Implementing Educational Programs Through Social Media Platforms to Regulate Information-Seeking Behavior

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Abstract

Social -media platforms correlate with educational curricula and contribute to improving students' learning of the use of digital technologies, which is necessary for their understanding of information management. The objective of this study was to determine the impact of social media engagement and content quality of educational programs on user perceived value and information seeking behaviour. This study was conducted in the context of China and a sample of 319 postgraduates was collected from universities located in Wuhan China. JASP version 0.19.0 was used to analyze the statistical data for this research. The study found that social media engagement and user perceived value have a significant impact on information seeking behavior; that social media engagement has a significant impact on user perceived value; and the content quality of educational programs has a significant impact on user perceived value but have no impact on information seeking behaviour. The findings have a significant contribution to knowledge and implications for practitioners and policymakers for implementing educational programs through social media platforms to regulate information-seeking behavior.

Keywords

Social Media Platforms, Information Seeking Behaviour, User Perceived Value, Educational Programs, Postgraduates.

1. Introduction

Information and learning are two measures that classifies higher education into types like research and non-research (**Abdullah** *et al.*, 2022). Learning is acquired with active participation in classroom activities which can help students to improve their understanding about the concepts and develop better approaches for working. However, information is disseminated to the students using different resources beyond curriculum and classrooms (**Ahmadi** *et al.*, 2023). The students who really strive to get education develop their positive attitude for learning and information management. The information related opportunities are significant for the students to develop a positive attitude for working (**Ala** *et al.*, 2021). Students who are highly motivated, their learning approach is different and they can have better understanding of getting up to date information. However, emerging information sources such as social media are critical for students (**Alameri** *et al.*, 2023). The use of social media platforms is important as it helps the students to improve their behaviour and learning capabilities.

Social media platforms have an indirect correlation with the educational content made available to students in schools and colleges that contribute to improving their learning (**Al-Dmour** *et al.*, 2024). These platforms often make big changes in students' learning since those students who are highly motivated, they develop effective strategies to work which can foster their learning performance. Such students are abreast with the use of digital technologies as it can help students improve their understanding of information management necessary in learning (**Al-Hail** *et al.*, 2024). Additionally, most of the course content and peer communication are discussed on social media platforms which significantly develop students' attitude for



learning (**Almela-Baeza** *et al.*, 2024). When students are motivated to learn and practice better, it becomes effective for them to improve their information seeking behaviour. When opportunities are available to students for using social media platforms, they should be conscious of technology use which can help to improve their learning (**Anderson Steeves** *et al.*, 2021).

In existing studies, there is a significant debate on information seeking behaviour of the students (**Asadourian** *et al.*, 2021). However, this debate is limited as the studies lack evidence to report on the role of social media in information seeking behaviour development. Furthermore, previous studies discussed information seeking behaviour, but there is limited discussion on how educational content is important for information seeking behaviour (**Atallah** *et al.*, 2023). In addition, previous studies have discussed information seeking behaviour of students, but there is a limited debate on how the perceived values of users affect information seeking behaviour. These gaps in knowledge develop a rationale for empirical research on information seeking behaviour and advancements of students (**Beale** *et al.*, 2020). Moreover, scholarly studies also have limited discussion on the information seeking behaviour of postgraduates in China. Hence, it is imperative to investigate the way information seeking behaviour is influenced by factors like digital technologies and social media.

The objective of this study was to determine the impact of social media engagement and content quality of educational programs on user perceived value and information seeking behaviour. This study was conducted in the context of China and a sample of 319 postgraduates was identified from universities located in Wuhan China. JASP version 0.19.0 was used to analyze the statistical data for this research. The study found that social media engagement and user perceived value have a significant impact on information seeking behaviour. The study also contributes to knowledge that social media engagement has a significant impact on user perceived value. The study found that the content quality of educational programs has a significant impact on user perceived value but have no impact on information seeking behaviour. The findings would prove to be a significant contribution to knowledge and implications for practitioners and policymakers for implementing educational programs through social media platforms to regulate information-seeking behavior. The study is divided into review of literature, methodology of research, findings, discussion and implications.

2. Literature Review and Hypotheses Development

Social media plays a significant role in students' learning and its perceived. The perceived value is reflected when students utilize social media platforms to improve their understanding and learning of complex subjects through discussions with their class fellows. The information shared on social media platforms helps students to improve their understanding and participate actively in different kind of discussion (Buarki; Sung, 2024). Such discussions help students engage with their peers and colleagues on social media platforms and improve their understanding of the curricular issues. The use of social media for information sharing and learning can help the students to improve their understanding of any specific content. When the students are highly motivated to learn, social media is useful for information management and learning appropriately (Imaniah et al., 2020). The use of social media helps the students to improve their understanding and provide some knowledge with discussion to other students. It helps the students to improve their understanding of any content by discussion on the social media platforms. The good platforms on social media that share fair and trustworthy information to the students can become effective for their lending. When the students have opportunities to learn from the social media, they should work actively to gather all the knowledge. The use of social media is necessary for students to understand where they are lacking to get appropriate information (Ogedengbe; Quadri, 2020). Shared communication with other peers helps the students to improve their learning in a critical way. Therefore, the use of social media platforms is considered as a significant factor in advantage of students letting and their performance (Robles Moral; Fernández Díaz, 2021). When the students are good to use social media, they can get benefit from their technology related knowledge to share the information on social media platforms. This requires testing the hypothesis:

H1: There is a relationship between social media engagement and user perceived value.

