

# Impact of Social Media Usage and Multitasking During Online Classes by Higher Secondary Student on Class Engagement and Academic Performance: A Quantitative Investigation

Korakod Tongkachok<sup>1</sup>, Dr. Vivek Sharma<sup>2</sup>, Rakhee Bhardwaj<sup>3</sup>, Dr. Suresh Kumar<sup>4</sup>

<sup>1</sup> Faculty of Law, Thaksin University, Thailand

<sup>2</sup> Director, Management, Sohem Group, Bareilly, Uttar Pradesh

<sup>3</sup> Assistant Professor, Education, Noida College of Physical Education, Greater Noida

<sup>4</sup> Assistant Professor, H.D. College of Education, Salhawas, Jhajjar Haryana

Email: <sup>1</sup>[tokorakod@tsu.ac.th](mailto:tokorakod@tsu.ac.th)

## Abstract

The schools have to shut down due to covid pandemic and in order to pursue the education the online classes came into existence. Online classes are not a new concept but earlier it was using for higher studies and distance education but due to the pandemic of covid for past two years schools has also adopted the same framework to keep the students in touch of studies. Digital devices have become an integral part of the studies and the social media usage was increasing dramatically. The increased access to devices has changed the whole paradigm of studies moreover it gave privilege to the students to be multitasking during their online studies and the focus of the higher secondary students swiftly shifts between the tasks. The indulgence in two or more tasks while taking their online classes affected the student's ability. This distraction leads them towards the poor performance and reduced the ability of learning. The present study is empirical in nature in which it was investigated quantitatively from teachers that how the multitasking during the online classes through social media affects the students. In this study the data were collected from 203 teachers of the 9th to 12th standard. The data were collected on five-point Likert scale. Mean and One Sample t-test were applied to analyze the data.

**Keywords**— Social Media Usage, Academic Performance, Multitasking, Online Classes

## I. INTRODUCTION

Student engagement in social media is impacting the mental abilities of higher secondary students they are not able to focus on their studies anymore because distraction can never lead to success it would always lead to failure. Students are investing their study time in social media sites. Social media include blogs audio, photo, video, text, sharing tools etc. It is also determined that for past two years the academic performance of the students is not as per expectations. It indicates that as engagement with social media usage increases, engagement with multitasking also increases. Therefore, student engagement through social media can impact the ability and potential of the students that leads to poor learning. It is also

found that increased usage of social media affecting students in both their academic and social lives. However, students who are using social media have scored less than the students who are not indulge in such social activities in their academics (Weinstein, 2018). The electronic devices are influencing the performance of the students. Especially in today's digital era students are attracting towards social media usage. For the last two years due to pandemic scenario online classes were the only medium to provide education to the students. The sudden change in the education environment changed the whole scenario. Students spending couple of hours on social media as for them that was the only platform to keep in touch with their friends.

This complex situation encouraged students to explore the different thing through social media. This social media addiction pushed the students towards multitasking activities. The increased engagement of students influenced the productivity as with diverted minds they were not able to score good marks in their academics and in result the students future is badly hit (Evers et al., 2020). Now a days online classes is rising as a prominent tool of the education. It is being determined that in mid of the online class students are also using different kind of social media app. The academic environment is being affected due to the usage of social network in between the classes. In the real time of the classes student's involvement in the social media has abstracted their energy and reducing the efficiency of the students. In such a way exposure is distracting the focus of the students and impacting the performance. To enhance the performance collaborative learning system should be adopted to ensure the participation of teachers as well as students to distract them from usage of social media network while attending the online classes (Fardoun et al., 2012).

## II. LITERATURE OF REVIEW

It is being determined that multitasking during online classes is affecting the academic performance of the higher secondary students. Students are engaging in different social activities during their online sessions. In such a way they are not able to focus on their academics and in result their performance is not up to the mark. This is the high time for students to focus on their career on the contrary students are spending too much time on social media and due to this they are suffering from different kind of health and mental issues. Social media and multitasking activities during online classes is hindering the academic performance of the students (Demirbilek & Talan, 2017).

Social network has become an important part of everyone's life especially students. Students are the prime users who are using the social media application. The usage of social media is increasing intensely among the secondary

students they are using Facebook, Instagram, You Tube, Snapchat, twitter excessively. Online classes have given advantage to the students to explore more and more social media while taking their online classes. It is also analyzed that students are distracted towards the social media in mid of their classes and this distraction would lead them towards poor performance (Shanab & Tarawneh, 2015).

Social media is controlling the young generation particularly the students. Online classes have become the necessity and that has changed the education forever. In today's scenario millions of students have had to depend upon the online studies. This sudden shift away has influenced the studies of students particularly the group of the higher secondary students. In traditional classrooms students can more focus on studies on the other hand in online classes multitasking and social media usage in between online classes are impacting their learning power (Maqableh et al., 2015).

