Perception on Online Education using Social Media Learning among Higher Secondary School Students with Special Reference to the Pandemic Period

Mr.B. Ganeshprabhu[1], Dr. K. Jayaraj[2]

[1]Research Scholar, Department of Visual Communication, Hindustan College of Arts and Science, Coimbatore, Tamil Nadu, India
[2]Department of Visual Communication, Guest Faculty, Government Arts College, Sathyamangalam, TamilNadu, India

Email: [1]Lmbganesh@gmail.com, [2]jayarajviscom@gmail.com

Abstract: The present study examined the Perception on Online Education using social media learning among Higher Secondary School Students with Special Reference to the Pandemic Period. The researcher randomly selected 250 higher secondary school students who have online education through social media among higher secondary school students from different schools in the Coimbatore district. The investigator constructed a self-made tool for this study and framed 35 statements for perception on online education using social media learning among higher secondary school students. The tool reliability value was 0.887. The results showed that many students used social media in online education, particularly in Google classroom; YouTube, Whatsapp, Zoom Meet, Linkedin, and weber Meet, during the pandemic period in academic programs. The study's findings also suggest that the online education system could positively impact the students' academic progress and their regular classroom teaching. Online education using social media progresses the students' cooperative learning, and their declaration with the teachers becomes in formal, which means, in terms of student-centred education, online education is critical.

Keywords: Online education, Perception, Higher Secondary school students, Social media.

1. INTRODUCTION

Online education using social media is websites and applications that enable users to create and share content or participate in social networking. Social media is not just restricted to posting images about holidays online. Online education using social media has increased credibility over the years as a reliable source of evidence and platform where organisations can intermingle with audiences. With the pandemic period-a corona virus disease spreading across the globe, many countries have ordered the closure of all schools. Higher Secondary schools have come to a functional standstill since they had to protect their students from viral exposures, likely in a highly socialising student community. As the schools are shut for an indefinite period, both higher secondary schools and students are experimenting with ways to complete their prescribed syllabi in the stipulated time frame in line with the academic

calendar. These measures have certainly caused a degree of inconvenience, but they have also prompted new examples of educational innovation using digital interventions.

This is a silver lining on a dark cloud considering the sluggish pace of reforms in higher secondary schools, which continues with millennia-old lecture-based approaches in teaching, ingrained institutional biases and obsolete classrooms. Nevertheless, COVID-19 has been a trigger for schools worldwide to pursue creative approaches relatively quickly. During this time, most schools have shifted to online mode using Blackboard, Microsoft Teams, Zoom, or other online platforms.

2. REVIEW OF RELATED STUDIES

Sofianidis et al. (2021) investigated students talk about emergency remote teaching experience among secondary students' perceptions on their experience during the covid-19 pandemic. From students ' perspectives, this research aimed to comprehend the impact of the first school closure on secondary education in Cyprus. Through the direction of an online survey with both closed and open questions. The study also provoked students' suggestions, based on their knowledge's from the lockdown period, on refining training in case of further lockdown(s) and the post-COVID-19 era. Three hundred twenty-two students of both upper and lower secondary education participated in the study. The appreciated understandings increased from this study exemplify how significant it is for educators and educational policymakers to give voice to students, carefully listen to what learners stroked worked and what did not throughout the period of remote learning, and develop strategies and policies that integrate their feedback.

Moliner et al. (2021) revealed E-Learning during the COVID-19 Pandemic in Spain among a case study with high school students. Results showed a continuous decrease in the number of students who preferred the first option, switching progressively from online live classes to pre-recorded classes as the weeks passed. The results also obtained a progressive decrease as students preferred to watch the teacher's explanations several times. Although e-learning is necessary for the 21st century, especially during the current pandemic, controlling students' level of application to distance work and online learning is still a challenge.