Social media engagement helps the students to improve their learning and their behaviour for education (**Celik**, 2021). Students who are socially active and participate in different kinds of communication on social media are information seekers. Not only for their own benefit, these students seek information for other students as well to improve their learning (**Chegeni** *et al.*, 2021). It is important that students use social media for education purpose and disseminate information Instead of wasting time on social media platforms in useless discussions and gossips, students should be working on information seeking behaviour which can help them to make a judicious use of social media platforms (**Darr** *et al.*, 2020). The shared information and blogs on social media platforms help the students to improve their understanding of any content. Information seeking behavior motivate students to learn new knowledge from social media platforms, which becomes effective when they implement that knowledge (**Karkar** *et al.*, 2020). Such students also use social media engagement to improve their learning levels. When students are motivated to improve their learning level, they know how to use the social media in a good way (**Htay** *et al.*, 2020). All such students are also externally motivated by parents and teachers to use social media engagement to develop information seeking behavior, reflected in the improvement of their lending and performance in class. This necessitates testing the hypothesis:

H2: There is a relationship between social media engagement and information seeking behaviour.

The role of user perceived value is important in helping students who seek information with the help of social media (**Metchik** *et al.*, 2021). When students are good and they perceive the value of information resources like social media to seek information, they can better perform in learning to improve its value (**Onuoha** *et al.*, 2020). Such students develop positive understanding for the use of social media platforms. As students work effectively on social media platforms, they improve their understanding and the perceived value of information seeking behaviour. They are required to use social media for educational purpose which should not be prohibited by their family (**Khanna** *et al.*, 2021). The parents and the teachers should also support students for the use of social media platforms for their educational purpose. The significant information shared on the social media platform effects positively students' perceived value and advance their learning in a critical way (**McNeill** *et al.*, 2024). When students' user perceived value improves due to the use of social media, they become better communicators, reflecting their information seeking behavior (**Gómez-Galán** *et al.*, 2020). In this way, user perceived value gained through social media platforms can be a significant game changer for improving the information seeking behaviour of the students. This necessitates testing the hypothesis:

H3: There is a relationship between user perceived value and information seeking behaviour.

The educational content has a significant value for the students to improve their knowledge and subsequently their perceived value (Khasawneh et al., 2022). When students improve their learning on social media platforms, it becomes effective for them to appropriately improve their perceived value (Jesus-Moraleida et al., 2022). It is however premised that the quality of educational material shared on social media platforms or in classroom can affect the learning of students. When students are motivated to improve their learning in a strategic way, they are supposed to work on the social media platforms which can effectively improve their educational performance (Deswani et al., 2024). However, it is important that content quality of educational programs should use such educational material which can help them improve students' perceived value. Moreover, the users' perceived value can affect the learning of students when they are appropriately trained through quality education material (Olelewe et al., 2020). Eventually, students should be provided with effective and quality resources so that they can improve their learning in a critical way. Furthermore, social media platforms should be used by students for improving their learning with the help of perceived values. They should be motivated to learn with the advanced content of the course, as their teachers play a motivating role to engage them with gualitative course content (Lee et al., 2023). In other words, it would be effective for students to improve their perceived value through course material of high-quality content, while they exploit social media platforms in their learning and performance (Onuoha et al., 2020). Hence, it is premised that content quality of educational programmes is a significant factor for improving user perceived value. This necessitates testing the hypothesis:

H4: There is a relationship between content quality of educational programs and user perceived value.

The quality of learning on online platforms or in classroom can affect students' information seeking behaviour if the course content is reliable (**Drajati et al.**, 2024). It is likely that when students are motivated to learn the course contents, it can influence their learning effectively, and their performance can improve. This suggests that the role of course content of educational programs is critical in shaping the information seeking behavior of students which can eventually improve their performance effectively. The policymakers are recommended to improve upon the quality of courses, which is necessary for students to improve their information seeking behavior. The significant level of information seeking behaviour of students is, therefore, influenced based on the course content they are exposed to learn it. It is therefore also necessary to improve the educational programmes quality which can help students to improve their learning that is effective for strategic performance (**Lee et al.**, 2023). If students are highly motivated to learn, they work effectively to improve their learning behavior can be possible only if quality content is communicated to them (**Onuoha et al.**, 2020). The content quality of educational programs is thus helpful for students to improve their learning strategically and deal with significant challenges to their information seeking behavior (**Ghazizadeh Ehsaei et al.**, 2021). Therefore, the content quality of educational content should be updated according to the information seeking behavior of students which can help them to engage in classroom activities and perform 0better. This requires to test the hypothesis:

H5: There is a relationship between content quality of educational programs and information seeking behaviour.

