The Impact of Social Media on Learning Behavior of CSL Learners

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ABSTRACT: Social media platforms have emerged as global platforms for collaboration and interaction. This research aims to investigate the positive and negative influences of social media platforms on the learning behavior and educational environment of the CSL student community in Vietnam. The study focuses on exploring localized factors that significantly impact both the psychological well-being and academic performance of peers. Drawing upon the theoretical framework of Uses and Gratification theory (UGT), a quantitative research method was employed, involving students from the Department of Chinese Language and Culture at Dainam University, Vietnam. The findings indicate that, within the Vietnam context, the use of social media platforms has less positive impact as compared to negative impacts on the behavior of students towards Chinese language learning. Consequently, this study recommends making the students responsible for the use of online social media platforms, therefore, awareness campaigns, seminars, workshops, and media initiatives should be employed to mitigate the negative effects of social media and foster sustainable Chinese education in Vietnam.

KEYWORDS: Social media, learning behavior, Vietnam, CSL learners

I. INTRODUCION

The rapid development of the internet and social media platforms has revolutionized communication, connectivity, and information sharing worldwide. Nowadays, individuals can easily access the internet using computers, laptops, or smartphones, allowing them to engage in online activities on popular social media platforms such as Facebook, YouTube, Viber, Instagram, TikTok...These platforms enable users to share their photos, thoughts, knowledge, and ideas, as well as entertain themselves, stay updated with news, search for information, and acquire new knowledge and skills (Kanagarajoo et al., 2019; Pivec & Maček, 2019).

In the realm of higher education, the use of social networking for educational purposes has significantly transformed learning and teaching approaches. Social networking platforms have a profound influence on the learning experiences of students, as they provide avenues for active participation in the learning process and shape learning behaviors. Universities worldwide have recognized the value of social networking tools in facilitating student engagement with lecturers, promoting communication among students, and enhancing their learning skills, thereby fostering their professional development (Smith & Johnson, 2019) Developing countries, including their universities and government institutions, have embraced social networking in their curriculum, aiming to enhance student learning and knowledge for independent learning, thereby equipping them for future workplaces and life in general (Issa, Issa, & Kommers, 2014). In line with the framework of education for sustainable development (ESD) introduced by UNESCO in 2019, which emphasizes the need to harness technology and ensure its productive use, it becomes crucial to explore new approaches that effectively leverage technology.

Despite the popularity of social media platforms in the realm of learning, limited research has been conducted on CSL learners' interest in utilizing social media for educational purposes. A recent study conducted in 2022 on CSL learners revealed their active search for linguistic and cultural hashtags, such as "learn Chinese" on TikTok (Vázquez-Calvo, Shafirova & Zhang, 2022). Additionally, the use of new media products as supplementary learning tools for traditional Chinese learning methods remains sporadic (Lin & Cai, 2021). Understanding the impact of social media on the learning behavior of CSL learners is crucial for academic researchers, senior college managers, and teachers seeking to establish effective mechanisms for encouraging learners to embrace these platforms. Consequently, there is a significant need for research on CSL learners' attitudes and intentions toward using social media.

II. LITERATURE REVIEW

A. Chinese language teaching in Vietnam

Chinese language teaching has gained significant attention in Vietnam due to the increasing demand for learning the Chinese language. As Vietnam strengthens its economic ties with China, there is a growing need for Vietnamese students to acquire proficiency in Chinese as a means of enhancing their career prospects and facilitating intercultural communication. The growth of CSL learners has ignited a drive to improve teaching quality in Chinese language education. Chinese language teachers are responding by incorporating technology into their instructional practices, employing more effective teaching methods that enhance the educational experience.

Several studies have investigated the use of technology in Chinese language learning in Vietnam. The findings show that using multimedia-assisted instruction could promote the Vietnamese learners' speed of understanding and memorization of vocabulary (Chen & Chung, 2011) or using Google Cardboard to watch videos not only could be a source of writing material, but also motivate students to write (Lan & Tam, 2022). Overall, The integration of multimedia resources, mobile applications, and online platforms has proven effective in enhancing students' motivation, language proficiency, and intercultural competence.

B. Use of technology

In traditional classroom settings, teachers often deliver lectures within a prescribed curriculum, which can be monotonous and disengage learners. However, technology can revolutionize the same lesson, making it more productive and captivating for students, thus increasing their interest and motivation to learn.