Budur and Taylan (2020) studied the role of online teaching tools on the perception of the higher secondary students during the lockdown of Covid-19. The results showed that the minor majority of the answers satisfied experiencing online education, which is considered acceptable because it was the first experience. Moreover, even though 40% of them were happy about online education, more than half of the respondents received lower than expected.

Objectives of the Study
- ❖ To find out the level of perception on online education using social media learning among higher secondary school students with special reference to the pandemic period
- ❖ To find out the significant difference in the mean score of perception on online education using social media learning among higher secondary school students' special reference to the pandemic period based on select sub-samples
  - Gender   :Male/Female
  - The locality of the Residence   : Rural / Urban
  - Social media using time for per day   : Below 1 hour/2 to 3/ Above 3 hours

Hypotheses of the Study
- ❖ The level of perception on online education using social media learning among higher secondary school students with special reference to the pandemic period is moderate
- ❖ There is no significant difference between male and female higher secondary school students towards opinion on social media learning based on the select sub-samples
  - Gender   : Male/Female
  - Locality of the Residence   : Rural / Urban
  - Social media using time for per day   : Below 1 hour/2 to 3/ Above 3 hours

3. RESEARCH METHODOLOGY

Research in common parlance mentions exploring information and can also rapidly research as a scientific and systematic search for suitable substantial on a specific theme. Kerlinger (1974) revealed that the research is the control, experimental and severe examination of hypothetical recommendations about theoretical relations among general phenomena". The researcher used a survey method and used simple random sampling technique for this study.

Variable

The researcher considered the variable in two parts Main variable and the Demographic variable for the present study. The main variable is a perception of online education using social media learning and in the current study, the following demographic variables are considered as
- Gender   :Male/Female
- The locality of the Residence   : Rural / Urban
- Social media using time for per day   : Below 1 hour/2 to 3/ Above 3 hours

Research Tool Used in the Study

Research tools are the means for describing and quantifying the data collected by the investigator. Many different methods and procedures have been developed to aid in the distinctive ways of describing and quantifying data. The investigator constructed a self-made tool with 35 statements for Perception on Online Education using Social Media Learning among higher secondary school students.

Scoring Procedure of the Tool

Perceptions on Online Education using Social Media Learning are arranged in Likert type method having 35 statements. The tool consists of 28 Positive questions and seven negative questions. The opinion questionnaire is in a four-point scale type as Strongly Agree, Agree, Disagree and Strongly Disagree. In the Positive questions, the Scores are to be given as 4,3,2,1 for strongly agree, agree, disagree and strongly disagree, respectively. In the negative questions, the scores are to be given as 1,2,3,4 for strongly agree, agree, disagree, and strongly disagree, respectively. The minimum score of the scale is 35, and the maximum score of the scale is 140.The responses were instrumented to read the statement carefully and put a tick mark (√) in the appropriate column.

Pilot Study

The researcher selected 35 statements for Perception on Online Education using Social Media Learning. The pilot study helped to determine the sustainability of the tool used

in the present study. The pilot study is a small replica of the main study and suitability of the tools; the selected researcher has conducted 50 higher secondary school students to establish a pilot study. The investigator carefully scored the collected data.

Reliability

Reliability refers to the consistency of assets of test scores. A test is reliable to the extent that it measures whatever it measures consistently. In tests that have a high coefficient of reliability, measurement errors have been reduced to a minimum. Reliable tests are stable in whatever they measure and yield comparable scores on repeated administration. It is usually expressed as a correlation coefficient. The reliability of a test may be raised by collective the number of items of equal value to the additional items. A test may be reliable even though it is not valid. However, for an examination to be valid, it must be reliable (Rajkumar and Hema, 2021).

To find out the reliability of Perception on Online Education using Social Media Learning among higher secondary school students using the Split Half method. It was administered to the researcher first to score the marks on each item in the tool. Then the items are divided into odd and even numbers. Then it's compared and correlated. The correlated value applies in the Spearman-Brown formula. The calculated reliability value is 0.887 as reliable. Therefore, the tool is finalised and standardised.