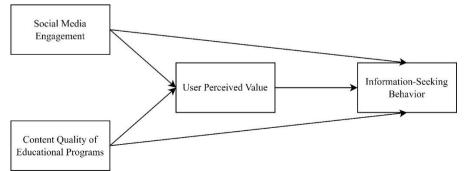


Figure 1: Information Seeking Behavior Model.

Based on the aforementioned relationships, the information seeking behaviour model is shown in Figure 1. In this model, social media engagement and content quality of educational programs are independent variables. The variable user perceived value is considered as mediating variable, and information seeking behaviour as a dependent variable.

3. Methodology

This study used quantitative measurements to test the relationship between variables. All variables of this study were operationalized to adhere with instruments available from the existing literature. These instruments were adapted for the present study to collect data from the primary resources. For instance, the instrument social media engagement was operationalized to measure the impact of social media platform-based engagement by students for getting information. Furthermore, the instrument related to content quality of education programs was used to measure the impact of educational programs content quality on user perceived value and information seeking behaviour. Similarly, the user perceived value was measured to determine how students developed their perceptions about social media and quality content in the education sector. Hence, the information seeking behaviour was operationalized to investigate its impact on content quality and social media engagement.

The population of the study comprised post-graduates in Chinese universities in Wuhan city, Mainland China. The convenience sampling method was used to identify the right sample for the study. This method also helped to distinguish between postgraduates and other students while data collection. A sample size of more than 300 is appropriate for testing the hypothesis (**Memon** *et al.*, 2020). A total of 500 questionnaires were distributed to collect the data; out of which 331 responses were collected back, resulting in a response percentage of more than 50%. However, the initial screening of data found 12 biased and incomplete responses which were deleted. A sample of 319 responses was finalized for the collection of data and findings of this research. A Likert scale questionnaire was also developed to facilitate the data collection (**Munshi**, 2014). To analyze the data, the statistical program JASP 0.19.0 was used. This user-friendly program is open access, free to use, and capable to analyze the data obtained from the specific instruments used in this study. This software also helps to determine the descriptive statistics of the data, the reliability of data, and validity of data. This software was also used to perform path analysis and draw a visual diagram of the findings of this research.

4. Findings

Out of 319 valid responses, there was no missing value. In fact, the study found that mean value was ±3 which is significant when a questionnaire based on five-point Likert scale is distributed. Furthermore, the standard deviation to the mean value was also significant in the study (**Hair et al.**, 2011). The findings of variance inflation factor (variance) were checked with a threshold of <5 (**Hair et al.**, 2011). The descriptive data confirmed that there was significant variance in the data.

Secondly, the study investigated the skewness and kurtosis value to determine normality of distribution in the data. The findings of skewness and kurtosis ±3 confirmed that the data of study was normally distributed (**Royston**, 1992). The statistics confirmed that there was a normality of distribution in research data. The findings of descriptive statistics are shown in Table 1.

	SME	CQEP	UPV	ISB
Valid	319	319	319	319
Missing	0	0	0	0
Mean	3.335	3.295	3.342	3.285
Std. Deviation	1.172	1.133	1.168	1.145
Variance	1.375	1.284	1.364	1.311
Skewness	0.030	0.028	-0.036	-0.032
Std. Error of Skewness	0.137	0.137	0.137	0.137
Kurtosis	-1.262	-1.089	-1.155	-1.011
Std. Error of Kurtosis	0.272	0.272	0.272	0.272
Minimum	1.000	1.000	1.000	1.000
Maximum	5.000	5.000	5.000	5.000

Table 1: Descriptive Statistics.

A Chi-squared test is a statistical hypothesis test which helps analyze the contingency tables when the sample size is large. In simpler terms, this test is primarily used to examine whether two categorical variables are independent in influencing the test statistic. Table 2 reports the findings showing p <.001, which is significant acceptance of data (**McHugh**, 2013). Hence, the study sample was significantly representative of expected data.

Table 2: Chi-squared Test.

	Value	df	Р
Model	154.631	2	< .001

In the next stage, the findings of factor loadings were investigated. A factor loading value above 0.70 confirms the significance of instrument measurements for analysis of data (Hair et al., 2011). Table 3 confirms that all scale items achieved factor loadings, as each value is above 0.70. Hence, the reliability of constructs was achieved. Furthermore, the study investigated Cronbach's alpha value to determine the validity of data. The Cronbach's alpha above 0.70 confirms that all the constructs of study are valid to represent the data of this research. Table 3 exhibits the factor loadings and Cronbach's Alpha.

Table 3: Factor Loadings.