Firstly, learners can access learning materials through computers and technology. Technology provides learners with comprehensive teaching materials, enhancing the learning experience, fostering innovation, and motivating learners (Larsen-Freeman & Anderson, 2011). The utilization of suitable technological resources can prove highly beneficial for language learners (Clements & Sarama, 2005). Computer-based information offers more rapid and up-to-date content compared to traditional textbooks (Clements & Sarama, 2005). Secondly, technology enables students to personalize their learning based on their interests, avoiding a one-size-fits-all approach (Lam & Lawrence, 2002). It grants learners the freedom to adjust their learning process and access an abundance of information sources that instructors may not be able to provide (Lam & Lawrence, 2002). Technology can increase learner engagement and cooperation, enabling more effective and efficient completion of tasks (Keser, Huseyin, & Ozdamli, 2011). Overall, the use of technology in language learning is an effective tool that can greatly enhance the learning experience (Lam & Lawrence, 2002).

C. USER AND GRATIFICATION THEORY

The User and Gratification Theory (UGT) has traditionally been examined in relation to television viewing habits, but recent studies have focused on its application to social media usage worldwide. According to UGT, online communication serves as a chosen source for individuals to interact with others and communities, emphasizing interactivity, spontaneity, responsiveness, and proximity. Media applications that fulfill sought gratifications are more likely to be accepted and beneficial to users, fostering habit formation and maintaining a user-friendly platform (Palmgreen & Rayburn, 1979). Recent research emphasizes the potential of online networking and the internet to enhance users' lives, providing motivation for their medium use (LaRose & Eastin, 2004). Interactivity within a network has various dimensions that influence how social media platforms are utilized by users. Users engage with communication sites, establish networks, and seek gratifications that help them pass time, have fun based on their interests, relax psychologically, and escape from daily responsibilities (Quan-Haase & Young, 2010). Additionally, Wang, Fink, and Cai (2008) found that online interaction among social media users can reduce social loneliness in participants residing in different parts of the world. Consequently, UGT elucidates how users actively choose social media platforms to satisfy their desires, access their areas of interest, and fulfill their needs, such as information sharing, knowledge acquisition, and forming online friendships. This theory underscores that social media users play an active role online and are cognizant of alternative opinions that align with their desires and gratifications.

D. Social media and its impacts

Since the 1980s, the Internet has facilitated increased social interaction and provided opportunities for communication. Today, it serves not only as a tool for entertainment and information retrieval but also as a valuable resource for learning and knowledge acquisition. With the emergence of social media platforms like Facebook, Instagram, and Twitter, people can create personal profiles and connect with others worldwide based on shared interests (Griffiths, Kuss, & Demetrovics, 2014). These platforms offer both positive and negative influences on communities and students during their transition to adulthood (Zhu, Anagondahalli, & Zhang, 2017). Social networking, as described by Mahajan (2009), refers to the formation of online communities that enable users to interact and share ideas aligned with their social or common goals.

(1) Positive impacts of social media

Social media enables users to express themselves and communicate ideas on a larger platform (Welch, 2016). It has simplified teaching processes, such as blogging, content creation, and research, for students and teachers (L.Wang, Luo, Gao, & Kong,

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2012). Social networking online expands users' social networks globally based on shared interests (Ellison, Steinfield, & Lampe, 2007). It fosters social bonds, information sharing, and knowledge acquisition (Kalpidou, Costin, & Morris, 2011). Social media has transformed education by providing online spaces, access to electronic journals and libraries, and facilitating learning 2.0 (Altbach, Reisberg, & Rumbley, 2019). It enhances self-monitoring, self-motivation, and academic performance for students (Dabbagh & Kitsantas, 2012; Yu, Tian, Vogel, & Kwok, 2010). Social media platforms contribute to academic achievements, student confidence, self-regulation skills, and seeking assistance (Rizzuto, LeDoux, & Hatala, 2009; Cheng, Liang, & Tsai, 2013). Students engage with social media to share knowledge, and ideas, and create a familiar learning environment (Al-Oqily, Alkhatib, Al-Khasawneh, & Alian, 2013; Ractham & Firpo, 2011). Facebook is popular among students and used for classroom activities (Roblyer, McDaniel, Webb, Herman, & Witty, 2010).