It is being determined that now-a-days online classes has become a compulsion due to the scenario of pandemic of covid but at the same time it has enhanced the on-screen timing for students. Students are enjoying online learning as now they are very conveniently can access to social network sites. Due to this the active involvement of students is decreasing in studies and increasing in social media usage. During the online classes they are doing multitasking in other words at the time of studies they are doing more than one task like playing games, scrolling the social media networks like Facebook, Insta, WhatsApp in result their mind gets diverted in between multiple tasks and impacting productivity of the higher secondary students (Yates et al., 2020).

The increased usage of smart devices, social websites is impacting the education environment. In today's scenario all the students have smart devices with them whether it is smart phone or laptop. They have full access to internet in the way of Wi-fi or data connection. Even in the virtual school the WhatsApp was the most popular app was being used by the students and teachers as it was the

communication platform for sharing the information with each other. But by the time students started taking advantage of their access to smart devices and very soon it is noticed that student especially higher secondary students started multitasking in the duration of their online classes. They started playing games, chatting, sharing videos amid their classes. Social media is negatively affecting the higher secondary students as it is prominent cause of distraction, poor sleep, cyberbullying and overall, it's also affecting the academic performance of the students (Alabdulkareem, 2015).

At very young age increasing usage and engagement of social networking has become a major concern in recent years. Social media can be utilized as a great opportunity for students as this platform is creating more prospects for learning. On the other hand, social media is main cause of distraction for the students. It has negative impact on high school students as wide exposure towards social media provoke the students towards multitasking and it also perceived that they are getting addicted towards social media usage (Martin et al., 2018).

Social media addiction is a most considerable addiction in recent years among the higher secondary students. Now a days due to the increased-on screen timing students are devoting the most of the time to social media which impacting other important aspects of life. Students turn on their personal phone during online classes for chatting or sharing messages or videos . Heavy social media usage by the students affecting their transactive memory and due to that they are not able to store important information in brain such type of memory loss is cause of poor academic performance among students. Students have to stay away from the social media in order to improve their learning power (Simsek et al., 2019).

Higher Secondary students are under going through psychological problems because of the social media addiction. Students keep their mobiles bedside them while attending their online classes. Social Media addiction decreases the learning efficiency in high school

students. The excessive usage of social media decreasing students' interest in studies moreover they are multitasking while studying. Majority of the students engage in social media while taking their online classes like video games, Facebook, Twitter, YouTube. Students' obsession with social media has had a significant impact on high school students as a result their academic performance is getting affected and pushing them towards fade future. Their intellectual skills are getting affected because their thoughts are on screens and in such a way, they are unable to give their 100% (Sümen & Evgin, 2021).

In recent years technology has become an immense part of the world, students are using the social media sites in excess moreover the online classes have given liberty to the students especially the higher secondary students to be on social media. Hence, it's hindering the social and physical development of the students and due to these, study is also getting hampered. Students are not using social media network in their spare time only they are also using the social media during their online classes also. This multitasking behavior at this crucial point of age lead them towards distraction Overall social media usage significantly addicting the students Majority of the students using Facebook, WhatsApp for sending messages, sharing pictures and videos with their friends. In result the adverse outcomes of the social media are the lack of concentration and poor academic performance (Bhuvaneswari, 2019).

It is being examined that when students are in online classes higher secondary students usually engross in multiple online events. Multitasking during classes is impacting the performance of the students. As multiple tasking during classes divided the focus in between more than one task and decrease the learning capacity. Multitasking and social media is interconnected because access to internet giving privilege to the students to do more than one task simultaneously. In such a way their learning is suffering as students are not able to recall or retain the knowledge they gained during their

online classes and this negatively influencing the performance (Alkahtani et al., 2016).

Wide spread usage of social media services during the online classes is increasing dramatically. Social media multitasking is the factor of poor performance of the students. The engagement of students in other social activities during their online classes is dividing their attention. Engagement in social media while attending the online classes reducing the listening power of the students and they are unable to grab the information providing during the online classes. Students grade performance is influenced by such multitasking social media activities. This digital distraction obstructing the student's performance critically (Kokoç, 2021).

Multitasking behaviour and social media addiction is prevailing among the higher secondary students. Lack of control on internet usage decreasing the concentration power of the students. Social media addiction promoting the multitasking behaviour and pushing the students towards failures. When students involved in more than one task amid their online classes their mind get distracted and can reduce the productivity of the students. In addition to that when students indulged in texting while taking the classes, they are unable to recall and retain the information being shared in the class (May & Elder, 2018).

In the last few years social media usage has risen melodramatically. The increasing social media usage among higher secondary students has been emerging as a big concern. The prevalence of social media usage is the cause of multitasking behaviour of the students. Over the last few years network activity has increased among the students. Physical, psychological and behaviourl related problems is being noticed in students and that cause to academic decline. Social media user students scored less in comparison to the non-social media user students (Masthi et al., 2017).