	Factor Loadings	Cronbach's Alpha
UPV	0.762	0.761
ISB	0.731	0.702
SME	0.730	0.703
CQEP	0.764	0.882
Note: SME = Social Media Engagement, CQEP = C	content Quality of Educational Programs, UPV = U	ser Perceived Value; ISB = Information Seeking
Behaviour		

The results of regression analysis (p > 1.96) were used to investigate the path coefficients (see Figure 2 and Table 4). According to H1 findings, there was a significant relationship between social media engagement and user perceived value. Furthermore, H2 found that there was a significant relationship between social media engagement and information seeking behaviour. H3 findings discussed that there was a significant relationship between user perceived value and information seeking behaviour. Furthermore, H4 found that there was a relationship between content quality of educational programs and user perceived value. With regard to H5, there was a non-significant relationship between content quality of educational programs and information seeking behaviour.

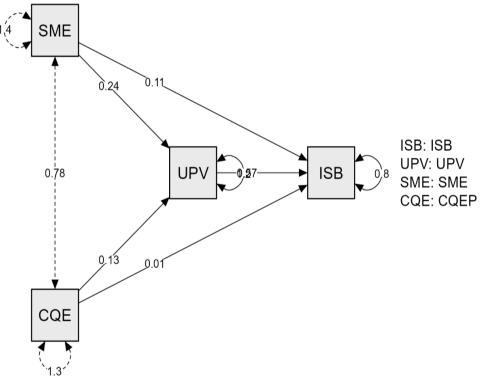


Figure 2: Path Plot.

			Estimate	Std. Error	z-value	р
UPV	\rightarrow	ISB	0.567	0.045	12.490	< .001
SME	\rightarrow	ISB	0.107	0.054	1.986	0.047
CQEP	\rightarrow	ISB	0.014	0.055	0.253	0.800
SME	\rightarrow	UPV	0.237	0.065	3.640	< .001
CQEP	\rightarrow	UPV	0.132	0.067	1.964	0.050

Seeking Behaviour

4. Discussion and Conclusion

The hypotheses in a study aim at confirming the significant relationship between variables. With regard to the first hypothesis (H1), a significant relationship between social media engagement and user perceived value was found. While social media play a crucial role in student learning enhancement, it also enhances students' comprehension through discussions with peers on social media platforms. The content disseminated on social media platforms enhances students' comprehension and fosters active participation in various debates. Metchik et al. (2021), too, discussed that facilitating pertinent discussions for students enhances their engagement with social media platforms, hence augmenting their comprehension of social media usage. Utilising social media for information dissemination and education might also enhance students' comprehension of subjects. When the pupils are strongly driven to learn, social media is useful for information management and learning effectively (Ogedengbe; Quadri, 2020). According to these studies, it is proven that social media usage enhances students' comprehension and facilitates information exchange through discussions with peers. It enhances students' comprehension of curriculum through discussions on social media platforms. In another study, Karkar et al. (2020) discovered that social media serves as a strong platform to give fair and trustworthy information to the pupils and might become useful for their learning. Students should also actively engage in acquiring knowledge via social media opportunities. The use of social media is crucial for pupils to discover where they are missing to receive proper information. Similarly, Robles Moral and Fernández Díaz (2021) discussed that collaborative conversation with peers significantly enhances students' learning outcomes. Consequently, the utilisation of social media platforms is regarded as a crucial component influencing students' engagement and performance (Buarki; Sung, 2024). When students utilise social media appropriately, they can leverage their technological expertise to disseminate content on these platforms.

The second hypothesis (H2) tested and accepted a significant relationship between social media engagement and information seeking behaviour. This relationship is consistent with previous studies, which also agreed that social media enhances students' learning and educational behaviour. For instance, **Robles Moral and Fernández Díaz** (2021) found it essential for students to engage in various communication-related programs on social media. Regardless of students' motivation to utilise social media, they can seek assistance from their peers to enhance their learning. **Calderón et al.** (2020), too, agreed that it is essential for students to be informed about the utilisation of social media for educational purposes. Rather than expending time on social media for trivial discussions, students should engage in information-seeking activity that can enhance their focus on these platforms. **Khasawneh et al.** (2022) reported that the disseminated material and blogs on social media platforms enhance students' comprehension of various content. When students are encouraged to acquire new knowledge from social media sites, they can effectively apply that knowledge through conversation. Furthermore, **Darr et al.** (2020) pointed out that students must be thoroughly motivated to prepare for the utilisation of social media to enhance their educational experience. When students are driven to enhance their educational programs, they can benefit positively from social media. However, **Celik** (2021) felt the need that pupils should be externally motivated by parents and teachers to utilise social media only for academic purpose. This will assist pupils in enhancing their reading skills and improve their academic performance.