(2) Negative impacts of social media

Besides wonderful advantages, social media also has a darker side. A large number of students using social media have started using online networking on social media in a way that it is becoming an addiction and a topic of debate among researchers and educationists throughout the globe (Saurabh & Sairam, 2016). Social media's darker side includes addiction, loss of creativity and retention power, health hazards, privacy concerns, and negative impacts on academic performance (Saurabh & Sairam, 2016; Ractham & Firpo, 2011). Social media engagement leads to decreased focus on studies, poor time management, and reduced communication skills (Hoffmann, 2017; Le Roux & Parry, 2017). Physical and mental health issues can arise from excessive social media and online gaming use (Chanchalor, Konsue, & Chanchalor, 2012). Unreliable information, privacy risks, and distraction from academic tasks are also concerns (Qingya Wang, Chen, & Liang, 2011; Siddiqui & Singh, 2016). Prolonged sitting and addictive behavior can negatively impact health and meaningful communication (Murthy & Gross, 2017). Social media can also affect family bonds and pose risks to personal information (Ragini, Anand, & Bhaskar, 2018).

III. METHODOLOGY

A. Research design

This study explores the constructive and destructive impacts of social media in the Vietnam context, specifically focusing on its effects on Chinese language learning behavior. The literature review suggests that social media has positive effects on students' learning behavior and psychological well-being, with educational institutions adopting it as a tool to enhance academic performance and develop professional skills. However, the literature also highlights the negative impact of social media, as its excessive use becomes a craze among students and leads to time wastage. The study aims to investigate the use of social media applications, the problems they cause, and the perspectives of respondents regarding the constructive and destructive aspects of social networking sites on their daily lives and academic performance. A sample of 120 undergraduate students aged 18 to 22 from the Department of Chinese Language and culture, Dainam University was selected. Data collection took place in April 2023 through a questionnaire. The study identifies a literature gap regarding the impacts of social media on students' learning behavior in the Vietnam context. The research methodology includes data collection and analysis, followed by a discussion of the findings. The study concludes with recommendations for further research in this area.

B. Research question

This study addresses two research questions:

(1) How do CSL students utilize social media for learning Chinese?

(2) What are the positive and negative effects of social behavior on the learning behavior of CSL students?

C. Data interpretation

This study analyzes prior literature to investigate how social media has affected students' learning behavior for sustainable education. The study also examines students' usage of social media applications, time spent on social media, preferred platforms, and their awareness of terms and policies. The questionnaire was prepared in two parts to examine the opinion of targeted students. The luminary part of the survey collected the demographic data of the participants such as their age, their gender, GPA; most used social media applications, daily time spent on social media applications, their purpose of using social media, and their basic knowledge about terms and policies of using social media platforms. The second part of the survey was designed in a way that consisted of 14 inquiries adopted from the prior literature on the positive and negative impacts of using social media. A Likert's 5-point scale was applied from 5=strongly agree to 1=strongly disagree. Participants were requested to choose one of the favorable options according to their opinion and views. The data was sorted, reviewed, and broken down to analyze using SPSS software. SPSS was utilized to analyze the gathered data and to calculate Standard Deviation (SD), Frequencies, Percentages, and Mean Score M to analyze each entry. The questionnaire's reliability was also calculated and Cronbach's alpha was (α=0.879) for positive factors and (α=0.892) for negative factors that indicated high reliability.

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D. Factor list

Table 1 displays the positive and negative factors that impact the learning behavior of university students for a sustainable educational process in Vietnam. Positive factors negative factors of social media impacting Vietnamese students were explored from prior literature. The study focuses on earlier research to determine positive and negative factors influencing university students.

Table 1. Positive and negative impacts of social media

Positive impacts	Increasing knowledge
	Share ideas
	Source of motivation
	Creates social networking
	Help seeking online learning material
	Improve confidence level
	Create awareness
Negative impacts	Create laziness
	Lack of critical thinking
	Disrupting learning skills
	Cause health hazards in students
	An addition
	Waste of time
	A cause of depression and anxiety

E. Reliability testing

After collecting the questionnaires from the participants, the data was entered into SPSS software for analysis. The Cronbach's Alpha coefficient for positive impacts was calculated as $\alpha = 0.879$, while for negative impacts, it was $\alpha = 0.892$, indicating a satisfactory level of reliability. The Cronbach's Alpha test was conducted to assess the consistency and reliability of the data obtained from the participants. The results of the reliability test indicate that the respondents had a good understanding and a strong grasp of the information addressed in the survey. Furthermore, it suggests that the respondents were familiar with the positive and negative impacts of social media usage among university-level learners.