Validity

Validity is the quality of a data-gathering instrument (or) procedure that enables it to measure and is supposed to be measure. The researcher cheeks the validity of the tool through Content validity and Face validity. Based on the subject expert's opinion, some items are modified.

Content Validity

In this study, the validity of the test items was determined by content validity done by the educational experts and my research guide.

Face Validity

The method of common-sense approach gives face validity, or a reasonable judgement about the items in the tool ensures content validity. The face validity of the questionnaire was accepted to be very high, and it was established through the items shown to faculties of visual communication departments.

The population of the study

A population is any group of people that have been one or more characteristic is common that are of interest to individuals that have been one or more characteristic is common that are interest to the researcher. The population of the present study consists of students studying in higher secondary school students at Coimbatore district.

Sample of the Study

A sample is a small proportion of a people selected for observation and analysis. The investigator used a simple random sampling technique to collect data. The investigator has selected 250 higher secondary students from government schools in the Coimbatore district. The sample contains both males and females.

Sampling Technique and Sample Distribution

In any social research, various methods are utilised for the selection and drawing of samples. After a detailed study of these methods and considering the variables selected for the research work, the simple random sampling method was initiate to be most suitable for this study.

Location of the Study

The present investigation is carried out with the higher secondary school students at Coimbatore district at Tamil Nadu, India.

Method of Data Collection

Having presented the study tool, it is appropriate at this stage to explain the data collection procedure. After getting permission from the concerned school head, the investigator reasonably approached the students and explained the importance of the investigation and their role in the investigation briefly. Then inventory was handed over to the subject and explained the response procedure. They were assured that the information given by them would be kept confidential. After the completion, the inventory was collected from them, and the investigator thanked them for their cooperation. Later all the entire response sheets were recorded. With the help of the grading key, the data was tabulated. The filled-in scale was tabulated. Then the data were analysed statistically using methods are descriptive analysis and differential analysis.

Statistical Techniques Used

In this study, the investigator used descriptive and differential statistics for the analysis of data. Mean, Standard deviation was calculated as descriptive analysis. 't' test and 'F' test are calculated as differential analysis. This research comes under the quantitative type of research.

4. DATA ANALYSIS

Percentage Analysis

The following tables show the percentage analysis of higher secondary school students' perception on Online Education using social media learning.

Table 1.1
Frequency and Percentage Analysis on social media using time for per day among Higher Secondary School Students

Social Media Using Time for Per Day	Frequency	Percentage (%)
Below 1 Hour	77	30.8
2-3	94	37.6
above4 hours	79	31.6
Total	250	100.0

The above table 1.1 shows that social media use time per day for online education among higher secondary school students. Out of 250 higher secondary school students, 30.8% are below 1 hour using social media in online education per day, followed by 37.6% are 2 to 3 hours, and 31.6% are above 4 hours using social media in online education per day.

Table 1.2

Frequency and Percentage Analysis on Number of Social Media Use among Higher
Secondary School Students

Number of Social Media Use	Frequency	Percentage (%)
One	41	16.4
Two	86	34.4
Three and Above	123	49.2
Total	250	100.0

Above table 1.2 shows the number of Social Media uses for online education among higher secondary school students. Out of 250 higher secondary school students,16.4% of students are one social Media use, followed by 34.4% are Two Social Media use, and 49.2% are three and several social media uses for online education among higher secondary school students.