The findings of the third hypothesis (H3) proved a significant relationship between user perceived value and information seeking behaviour. These findings are in line with those of previous studies. **Ghazizadeh Ehsaei et al.** (2021) found user perceived value playing a crucial role in student learning facilitated by social media. The study results professed that when students recognise the significance of social media in their coursework, they can enhance their performance on social media, which is essential for augmenting its worth. Enhancing students' motivation to lead through social media fosters their good intention towards its usage It is essential for students to cultivate a constructive perception of social media sites. Effective engagement of students on social media platforms would enhance their comprehension and learning behaviour. It is also recommended that students must utilise social media for educational purposes, provided it is not restricted by their families. Parents and educators are advised to assist pupils in utilising social media platforms for educational purposes. However, **Khanna et al.** (2021) found that the substantial material disseminated on the social media platforms positively influences pupils and enhances their learning critically. Conversely, when students are driven to enhance their learning, they ought to optimise their use of social media to augment their academic achievement. This suggests that social media serves as a communication instrument for course-related material. Consequently, it can substantially enhance students' information-seeking behaviour.

The findings of the fourth hypothesis (H4) validated the relationship between content quality of educational programs and user perceived value. These findings are in concurrence with those of previous studies. For instance, **McNeill et al.** (2024) found that the educational content on social media had a great importance for the pupils to develop their knowledge. When students are strongly driven to enhance their learning on social media platforms, it becomes effective for them to learn effectively. **Gómez-Galán et al.** (2020) also found that the calibre of educational resources disseminated on social media platforms or within the classroom might influence student learning. Students wanting to enhance their learning strategically should engage with social media platforms that can effectively boost their performance. **Imaniah et al.** (2020), too, discussed that social media platforms should be utilised to disseminate educational materials that can enhance students' information-related behaviours. The efficacy of social media can influence student learning when they receive proper training. **Lee et al.** (2023) recommend that students should be supplied with excellent resources and opportunities that can significantly enhance their learning. It was also suggested that pupils should utilise social media sites to enhance their skills through perceived values (**Drajati et al.**, 2024). Teachers should assume a motivating role to engage students

with the advanced course content when the students are inspired to learn. Consequently, utilising social media channels for students to get course information would be advantageous. Likewise, **Jesus-Moraleida** *et al.* (2022) found that if students work efficiently, social media sites can significantly enhance their learning and performance. To sum up, the quality of material in educational programs is deemed a crucial component in user perceived value.

The findings of the fifth hypothesis (H5) were not accepted as there was a non-significant relationship between content quality of educational programs and information seeking behaviour. These findings concur with those of previous studies. **Lee et al.** (2023) concur that educational experience of students both on online platforms and in classrooms and found that education content can influence students' behaviour if the course material is credible. The students are driven to comprehend the course material, which can significantly impact their learning outcomes. This suggests that the performance of pupils is enhanced with regard to the course topic with the assistance of teachers and family. The significance of course content is crucial in student learning, as it can substantially enhance their performance. **Lee et al.** (2023) firmly recommend that policymakers should develop a course code essential for enhancing student success. The substantial degree of information-seeking behaviour among students is determined by the course content which they are exposed to. It is vital to improve the educational programmes quality which can enable the students to improve their learning that is effective for strategic performance (**Htay et al.**, 2020). Regardless of students' motivation to learn, they must engage effectively to enhance their education, which can be achieved through the delivery of high-quality information. **Chegeni et al.** (2021) conclude that it is advantageous for students to enhance their learning strategically, providing an opportunity to address substantial issues in education. Therefore, the instructional content must be revised to align with students' preferences, so facilitating their engagement in classroom activities and enhancing their performance.

5.1. Implications and Future Directions

The implications of this study have a significant contribution to literature. The study addresses in knowledge that social media engagement is a significant antecedent of user perceived value and information seeking behaviour. This relationship has not been discussed empirically in previous studies. Secondly, the study contributes to body of knowledge by reporting that user perceived value is a significant influencing factor on information seeking behavior; though there was a contradiction in the findings of this study regarding this relationship. Third, the study concluded that the content quality of educational programs makes a significant impact on user perceived value. This relationship is a new addition to literature as previous studies have limited discussion regarding this connection. Finally, this study also found that content quality of educational programs is not a significant antecedent of information seeking behaviour. Although this relationship was rejected, which is also an empirical contribution to knowledge.

Apart from theoretical contributions, the practical findings of this research are important for policymakers and practitioners. The study recommends policymakers to work on social media which is a significant factor to improve the students' perceived value while they are learning. In addition, the study recommends that social media engagement should be improved as it helps to develop a positive approach for information seeking behaviour. Furthermore, the study recommends policymakers to improve the content quality of education programs. Although it is discussed that content quality of educational programs has no direct impact on information seeking behaviour, it has impact on user perceived value. In result, the perceived value of users can play a significant role in information seeking behaviour. To sum up, this study recommends the findings for improvement in information seeking behaviour which can influence the understanding of postgraduates for better performance in information seeking and learning.

