and sense of belonging positively influence a user's satisfaction and, in effect, their intention to use the platform. However, this influence is less significant than other constructs like attitude, which substantially impacts behavioral intention more.

Although perceived informativeness was shown to influence attitude (H2) positively, the strength of this relationship was not significant enough. This may be attributed to the perception of TikTok's fast-paced and brief content as lacking depth, potentially undermining its educational utility (Mei & Aziz, 2022). The platform's potential for distraction further diminishes its ability to shape positive attitudes toward learning. Moreover, TikTok's primary focus on entertainment may contribute to this minimal influence (Adelhardt & Eberle, 2024). This may also be explained by our demographics, specifically on TikTok use, as most of our study's respondents exhibited limited use of the platform for educational purposes. This aligns with findings by Pozzo et al. (2024), which suggested that TikTok's effectiveness as an educational tool relied on user familiarity and skill, with limited experience leading to negative perceptions and insignificant performance impacts.

5. Conclusion, Limitations, and Recommendations

The rise of social media platforms has opened new opportunities for content creation besides entertainment, such as learning. Our structural analysis revealed that perceived credibility and learner-content interaction positively influence attitude, perceived informativeness positively influences learner-content interaction, and attitudes and social norms positively influence behavioral intention. In the context of this study, we also found that the influence perceived informativeness has on attitude is statistically insignificant, which may be attributed to the platform's potential for distraction and many of the respondents of this study having limited usage of TikTok for educational purposes.

Given these findings, the limitations of this study should also be acknowledged. First, the study is limited to undergraduate students in the Philippines who may have unique cultural and educational contexts that influence their behavior on TikTok, which may limit the generalizability of the findings to other educational contexts. Second, the study focuses solely on one social media platform. While TikTok serves as the primary medium for analyzing nano-learning behaviors, it is important to recognize that other comparable short-form platforms, such as Instagram's Reels and YouTube's Shorts, might result in different responses and usage patterns. These platforms may vary in reliability and users' understanding of short-form educational content, potentially influencing how such content is perceived and utilized. Finally, the study is limited to 3 months and is conducted quantitatively. This constrained period might limit the scope and depth of data collection, affecting the thoroughness of the results.

With the limitations provided, it is recommended that future research expand the scope to include multiple platforms to provide a broader understanding of short-form learning behaviors across diverse digital environments. Also, the scope of respondents can be widened to include individuals such as graduate students and those in the workforce for variety, as this study only has undergraduate students as respondents. Aside from this, the study can also be conducted outside the Philippines, as the environment differs from country to country. Lastly, it is recommended that researchers consider conducting a longitudinal study to allow them to build a more profound comprehension of using TikTok as a platform for nano-learning.

References

Adelhardt, Z., & Eberle, T. (2024). TikTok as an Educational Platform: Teenagers' Experiences. *European Conference on Social Media*, *11*(1), Article 1. https://doi.org/10.34190/ecsm.11.1.2331

Belanche, D., Casaló, L. V., Flavián, M., & Ibáñez-Sánchez, S. (2021). Building influencers' credibility on Instagram: Effects on followers' attitudes and behavioral responses toward the influencer. *Journal of Retailing and Consumer Services*, *61*, 102585. https://doi.org/10.1016/j.jretconser.2021.102585

Bilocura, E. B., Adlaon, M. S., & Cuyag, R. M. O. (2023). E-Learning Engagements of Pre-Service Education Students. *International Journal of Technology in Education and Science*, *7*(4), 514–530. https://doi.org/10.46328/ijtes.513

Carpenter, J. P., Morrison, S. A., Shelton, C. C., Clark, N., Patel, S., & Toma-Harrold, D. (2024). How and why educators use TikTok: Come for the fun, stay for the learning? *Teaching and Teacher Education*, *142*, 104530. https://doi.org/10.1016/j.tate.2024.104530

Dilon, C. (2020). Tiktok Influences on Teenagers and Young Adults Students: The Common Usages of The Application Tiktok. *American Scientific Research Journal for Engineering, Technology, and Sciences*, *68*, 132–142.

Dunn, N. (2024, September 8). *TikTok Statistics: - The TikTok Stats & facts you need to know about.* https://www.charleagency.com/articles/tiktok-statistics/

El-Sabagh, H. A. (2021). Adaptive e-learning environment based on learning styles and its impact on development students' engagement. *International Journal of Educational Technology in Higher Education*, *18*(1), 53. https://doi.org/10.1186/s41239-021-00289-4

Escamilla-Fajardo, P., Alguacil, M., & López-Carril, S. (2021). Incorporating TikTok in higher education: Pedagogical perspectives from a corporal expression sport sciences course. *Journal of Hospitality, Leisure, Sport & Tourism Education*, *28*, 100302. https://doi.org/10.1016/j.jhlste.2021.100302

Garcia, M., Juanatas, I., & Juanatas, R. (2022, April 9). *TikTok as a Knowledge Source for Programming Learners: A New Form of Nanolearning?* https://doi.org/10.1109/ICIET55102.2022.9779004

Gray, J., & Diloreto, M. (2016). The Effects of Student Engagement, Student Satisfaction, and Perceived Learning in Online Learning Environments. *International Journal of Educational Leadership Preparation*, *11*, 89–119.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hovland, C. I., & Weiss, W. (1951). *The Influence of Source Credibility on Communication Effectiveness*.