The introduction of online classes among school students and increased usage of social media for instance YouTube, Facebook, Twitter, Snapchat has given exposure to

unwanted sites also. Students has had to take classes on teams, google meet or on some school app but the access to internet provide them an opportunity to adopt the multitasking behaviour. Students neglected the perils associated with the excessive usage of social media and it leads to low grade because of poor concentration in class (Raj et al., 2018).

### III.OBJECTIVE OF THE STUDY

1. To know the impact of Social Media Usage and Multitasking During Online Classes by Higher Secondary Student on Class Engagement and Academic Performance.

### IV. RESEARCH METHODOLOGY

Sample of 203 teachers from different colleges and universities were surveyed through a structured questionnaire to know the impact of Social Media Usage and Multitasking During Online Classes by Higher Secondary Student on Class Engagement and Academic Performance. The present study is a quantitative investigation for which the primary data was collected through random sampling method. The statistical tools like mean and t-test were applied to analyze and evaluate the data and get the end results.

### V. FINDINGS OF THE STUDY

Table 1 is showing demographic details of the respondents. It is found from the table that in total 203 respondents 52.7% are males and 47.3% are females. Among them 34.0% are from the age group 32-39 yrs, 35.0% belongs to age group 39-46 yrs and rest 31.0% are above 46 years of age group. 33.0% of the respondents are teaching in colleges, 40.9% are working in universities and 26.1% are teaching in some other educational institutions. 34.0% of the respondents are having a teaching experience of below 3 years, 37.9% of them are teaching from 3-7 years and rest 28.1% are having a teaching experience of more than 7 years.

**Table 1 Demographic details**

Variables	Respondents	Percentage
<b>Gender</b>		
Males	107	52.7
Females	96	47.3
<b>Total</b>	<b>203</b>	<b>100</b>
<b>Age profile</b>		
32-39 years	69	34.0
39-46 years	71	35.0
Above 46 years	63	31.0
<b>Total</b>	<b>203</b>	<b>100</b>
<b>Workplace</b>		

College	67	33.0
University	83	40.9
Others	53	26.1
<b>Total</b>	<b>203</b>	<b>100</b>
<b>Teaching experience</b>		
Below 3 years	69	34.0
3-7 years	77	37.9
More than 7 years	57	28.1
<b>Total</b>	<b>203</b>	<b>100</b>

**Table 2 Impact of Social Media Usage and Multitasking on Class Engagement and Academic Performance**

S. No.	Statements	Mean score	t value	Sig
1.	Social media usage leads to poor academic achievement and low concentration during class lectures	4.07	8.264	0.000
2.	Class engagement of students is reduced due to introduction of cognitive load through social media	3.91	5.982	0.000
3.	Multitasking makes students less productive, less focussed and they take longer time to complete any task	3.67	2.520	0.006
4.	Students busy in multitasking with digital platform and devices takes few notes during online classes	3.70	2.905	0.002
5.	Student spending more time on social media for chatting and making networks demonstrates poor response to teachers	4.00	7.381	0.000
6.	Cognitive load created during social media usage limits the cognitive processing ability while learning for an individual	4.17	9.724	0.000
7.	Students switch from one task to another which decrease their ability to change focus and pay attention	3.83	4.835	0.000
8.	Social media usage and multitasking indicates negative effect on school work and students class engagement	3.90	5.886	0.000
9.	Multitasking is a reason behind distraction in students during learning through online classes	3.72	3.198	0.001
10.	Social media usage limits in memory allocation and class engagement results in low grade performance in students	3.80	4.438	0.000

Table 2 is demonstrating the impact of Social Media Usage and Multitasking on Class Engagement and academic Performance. It is observed from the table that Cognitive load created during social media usage limits the cognitive processing ability while learning for an individual with mean value 4.17 and social media usage leads to poor academic achievement and low concentration during class lectures with mean value 4.07. the respondent

also says that Student spending more time on social media for chatting and making networks demonstrates poor response to teachers with mean value 4.00 and Class engagement of students is reduced due to introduction of cognitive load through social media with mean value 3.91. Social media usage and multitasking indicates negative effect on school work and students class engagement with mean value 3.90 and Students switch from one task to

another which decrease their ability to change focus and pay attention with mean value 3.83. Social media usage limits in memory allocation and class engagement results in low grade performance in students with mean value 3.80. Multitasking is a reason behind distraction in students during learning through online classes with mean value 3.72, Students busy in multitasking with digital platform and devices takes few notes during online classes with mean value 3.70 and Multitasking makes students less productive, less focussed and they take longer time to complete any task with mean value 3.67.