Despite the significant contribution, the study faced some limitations as well. First, this study was based on crosssectional data which provides only one-time assessment of behaviour. However, studies recommend measuring behaviour with longitudinal data which can provide a different insight. Therefore, future studies are recommended to use longitudinal data for conducting research which can possibly improve the findings. Secondly, the sample of this study was confined to post-graduates only which limited the overall observation about the information seeking behaviour of students. Since there is a difference in demographics between postgraduates and undergraduates, more research is required to determine the role of information seeking behaviour which could contribute to knowledge. Third, this study used quantitative instruments to collect data which could be a significant limitation of the study because understanding the relationship from a qualitative perspective would provide a new insight into literature. Hence, the scholars interested in qualitative work are also recommended to work significantly to improve the body of knowledge.

References

Abdullah, Ahmad Taufik Hidayah; Al-Bawaleez, Mohammad Musleh Awad; Azmi, Mohd Nazri Latiff; Hassan, Isyaku. (2022). "Analysis of EFL Learners' Language Proficiency Development Across Different Social Media Platforms". *Theory and Practice in Language Studies*, v. 12, n. 9, pp. 1756-1761. https://doi.org/10.17507/tpls.1209.07

Ahmadi, Dadi; Sulaiman, Adhi Iman; Runtiko, Agus Ganjar; Noegroho, Agoeng; Raqi, Ray Ibrahim Ar; Maryani, Anne; Yuniati, Yenni; Yulianita, Neni. (2023). "Marketing Communications for Tourism Development in Ecoethno Leadcamp Site". *Studies in Media and Communication*, v. 11, n. 4, pp. 67-77. *https://doi.org/10.11114/smc.v11i4.5909* **Al-Dmour, Rand; Al-Dmour, Hani; Al-Dmour, Ahmed.** (2024). "The role of marketing mix and social media strategies in influencing international students' university choices in Jordan". *Journal of International Students,* v. 14, n. 4, pp. 642-663. *https://doi.org/10.32674/jis.v14i4.6407*

Al-Hail, Maryam; Zguir, Mariem Fekih; Koç, Muammer. (2024). "Exploring Digital Learning Opportunities and Challenges in Higher Education Institutes: Stakeholder Analysis on the Use of Social Media for Effective Sustainability of Learning–Teaching–Assessment in a University Setting in Qatar". *Sustainability*, v. 16, n. 15, pp. 6413. *https://doi.org/10.3390/su16156413*

Ala, Oluwafolakemi Grace; Yang, Hongtao; Ala, Bamidele Kehinde. (2021). "Characteristics and comparison of peerassisted learning interactions among university students in Harbin, China". *Social Sciences & Humanities Open*, v. 4, n. 1, pp. 100164. *https://doi.org/10.1016/j.ssaho.2021.100164*

Alameri, Mariam; Gharaibeh, Lobna; Alrashdan, Raya. (2023). "Perception and Knowledge of Adults Toward the Newly Evoked Variant Omicron: A Web-based National Survey from Jordan". *The Open Public Health Journal*, v. 16, n. 1, pp. e187494452304050. https://doi.org/10.2174/18749445-v16-e230505-2022-236

Almela-Baeza, Javier; Febrero, Beatriz; Ramírez, Pablo. (2024). "Teenagers, Audio-Visual Prosumers and Audience Generators in the Field of Organ Donation". *Health Communication*, v. 39, n. 9, pp. 1825-1832. *https://doi.org/10.1080/10410236.2023.2243661*

Anderson Steeves, Elizabeth; Trude, Angela Cristina Bizzotto; Ruggiero, Cara Frances; Mejia Ruiz, Maria Jose; Jones-Smith, Jessica C.; Pollack Porter, Keshia; Cheskin, Lawrence; Hurley, Kristen; Hopkins, Laura; Gittelsohn, Joel. (2021). "Perceptions and Impact of a Youth-led Childhood Obesity Prevention Intervention among Youth-leaders". *Journal of Hunger & Environmental Nutrition*, v. 16, n. 2, pp. 213-234. https://doi.org/10.1080/19320248.2019.1649777

Asadourian, Paul A.; Murphy, Alexander I.; Marano, Andrew A.; Rohde, Christine H.; Wu, June K. (2021). "Home Field Advantage: Assessing the Geographic Trends of the Plastic Surgery Residency Match during the COVID-19 Pandemic". *Journal of Surgical Education,* v. 78, n. 6, pp. 1923-1929. *https://doi.org/10.1016/j.jsurg.2021.06.002*

Atallah, Stephanie; Mansour, Hanine; Dimassi, Hani; Kabbara, Wissam K. (2023). "Impact of social media education on antimicrobial stewardship awareness among pharmacy, medical and nursing students and residents". BMC Medical Education, v. 23, n. 1, pp. 446. https://doi.org/10.1186/s12909-023-04423-w

Beale, Tyler L; Kennard, Chelsea A; Dollahite, Jamie S; Paddock, Joan D. (2020). "Day to Day Eats: Using an Educational Blog to Extend Nutrition Education". *The Journal of Extension*, v. 58, n. 2, pp. 7. https://doi.org/10.34068/joe.58.02.07