Huang, Y.-M. (2016). The factors that predispose students to continuously use cloud services: Social and technological perspectives. *Computers & Education*, *97*, 86–96. https://doi.org/10.1016/j.compedu.2016.02.016

Khlaif, Z. N., & Salha, S. (2021). Using TikTok in Education: A Form of Micro-learning or Nano-learning? *Interdiscip J Virtual Learn Med Sci*, *12*(3), 213–218. https://doi.org/10.30476/ijvlms.2021.90211.1087

Kim, Y. J., & Han, J. (2014). Why smartphone advertising attracts customers: A model of Web advertising, flow, and personalization. *Computers in Human Behavior*, *33*, 256–269. https://doi.org/10.1016/j.chb.2014.01.015

Kirkpatrick, C. E., & Lawrie, L. L. (2024). TikTok as a Source of Health Information and Misinformation for Young Women in the United States: Survey Study. *JMIR Infodemiology*, *4*(1), e54663. https://doi.org/10.2196/54663

Kumar, P., Saxena, C., & Baber, H. (2021). Learner-content interaction in e-learning- the moderating role of perceived harm of COVID-19 in assessing the satisfaction of learners. *Smart Learning Environments*, *8*(1), 5. https://doi.org/10.1186/s40561-021-00149-8

Kuo, Y.-C., Walker, A. E., Schroder, K. E. E., & Belland, B. R. (2014). Interaction, Internet self-efficacy, and self-regulated learning as predictors of student satisfaction in online education courses. *The Internet and Higher Education*, *20*, 35–50. https://doi.org/10.1016/j.iheduc.2013.10.001

Manangon, M. C. (2021). *How do people appraise to what extent TikTok videos are informative? Exploring the processes and factors that play a role in the evaluations of informational content on TikTok* [Master thesis, The University of Bergen]. https://bora.uib.no/bora-xmlui/handle/11250/2761219

Mei, K. L., & Aziz, A. A. (2022). Students' Perception on Using Tiktok Application as An English Learning Tool. *International Journal of Academic Research in Progressive Education and Development*, *11*(4), Pages 166-190. https://doi.org/10.6007/IJARPED/v11-i4/15403

Miltsov, A. (2022). *Researching TikTok: Themes, Methods, and Future Directions*.

Nguyen, H., & Diederich, M. (2023). Facilitating knowledge construction in informal learning: A study of TikTok scientific, educational videos. *Computers & Education*, *205*, 104896. https://doi.org/10.1016/j.compedu.2023.104896

Pei, H., & Nian, O. S. (2024). Chinese Undergraduate's Motivation And Attitudes Towards Learning English on TikTok. *ResearchGate*, *7*(1). https://doi.org/10.61762/pjmhvol7iss1art27056

Pozzo, D. N., Biegelmeyer, U. H., Gomez Pedroza, F. J., Grados, E. A., Barrera, M. B., Craco, T., & Fermiano Fidelis, A. C. (2024). The impact of TikTok as an educational tool on students' performance: A multi-group comparison of international business classes in Peru and Colombia. *Procedia Computer Science*, *238*, 989–994. https://doi.org/10.1016/j.procs.2024.06.124

Regasa, A., & Ettisa, D. L. (2023). The Impact of TikTok on Students: A Literature Review. *Qeios*. https://doi.org/10.32388/EPFGO6

Savitri, C., Hurriyati, R., Wibowo, L. A., & Hendrayati, H. (2022). The role of social media marketing and brand image on smartphone purchase intention. *International Journal of Data and Network Science*, *6*(1), 185–192. https://doi.org/10.5267/j.ijdns.2021.9.009

Serman, Z. E., & Sims, J. (2023). Source Credibility Theory: SME Hospitality Sector Blog Posting During the Covid-19 Pandemic. *Information Systems Frontiers*, *25*(6), 2317–2334. https://doi.org/10.1007/s10796-022-10349-3

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

Wang, C., Mirzaei, T., Xu, T., & Lin, H. (2022). How learner engagement impacts non-formal online learning outcomes through value co-creation: An empirical analysis. *International Journal of Educational Technology in Higher Education*, *19*(1), 32. https://doi.org/10.1186/s41239-022-00341-x

Wang, S., Sun, Z., Li, M., Zhang, H., & Metwally, A. H. S. (2024). Leveraging TikTok for active learning in management education: An extended technology acceptance model approach. *The International Journal of Management Education*, *22*(3), 101009. https://doi.org/10.1016/j.ijme.2024.101009

Watkins, B. A. (2017). Experimenting with dialogue on Twitter: An examination of the influence of the dialogic principles on engagement, interaction, and attitude. *Public Relations Review*, *43*(1), 163–171. https://doi.org/10.1016/j.pubrev.2016.07.002

Yang, Y., & Zilberg, I. E. (2020). *Understanding Young Adults' TikTok Usage—Real People, Creative Videos that Makes Your Day*.

Yélamos-Guerra, M. S., García-Gámez, M., & Moreno-Ortiz, A. (2022). The use of Tik Tok in higher education as a motivating source for students. *Porta Linguarum Revista Interuniversitaria de Didáctica de Las Lenguas Extranjeras*, 83–98. https://doi.org/10.30827/portalin.vi38.21684

Zhang, Y., & Zhang, X. (2024). The impact of online interaction and information technology accessibility on academic engagement among international undergraduate students in Chinese universities: The mediating effect of learning interest. *Acta Psychologica*, *249*, 104478. https://doi.org/10.1016/j.actpsy.2024.104478

Zulkifli, N. N., Letchumanan, M., Kamarudin, S., Halim, N. D. A., & Hashim, S. (2022). *A Review: The Effectiveness of Using TikTok in Teaching and Learning*.