Table 1.3

Frequency and Percentage Analysis on Mostly using social media in Online Education among
Higher Secondary School Students

Mostly Using Social Media	Frequency	Percentage (%)
Google Classroom	83	33.2
YouTube	52	20.8
Whatsapp	36	14.4
Zoom Meet	25	10.0
Linkedin	18	7.2
Weber Meet	17	6.8
Others	19	7.6
Total	250	100.0

The above table 1.3 shows that Mostly using social media in Online Education Purpose among higher secondary school students. Out of 250 higher secondary school students33.2% of students are Google Classroom using social media in online Education Purpose, followed by 20.8% are YouTube, 14.4% are whatsapp,10.0% are Zoom Meet using, 7.2% are Linkedin using, 6.8% are Weber Meet using, 7.6% are Others using Social media in Online Education Purpose.
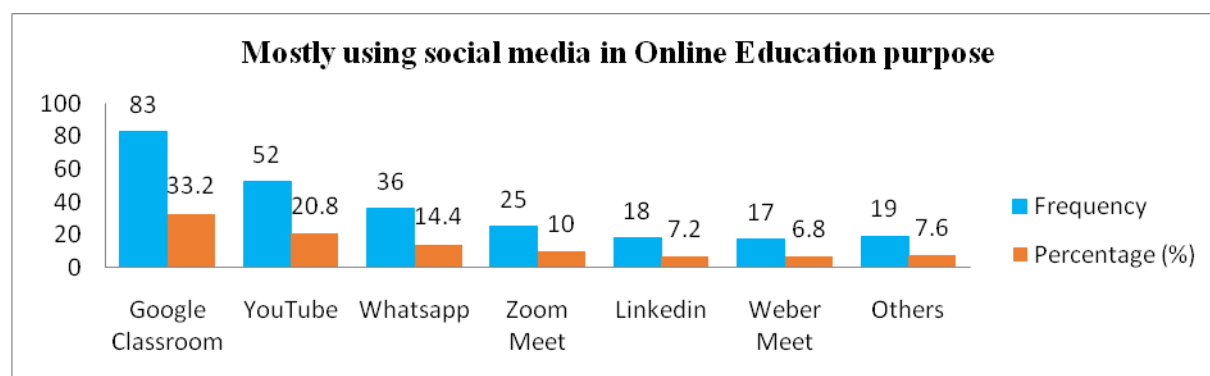

Fig. 1.3 Frequency and Percentage of Mostly using social media in Online Education purpose

TESTING OF HYPOTHESES

Hypothesis – 1

There is no significant difference between male and female higher secondary school students towards opinion on social media learning

Table 1.4

Significance of Difference between Male and Female Higher Secondary School Students' Perception on Online Education using Social Media Learning

Gender	N	Mean Score	Standard Deviation	't' Value	'P' Value	Level of Significance 0.05
Male	105	128.30	12.290	1.645@	0.107	Not Significant
Female	145	130.76	11.145			

@ - Not Significant at 0.05 Level

Table 1.4 noted that the calculated 't' – Value 1.645 is less than the tabulated value 1.96 at a 0.05 level of significance. Consequently, the null hypothesis is accepted. Hence, it is inferred that there is no significant difference between male and female higher secondary school students towards perception on online education using social media learning. Here female students (M = 130.76) have a high perception on online education using social media learning than male Students (M = 128.30).

Hypothesis-2

There is no significant difference between rural and urban higher secondary school students towards perception on online education using social media learning

Table 1.5

Significance of Difference between Rural and Urban Higher Secondary School Students towards Perception on Online Education Using Social Media Learning

Locality	N	Mean Score	Standard Deviation	't' Value	'P' Value	Level of Significance 0.05
Rural	143	129.36	12.133	0.580 @	0.557	Not Significant
Urban	107	130.22	11.080			

@ - Not Significant at 0.05 Level

Table 1.5 noted that the calculated 't' – Value 0.580 is less than the tabulated value 1.96 at a 0.05 level of significance. Consequently, the null hypothesis is accepted. Hence, it is inferred that there is no significant difference between rural and urban higher school students towards perception on online education using social media learning. Here, Urban students (M = 130.22) have a high perception on online education using social media learning than rural students (M = 129.36).