Buarki, Hanadi; Sung, Hui-Yun. (2024). "Use of social media by LIS students in Kuwait and Taiwan: A comparative analysis". *Information Services & Use*, v. 44, pp. 107-119. *https://doi.org/10.3233/ISU-240228*

Calderón, Antonio; Meroño, Lourdes; MacPhail, Ann. (2020). "A student-centred digital technology approach: The relationship between intrinsic motivation, learning climate and academic achievement of physical education pre-service teachers". *European Physical Education Review,* v. 26, n. 1, pp. 241-262. *https://doi.org/10.1177/1356336x19850852*

Celik, Melike Yavaş. (2021). "Assessment of Have Problems and Care Burdens of Mothers with Handicapped Children in COVID-19 Pandemic". *Social Work in Public Health*, v. 36, n. 6, pp. 638-646. https://doi.org/10.1080/19371918.2021.1943100

Chegeni, Maryam; Shahrbabaki, Parvin Mangolian; Shahrbabaki, Mahin Eslami; Nakhaee, Nouzar; Haghdoost, Aliakbar. (2021). "Why people are becoming addicted to social media: A qualitative study". *Journal of Education and Health Promotion*, v. 10, n. 1, pp. 175. https://doi.org/10.4103/jehp.jehp_1109_20

Darr, Molly; Hulcr, Jiri; Eickwort, Jeff; Smith, Jason; Hubbard, William; Coyle, David. (2020). "Forest Health Diagnostics Facebook Page: Impact and Natural Resources Programming Implications". *The Journal of Extension*, v. 58, n. 3, pp. 25. *https://doi.org/10.34068/joe.58.03.25*

Deswani, Deswani; Rahmawati, Dea Eki; Mulyanti, Yuli; Syafdewiyani, Syafdewiyani; Ismail, Rita; Djuwitaningsih, Sri. (2024). "Social Media Utilization and Knowledge Levels in Exclusive Breastfeeding Among Mothers in Indonesia". *Healthcare in Low-Resource Settings*, v. 12, n. 1, pp. 11765. *https://doi.org/10.4081/hls.2023.11765*

Drajati, Nur Arifah; Tan, Lynde; Wijaya, Surya Agung; Tyarakanita, Agustina. (2024). "Developing pre-service teachers' intercultural communication competence: Learning through extracurricular informal digital learning of English". *Studies in English Language and Education,* v. 11, n. 2, pp. 855-872. *https://doi.org/10.24815/siele.v11i2.34775*

Ghazizadeh Ehsaei, Soudabeh; Haddad Narafshan, Mehry; Zeinali Nejad, Majid. (2021). "Environmental and Occupational Health Students' Attitudes Toward Social Media in Online Learning During the COVID-19 Pandemic". *Strides in Development of Medical Education,* v. 18, n. 1, pp. 1-5. *https://doi.org/10.22062/sdme.2021.196657.1080*

Gómez-Galán, José; Martínez-López, José Ángel; Lázaro-Pérez, Cristina; Sarasola Sánchez-Serrano, José Luis. (2020). "Social Networks Consumption and Addiction in College Students during the COVID-19 Pandemic: Educational Approach to Responsible Use". *Sustainability,* v. 12, n. 18, pp. 7737. *https://doi.org/10.3390/su12187737* Hair, Joe F.; Ringle, Christian M.; Sarstedt, Marko. (2011). "PLS-SEM: Indeed a Silver Bullet". Journal of Marketing Theory and Practice, v. 19, n. 2, pp. 139-152. https://doi.org/10.2753/MTP1069-6679190202

Htay, Mila Nu Nu; McMonnies, Kate; Kalua, Thokozani; Ferley, Dylan; Hassanein, Mayada. (2020). "Postgraduate students' perspective on using Twitter as a learning resource in higher education". *Journal of Education and Health Promotion,* v. 9, n. 1, pp. 61. *https://doi.org/10.4103/jehp.jehp_321_18*

Imaniah, Ikhfi; Zakky, Akhmad; Anggraini, Diah Retno. (2020). "Indonesia-Japan Cross Culture Facebook Writing Program: New Challenges in Teaching Writing". *The Asian EFL Journal*, v. 27, n. 5.2, pp. 23-35. *https://www.asian-efl-journal.com/monthly-editions-new/2020-monthly-editions/volume-27-issue-5-2-december-2020/index.htm*

Jesus-Moraleida, Fabianna Resende de; Santos, Ana Ellen do Nascimento; Máximo Pereira, Leani Souza; Ferreira, Manuela Loureiro; Ferreira, Paulo Henrique; Macedo, Luciana Gazzi; Nunes, Ana Carla Lima. (2022). "Physical Activity Supported by Mobile Technology Program (Pat-Back) for Older Adults with Back Pain at Primary Care: a Feasibility Study Protocol". *Motriz: Revista de Educação Física*, v. 28, pp. e10220020321. https://doi.org/10.1590/s1980-657420220020321