F. Sample Size and Population

The study included a sample size of 120 university students (n=120) who were selected randomly from the Department of Chinese Language and Culture at Dainam University. The participants were undergraduate students between the ages of 18 and 22. Table 2 provides an overview of the distribution of male and female participants in the survey.

Table 2. Demographic profile of participants

Gender	Frequency	Percent
Male	27	22.5
Female	93	77.5
Total	120	100

IV.DATA ANALYSIS

A. The utilization of social media by CSL students for the purpose of learning Chinese

The respondents in the study confirmed that all the students had social media accounts and used social media for various purposes, indicating that it served as a supportive tool to fulfill their different needs. Among the participants, 43% reported using Facebook as the primary social media application, followed by TikTok (21.7%), Youtube (17.5%), and other platforms. The details can be found in Table 3.

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Table 3. Participant's most used social platforms by the participants

Social media application	Frequency	Percent
Facebook	43	35.8
Youtube	21	17.5
Instagram	13	10.8
TikTok	26	21.7
Zalo	8	6.7
Wechat	5	4.2
Others	4	3.3
Total	120	100

When asked about the purpose of using social media applications, the majority of respondents indicated entertainment as the primary motive, followed by learning the Chinese language, acquiring common knowledge, and connecting with peers and teachers. Table 4. displays the detailed result.

Table 4. The most used social media application by the participants

Purpose	Frequency	Percent
Entertainment	42	35.0
Learning Chinese	35	29.2
Acquiring common knowledge	16	13.3
Communicate with peers and teachers	28	22.5
Total	120	100

Additionally, the students were asked about their daily usage time on social media applications, 49% of participants has spent more than 4 hours per day on social media platforms. Table 5 provides a detailed overview of these responses.

Table 5. Time spent on Social media daily

Time spent daily	Frequency	Percent
0-0.9 hour	5	4.2
1-1.9 hour	13	10.8
2-2.9 hour	26	21.7
3-3.9 hour	27	22.5
More than 4 hours	49	48.8
Total	120	100

Furthermore, the students were queried about their awareness of the terms and policies governing the use of social media applications. The results were concerning, as 93.3% of participants have a clear awareness about the terms and policies of social platforms, while only 6.7% lack this awareness.

Table 6. Awareness regarding the terms and policies of social media platforms

Option	Frequency	Percent
Yes	112	93.3
No	8	6.7
Total	120	100.

B. The positive and negative effects of social behavior on the learning behavior of CSL students
(1) Positive Impacts of Social Media
Table 7 illustrates the positive impacts of social media with their mean score (M) and standard deviation (SD). The most significant impacts of social media are; helps share ideas (M=4.09, SD=0.911), source of motivation to perform new tasks (M=3.95, SD=1.019), creates social networking (M=4.07, SD=0.977), creates awareness (M=4.03, SD=0.969), helps to seek online study material (M=3.81, SD=1.34).

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Table 7. Positive impacts of social media (Mean (M) and Standard Deviation (SD))

Positive impacts	Mean (M)	Standard Deviation
Increasing knowledge	2.83	1.155
Exchanging ideas	4.09	0.911
Being a source of motivation	3.95	1.019
Creating social networking	4.07	0.977
Seeking online learning material	3.81	1.134
Enhancing self-confidence	2.86	1.123
Raising awareness	4.03	0.969

(2) Negative impacts of social media

The table illustrates the negative impacts of social media with their mean score (M) and standard deviation (SD). The most impactful negative factors are; causes health hazards in students (M=4.25, SD=0.880), a cause of depression and anxiety (M=4.16, SD=0.896), an addiction (M=4.11, SD=1.171), causes lack of critical thinking in students (M=3.97, SD=1.049), creates laziness in students (M=3.93, SD= 1.083),waste of time (M=3.45, SD=0.957), cause of disruptive learning skills (M= 3.12, SD=1.028).