Hypothesis-3
There is no significant difference Among 1 hour, 2 to 3 hours, and above 4 hours of higher secondary school students towards perception on online education using social media learning

Table 1.6 (a)
Descriptive analysis based on Social Media using time for per day in Online Education

Social Media Using Time for Per Day	N	Mean	SD
Below 1 Hour	77	129.22	12.169
2 to 3 Hour	94	128.12	11.420
4 hour above Hour	79	132.14	11.240
Total	250	129.82	11.609

Table – 1.6 (b)
Significance of Difference in the Perception on Online Education using Social Media among Higher Secondary School Students with respect to Social Media Using Time for Per Day

Source of Variation	Sum of Square	Mean Square	'F' Value	'P' Value	Level of Significance @0.05
Between Groups	723.076	361.538	2.687	0.070	Not Significant
Within Groups	33238.428	134.569			

@ - Not Significant at 0.05 Level
Table 1.6(b) noted that the calculated 'F' – Value 2.687 is less than the tabulated Value 3.00 at 0.05 level of significance. Consequently, the null hypothesis is accepted. Hence, there is no significant difference among 1 hour, 2 to 3 hours, above 4 hour of higher secondary school students towards the perception on online education using social media learning. Here, Table – 1.6(a)four hours above students (M = 132.14) have a high perception on online education using social media learning than the below I hour students (M = 129.22) and 2-to-3-hour Students (M = 128.12).

5. FINDINGS OF THE STUDY

✓ Out of 250 higher secondary school students, 30.8% are below 1 hour using social media in online education per day, followed by 37.6% are 2 to 3 hours, and 31.6% are above 4 hours using social media in online education per day.
✓ Out of 250 higher secondary school students, 16.4% of students are one social Media use, followed by 34.4% are Two Social Media use, and 49.2% are three and above several social media uses for online education among higher secondary school students.

✓ Out of 250 higher secondary school students, 33.2% of students are Google Classroom using social media in online Education Purpose, followed by 20.8% are YouTube, 14.4% are Whatsapp,10.0% are Zoom Meet using, 7.2% are LinkedIn using, 6.8% are Weber Meet using, 7.6% are Others using social media in Online Education Purpose.

✓ There is no significant difference between male and female higher secondary school students' perceptions on online education using social media learning. However, female students (M = 130.76) have a high perception on online education using social media learning than male students (M = 128.30).

✓ There is no significant difference between rural and urban higher secondary school students' perception on online education using social media learning. However, Urban students (M = 130.22) have a high perception on online education using social media learning than rural students (M = 129.36).

✓ There is no significant difference among 1 hour, 2 to 3 hours, above 4 hours of higher secondary school students' perception of online education using social media learning. However, four hours above students (M = 132.14) have a high perception on online education using social media learning than the below I hour students (M = 129.22) and 2 to 3-hour Students (M = 128.12).

6. EDUCATIONAL IMPLICATIONS

❖ The board of school education and school heads should motivate the school students to use online education using social media as complementary tools of learning in the pandemic period.

❖ The private and government school educational institutions should harness the potentials of social media for educational progress.

❖ The school educational institutions should guide the students to ensure judicious use of online education using social media and prevent harmful addiction of social media.

❖ The school heads and teachers should enable the students to gain mastery over social media applications and achieve success in their academic pursuits.

❖ The schools should encourage the teachers to design and incorporate social media activities into their course syllabi.

❖ The educational institutions should use new social media classroom approaches that extend and enhance teacher-student interactions in the pandemic.

❖ Educational institutions should develop online education using social media ethics to promote better learning and social networking culture.

❖ This study is very much useful for media experts. By knowing the social media usage and acceptance of the student community towards social media, the media experts may modify the social media tools suitable for the day-to-day teaching-learning process, leading to the proper integration of social media into the educational system. This study may help future researchers to conduct new studies with different settings and variables.