Karkar, Ammar J M; Fatlawi, Hayder K; Al-Jobouri, Ahmed A. (2020). "Highlighting e-learning adoption challenges using data analysis techniques: University of Kufa as a case study". *Electronic Journal of e-Learning*, v. 18, n. 2, pp. 136-149. *https://doi.org/10.34190/EJEL.20.18.2.003*

Khanna, Priya; Roberts, Chris; Lane, Andrew Stuart. (2021). "Designing health professional education curricula using systems thinking perspectives". *BMC Medical Education*, v. 21, n. 1, pp. 20. *https://doi.org/10.1186/s12909-020-02442-5*

Khasawneh, Amro; Chalil Madathil, Kapil; Taaffe, Kevin M.; Zinzow, Heidi; Ponathil, Amal; Chalil Madathil, Sreenath; Nambiar, Siddhartha; Nanda, Gaurav; Rosopa, Patrick J. (2022). "Dynamic simulation of social media challenge participation to examine intervention strategies". *Journal of Computational Social Science*, v. 5, n. 2, pp. 1637-1662. https://doi.org/10.1007/s42001-022-00183-7

Lee, Seung-Eun; Mull, Ian; Agnew, Lauren. (2023). "Teaching effective Instagram marketing strategies using an experiential learning project for cotton fibres and textiles". *International Journal of Fashion Design, Technology and Education*, v. 16, n. 3, pp. 288-295. *https://doi.org/10.1080/17543266.2023.2190167*

McHugh, Mary L. (2013). "The Chi-Square Test of Independence". *Biochemia Medica*, v. 23, n. 2, pp. 143-149. https://doi.org/10.11613/BM.2013.018

McNeill, Liz; Jefford, Elaine; Gray, Michelle; Bloxsome, Dianne; Downer, Terri; Johnson-Cash, Jessie; Ebert, Lyn. (2024). "A survey of students' experiences of returning to midwifery studies after maternity leave: A pilot survey". *Nurse Education in Practice*, v. 79, pp. 104073. *https://doi.org/10.1016/j.nepr.2024.104073*

Memon, Mumtaz Ali; Ting, Hiram; Cheah, Jun-Hwa; Thurasamy, Ramayah; Chuah, Francis; Cham, Tat Huei. (2020). "Sample Size for Survey Research: Review and Recommendations". *Journal of Applied Structural Equation Modeling*, v. 4, n. 2, pp. i-xx. *https://jasemjournal.com/wp-content/uploads/2020/07/Memon-et-al_JASEM_-Editorial_V4_Iss2_June2020.pdf*

Metchik, Ariana; Boyd, Sally; Kons, Zachary; Vilchez, Valery; Villano, Anthony M.; Lazar, John F.; Anand, Rahul J.; Jackson, Patrick; Stern, Jeffrey. (2021). "How We Do It: Implementing a Virtual, Multi-Institutional Collaborative Education Model for the COVID-19 Pandemic and Beyond". *Journal of Surgical Education*, v. 78, n. 4, pp. 1041-1045. *https://doi.org/10.1016/j.jsurg.2020.12.012*

Munshi, Jamal. (2014). "A Method for Constructing Likert Scales". Available at SSRN 2419366. https://doi.org/ 10.2139/ssrn.2419366

Ogedengbe, Osebhajimende Esther; Quadri, Ganiyu Oluwaseyi. (2020). "The Use of Social Media by Undergraduates in South-West Nigeria: A Comparative Study". *Library Philosophy and Practice (e-journal),* pp. 3860. *https://digital commons.unl.edu/libphilprac/3860*

Olelewe, Chijioke Jonathan; Orji, Chibueze Tobias; Osinem, Emmanuel C.; Rose-Keziah, Ikemelu Chinelo. (2020). "Constraints and strategies for effective use of social networking sites (snss) for collaborative learning in tertiary institutions in nigeria: perception of tvet lecturers". *Education and Information Technologies,* v. 25, n. 1, pp. 239-258. *https://doi.org/10.1007/s10639-019-09963-7*

Onuoha, Charis; Enyia, Chris; Obiano, Doris; Odeh, Peter. (2020). "The Role of Social Media in Collaborative Library and Information Science Education: Nigerian Perspective". *Library Philosophy and Practice (e-journal),* pp. 4382. *https://digitalcommons.unl.edu/libphilprac/4382*

Robles Moral, Francisco Javier; Fernández Díaz, Manuel. (2021). "Future Primary School Teachers' Digital Competence in Teaching Science through the Use of Social Media". *Sustainability, v.* 13, n. 5, pp. 2816. *https://doi.org/10.3390/su13052816*

Royston, Patrick. (1992). "Which measures of skewness and kurtosis are best?". *Statistics in Medicine*, v. 11, n. 3, pp. 333-343. *https://doi.org/10.1002/sim.4780110306*