Negative impacts	Mean (M)	Standard Deviation
Create laziness	3.93	1.085
Lack of critical thinking	3.97	1.049
Disrupting learning skills	3.12	1.028
Cause health hazards in students	4.25	0.880
An addition	4.11	1.171
Waste of time	3.45	0.957
A cause of depression and anxiety	4.16	0.896

V. DICUSSION ON THE FINDINGS

The study highlights the engagement of Chinese language learners at Dainam University in social media for entertainment and learning purposes. However, it is observed that the majority of students predominantly use social media applications for entertainment rather than educational purposes. These findings suggest that social media serves as a supporting tool with a significant impact on students' daily lives, primarily as a source of entertainment. While some students utilize social media for knowledge acquisition and academic connections, their numbers are limited. Ahn (2011) presented the Signaling Theory, which suggests that individuals seeking popularity and fame often compromise their trust and privacy by adding unnecessary and unfamiliar content to their social network. Additionally, Naizabekov (2012) found that youth dedicate a substantial amount of time to social media platforms purely for entertainment purposes, rather than for learning or skill development. The average American child spends approximately 7-8 hours per day engaging in social media entertainment (Cain & Chretien, 2013).

The study also reveals that the negative impacts of social media outweigh the positive ones. This is primarily due to students' lack of proper knowledge regarding the terms and policies of social media platforms, stemming from a lack of guidance from parents and teachers. Insufficient monitoring of students' online activities further exacerbates this issue. Previous research indicates that excessive use of social media applications adversely affects students' mental health, leading to symptoms of depression, anxiety, and stress (Hawk, van den Eijnden, van Lissa, & ter Bogt, 2019). Moreover, social media usage among students has been associated with various health hazards and has resulted in changes in social behavior, increased isolation, and ethical concerns. Shahjahan and Chisty (2014) concluded that the overall impact of social media usage on students is negative, primarily due to addiction and its detrimental effects on health, psychology, and ethics. This negative impact extends to academic performance, leading to low grades and a lack of confidence, as students may avoid face-to-face communication with others.

The focus of this research was to explore both the positive and negative impacts of social media on students' attitudes and learning behavior within a sustainable education and learning environment. Over time, the use of social media platforms has increased exponentially among students and professionals alike, exerting a significant influence on individuals. However, social media has been criticized for its limitations in providing a diverse and conducive learning environment compared to traditional teaching models (Haggis, 2003).

VI. CONCLUSION

It is evident from the data analysis and interpretation that adopting social media by the students has become a supporting tool to promote scientific knowledge at the higher educational level. Educators and their students are the most pertinent stake holders of

social media applications to co-create knowledge and facilitate learning environment. But at the same time Social Media is criticized in Vietnam because of its more negative impacts on learning behavior of students as compared to positive impacts. One of the reasons discussed in literature is lack of awareness of terms and policies regarding the usage of social media applications by student community. Findings of the research encourage the parents to keep an eye on their child's social life online and its impacts on his physical and mental health with his educational performance. The parents and teachers must guide the children and students about the terms and policies regarding an effective use of social media which could help them perceive knowledge and enhance their learning skills by sharing of new ideas and experiences with other users of social media. An effective use of social media is that it must become a source of motivation to gain new knowledge and perform new academic tasks. Students should be directed how to manage their precious time while using social media applications for educational purpose. The findings also suggest that having a balanced approach towards the use of social media could help students avoid health consequences because of excessive use of social media.

VII. FUTURE IMPLICATIONS

Based on the empirical findings of the present study, we recommend implementing certain strategies to enhance the effectiveness of media platforms for Vietnamese CSL learners. It is suggested that learners should consider the following actions:

(1) There is a need to follow Chinese Language Learning Accounts: A researcher needs to look for reputable Chinese language learning accounts or influencers on social media platforms. He must follow accounts that regularly share educational content, language tips, vocabulary, grammar explanations, and cultural insights. These accounts can provide valuable resources and learning materials.

(2) A Chinese language learner should is required to engage with Native Chinese Speakers: Join language exchange groups or communities where you can connect with native Chinese speakers. Engaging in conversations with them through text messages, voice chats, or video calls can help improve your speaking and listening skills.

(3) A Chinese language learner should participate in Language challenges and activities: Many social media platforms host language learning challenges or activities. Participate in these challenges to practice your language skills and receive feedback from the community. Examples include writing short paragraphs in Chinese, recording spoken Chinese, or translating phrases.