## VI. CONCLUSION

It is being concluded that for past two years the greater exposure towards social media has increased among the higher secondary students. Excessive social media usage and multitasking behaviour preventing the school students from enhancing their skills in different aspects of life. Social media is complexed in nature as it is a valuable tool for the communication if it is used in right way will lead to right results. At the same time if it is used excessively the consequence could be hazardous. For instance, students can get help in their assignments through the social media but on the contrary students are utilizing their time on social media for Internet gaming, chatting, sharing pictures, videos, watching You Tube. Because of their shifted energy students rise in poor academic performance and learning disability can be seen now a days. Overall, it results that disengagement of social media usage while attending the online classes might increase the conscious intellectual activity of the students.

The study concludes that social media usage and multitasking during online classes limits the cognitive processing ability while learning, poor academic achievement and low concentration, demonstrates poor response to teachers, Class engagement of students is reduced, negative effect on school work and students, class engagement decrease their ability to change focus and pay attention, limits in memory allocation and class engagement,

distraction in students and makes students to take longer time to complete any task.

## REFERENCES

1. Abu-Shanab, E., & Al-Tarawneh, H. (2015). The Influence of Social Networks on High School Students' Performance. *International Journal of Web-Based Learning and Teaching Technologies*, 10(2), 49-59.
2. Alabdulkareem, S. (2015). Exploring the Use and the Impacts of Social Media on Teaching and Learning Science in Saudi. *Procedia - Social and Behavioral Sciences*, 182, 213-224.
3. Alkahtani, M., Ahmad, A., Darmoul, S., Samma, S., Zabidi, A., & Bamatraf, K. (2016). Multitasking Trends and Impact on Education: A Literature Review Project: CAN-MAP: Comprehensive Analysis Network for Multi-tasking Assessment of Performance ,10(3), 995-1001.
4. Bhuvaneswari U L (2019). Social media addiction among high school students. *International Journal of Indian Psychology*, 7(4), 937-942.
5. Demirbilek, M., & Talan, T. (2017). The effect of social media multitasking on classroom performance. *Journal of Active Learning in Higher Education*, 19(2).
6. Evers, K., Chen, S., Rothmann, S., Dhir, A., & Pallesen, S. (2020). Investigating the relation among disturbed sleep due to social media use, school burnout, and academic performance. *Journal of Adolescence*, 84(1), 156-164.
7. Fardoun, H., Alghazzawi, D., López, S., Penichet, V., & Gallud, J. (2012). Online Social Networks Impact in Secondary Education. *International Workshop on Evidence-Based Technology Enhanced Learning*, 37-45.
8. Kokoç, M. (2021). The mediating role of attention control in the link between multitasking with social media and academic performances among adolescents. *Scandinavian Journal of Psychology*, 62(4), 493-501.
9. Maqableh, M., Rajab, L., Quteshat, W., Masa'deh, R., Khatib, T., & Karajeh, H. (2015). The Impact of Social Media Networks Websites Usage on Students' Academic Performance. *Journal of Communications and Network*, 7(4), 159-171.

10. Martin, F., Wang, C., Petty, T., Wang, W., & Wilkins, P. (2018). Middle School Students' Social Media Use. *Journal of International Forum of Technology & Society*, 21 (1), 213-224.
11. Masthi, N.R., Pruthvi, S., & Mallekavu, P. (2017). A Comparative Study on Social Media Addiction Between Public and Private High School Students of Urban Bengaluru, India. *ASEAN Journal of Psychiatry*, 18 (2).
12. May, K., & Elder, A. (2018). Efficient, helpful, or distracting? A literature review of media multitasking in relation to academic performance. *International Journal of Educational Technology in Higher Education*, 15(1).
13. Raj, M., Bhattacharjee, S., & Mukherjee, A. (2018). Usage of Online Social Networking Sites among School Students of Siliguri, West Bengal, India. *Indian Journal of Psychological Medicine*, 40(5), 452-457.
14. Simsek, A., Elciyar, K., & Kizilhan, T. (2019). A Comparative Study on Social Media Addiction of High School and University Students. *Journal of Contemporary Educational Technology*, 10(2), 106-119.
15. Sümen, A., & Evgin, D. (2021). Social Media Addiction in High School Students: A Cross-Sectional Study Examining Its Relationship with Sleep Quality and Psychological Problems. *Journal of Child Indicators Research*, 14(6), 2265-2283.
16. Weinstein, E. (2018). The social media see-saw: Positive and negative influences on adolescents' affective well-being. *Journal of New Media & Society*, 20(10), 3597-3623.
17. Yates, A., Starkey, L., Egerton, B. and Flueggen, F., 2020. High school students' experience of online learning during Covid-19: the influence of technology and pedagogy. *Journal of Technology, Pedagogy and Education*, 30(1), 59-73.