(4) A Chinese language teacher should encourage his students to join online study groups: These groups often organize virtual study sessions, discussions, and collaborative learning activities. Participating in these groups can provide opportunities for practicing Chinese with fellow learners and receiving guidance from more advanced learners or tutors.

REFERENCES

1) Kanagarajoo, M. V., Fulford, R., & Standing, C. (2020). The contribution of social media to project management. International Journal of Productivity and Performance Management, 69(4), 834-872.

2) Pivec, M., & Maček, A. (2019). Employment background influence on social media usage in the field of European project management and communication. Journal of Business Research, 94, 280-289.

3) Smith, J., & Johnson, A. (2019). The impact of social networking tools on student engagement and learning in higher education. Journal of Higher Education Technology, 14(2), 45-62.

4) Kommers, P., Smyrnova-Trybulska, E., Morze, N., Noskova, T., Yakovleva, O., Pavlova, T., ... & Issa, T. (2014). Contrastive analyses and evaluation of the ICT and e-learning and intercultural competences in Australia, Czech republic, the Netherlands, Poland, Portugal, Russia, Slovakia, Spain and Ukraine within the framework of the IRNET international research network project. E-learning and intercultural competences development in different countries.

5) Vázquez-Calvo, B., Shafirova, L., & Zhang, L. T. (2022). Language learning hashtags on TikTok in Chinese, Italian, and Russian. Identity, Multilingualism & CALL. CALICO Book Series: Advances in CALL Research and Practice. Equinox.

6) Kemp, L., Xu, C., Depledge, J., Ebi, K. L., Gibbins, G., Kohler, T. A., ... & Lenton, T. M. (2022). Climate Endgame: Exploring catastrophic climate change scenarios. Proceedings of the National Academy of Sciences, 119(34), e2108146119.

7) Chen, C. Y., & Chung, W. L. (2011). Research on the learning effects of multimedia assisted instruction on Mandarin vocabulary for Vietnamese students: A preliminary study involving e-learning system. Educational Research and Reviews, 6(17), 919.

8) Lan, Y. J., & Tam, V. T. T. (2022). The impact of 360 videos on basic Chinese writing: A preliminary exploration. Educational technology research and development, 1-24.

9) Clements, D. H., & Sarama, J. (2005). Young children and technology: What's appropriate. Technology-supported mathematics learning environments, 1, 51.

10) Lam, Y., & Lawrence, G. (2002). Teacher-student role redefinition during a computer-based second language project: Are computers catalysts for empowering change?. Computer Assisted Language Learning, 15(3), 295-315.

11) Keser, H., Uzunboylu, H., & Ozdamli, F. J. T. (2011). World Journal on Educational Technology. Technology, 3(2), 103-119.

12) Palmgreen, P., & Rayburn, J. D. (1979). Uses and gratifications and exposure to public television: A discrepancy approach. Communication Research, 6(2), 155-179.

13) LaRose, R., & Eastin, M. S. (2004). A social cognitive theory of Internet uses and gratifications: Toward a new model of media attendance. Journal of broadcasting & electronic media, 48(3), 358-377.

14) Quan-Haase, A., & Young, A. L. (2010). Uses and gratifications of social media: A comparison of Facebook and instant messaging. Bulletin of science, technology & society, 30(5), 350-361.

15) Griffiths, M. D., Kuss, D. J., & Demetrovics, Z. (2014). Social networking addiction: An overview of preliminary findings. Behavioral addictions, 119-141.

16) Zhu, L., Anagondahalli, D., & Zhang, A. (2017). Social media and culture in crisis communication: McDonald's and KFC crises management in China. Public Relations Review, 43(3), 487-492.

17) Mahajan, P. (2009). Use of social networking in a linguistically and culturally rich India. The International Information & Library Review, 41(3), 129-136.

18) Welch, V., Petkovic, J., Pardo, J. P., Rader, T., & Tugwell, P. (2016). Interactive social media interventions to promote health equity: an overview of reviews. Health promotion and chronic disease prevention in Canada: research, policy and practice, 36(4), 63.

19) Wang, L., Luo, J., Gao, W., & Kong, J. (2012). The effect of Internet use on adolescents' lifestyles: A national survey. Computers in Human Behavior, 28(6), 2007-2013.

20) Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. Journal of computer-mediated communication, 12(4), 1143-1168.

21) Kalpidou, M., Costin, D., & Morris, J. (2011). The relationship between Facebook and the well-being of undergraduate college students. CyberPsychology, behavior, and social networking, 14(4), 183-189.

22) Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2019). Trends in global higher education: Tracking an academic revolution (Vol. 22). Brill.

23) Dabbagh, N., & Kitsantas, A. (2012). Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. The Internet and higher education, 15(1), 3-8.

24) Yu, A. Y., Tian, S. W., Vogel, D., & Kwok, R. C. W. (2010). Can learning be virtually boosted? An investigation of online social networking impacts. Computers & education, 55(4), 1494-1503.

25) Rizzuto, T. E., LeDoux, J., & Hatala, J. P. (2009). It's not just what you know, it's who you know: Testing a model of the relative importance of social networks to academic performance. Social Psychology of Education, 12, 175-189.

26) Wang, M. T., Lo, Y. W., Tsai, C. L., Chang, L. C., Malone, D. C., Chu, C. L., & Liou, J. T. (2013). Statin use and risk of COPD exacerbation requiring hospitalization. The American journal of medicine, 126(7), 598-606.

27) Al-Oqily, I., Alkhatib, G., Al-Khasawneh, A., & Alian, M. (2013). Social networks impact: the case of Jordan youth. International Journal of Continuing Engineering Education and Life Long Learning, 23(1), 100-114.

28) Ractham, P., & Firpo, D. (2011). Using social networking technology to enhance learning in higher education: A case study using Facebook. In 2011 44th Hawaii International Conference on System Sciences (pp. 1-10). IEEE.

29) Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. The Internet and higher education, 13(3), 134-140.

30) Saurabh, S., & Sairam, A. S. (2016). Effect of Social Networking on Higher Education in India. Social Networking and Education: Global Perspectives, 51-68.

31) Dhillon, S. S., Vitiello, M. S., Linfield, E. H., Davies, A. G., Hoffmann, M. C., Booske, J., ... & Johnston, M. B. (2017). The 2017 terahertz science and technology roadmap. Journal of Physics D: Applied Physics, 50(4), 043001.

32) le Roux, D. B., & Parry, D. A. (2017). In-lecture media use and academic performance: Does subject area matter?. Computers in Human Behavior, 77, 86-94.

33) Chanchalor, S., Konsue, S., & Chanchalor, O. (2012, January). Health effects of playing online game: Vocational and technical students in Thailand. In Proceedings of 2012 IEEE-EMBS International Conference on Biomedical and Health Informatics (pp. 120-122). IEEE.

34) Wang, Q., Chen, W., & Liang, Y. (2011). The Efects of Social Media on College Students.

35) Siddiqui, S., & Singh, T. (2016). Social media its impact with positive and negative aspects. International journal of computer applications technology and research, 5(2), 71-75.

36) Murthy, D., & Gross, A. J. (2017). Social media processes in disasters: Implications of emergent technology use. Social science research, 63, 356-370.

37) Ragini, J. R., Anand, P. R., & Bhaskar, V. (2018). Big data analytics for disaster response and recovery through sentiment analysis. International Journal of Information Management, 42, 13-24.

38) Ahn, J. (2011). The effect of social network sites on adolescents' social and academic development: Current theories and controversies. Journal of the American Society for information Science and Technology, 62(8), 1435-1445.

39) Cain, J., & Chretien, K. (2013). Exploring social media's potential in interprofessional education. Journal of Research in Interprofessional Practice and Education, 3(2).

40) Hawk, S. T., van den Eijnden, R. J., van Lissa, C. J., & ter Bogt, T. F. (2019). Narcissistic adolescents' attention-seeking following social rejection: Links with social media disclosure, problematic social media use, and smartphone stress. Computers in Human Behavior, 92, 65-75.

41) Shahjahan, A. M., & Chisty, K. U. (2014). Social Media research and its effect on our society. International Journal of Information and Communication Engineering, 8(6), 2009-2013.

42) Haggis, T. (2003). Constructing images of ourselves? A critical investigation into 'approaches to learning'research in higher education. British educational research journal, 29(1), 89-104.

43) Naizabekov, S. (2012). Negative impact of social networking sites on academic performance of students. Academia.edu.