7. CONCLUSION

The result of the study found that out of 250 higher secondary school students, 30.8% of students are below 1 hour using social media in online education per day, followed by 37.6% are 2 to 3 hours, and 31.6% are above 4 hours using social media in online education

per day; 16.4% of students are one social media use, followed by 34.4% are two social media use, and 49.2% are three and several social media use for online education among higher secondary school students; 33.2% of students are Google Classroom using social media in online Education Purpose, followed by 20.8% are YouTube, 14.4% are WhatsApp,10.0% are Zoom Meet using, 7.2% are Linkedin using, 6.8% are Weber Meet using, 7.6% are Others using social media in Online Education Purpose. The significant findings of the study are there is no significant difference between male and female higher secondary school students towards perception on online education using social media learning; There is no significant difference between rural and urban high school students towards perception on online education using social media learning; and there is no significant difference among 1 hour, 2 to 3 hour, above 4 hours of higher secondary school students towards perception on online education using social media learning. Online education is now with lots of services and resources. These services and resources can make use by the users of social media. This paper is also known that the use of online education among higher secondary school students can make use of interaction services, blogging services, and group services in their studies and use social media effectively to search for school students and their career opportunities.

8. REFERENCES

[1] Al-Qaysi, N., Mohamad-Nordin, N., and Al-Emran, M. (2020) Employing the technology acceptance model in social media: A systematic review. Education and Information Technologies, 25, 4961-5002.

[2] Al-Rahmi, W., Othman, M. S., and Yusuf, L. M. (2015) The role of social media for collaborative learning to improve academic performance of students and researchers in Malaysian higher education. The International Review of Research in Open and Distributed Learning, 16(4).

[3] Ansari, J. A. N., and Khan, N. A. (2020) Exploring the role of social media in collaborative learning the new domain of learning. Smart Learning Environments, 7(1), 1-16.

[4] Bicen, H., andUzunboylu, H. (2013) The use of social networking sites in education: A case study of Facebook. J. UCS, 19(5), 658-671.

[5] Bilgici, B. G., Akyuz, H. I., andBilgici, G. (2018). Examination of Student Opinions on the Use of Social Media in Educational Environments. Online Submission.

[6] Bold, U., andYadamsuren, B. (2019) Use of social media as an educational tool: Perspectives of Mongolian university educators. In Proceedings of the 10th International Conference on Social Media and Society (pp. 233-243).

[7] Budur, T. (2020) The role of online teaching tools on the perception of the students during the lockdown of Covid-19. International Journal of Social Sciences and Educational Studies, 7(3), 178-190.

[8] Deka, P. P. (2015) A study on impact of social media on educational efforts in Guwahati City, Assam. International Journal of Advanced Research in Education Technology, 2(3), 90-94.

[9] Delello, J. A., McWhorter, R. R., and Camp, K. M. (2015) Using social media as a tool for learning: A multi-disciplinary study. International Journal on e-learning, 14(2), 163-180.

[10] Fozdar, B. I., and Kumar, L. S. (2007) Mobile learning and student retention. International Review of Research in Open and Distance Learning, 8(2), 1-18.

[11] Genden, S. (2005)The use of multimedia in online distance learning. Genden Design: Instructional Design and Technology, 1-16.

[12] Gok, T. (2016) The Effects of Social Networking Sites on Students' Studying and Habits. International journal of Research in Education and Science, 2(1), 85-93.

[13] Greenhow, C., and Askari, E. (2017) Learning and teaching with social network sites: A decade of research in K-12 related education. Education and information technologies, 22(2), 623-645.

[14] Grover, V. K. (2014) Social Media as an educational tool: Opportunities and challenges. International Journal of Innovative Research and Studies, 3(2), 269-282.

[15] Guo, R., Shen, Y., and Li, L. (2018) Using social media to improve student-instructor

[16] Hossein-Mohand, H., Gómez-García, M., Trujillo-Torres, J. M., Hossein-Mohand, H., andBoumadan-Hamed, M. (2021). Uses and Resources of Technologies by Mathematics Students Prior to COVID-19. Sustainability, 13(4), 1630.

[17] Hussain, I., Cakir, O., andCandeger, Ü. (2018) Social Media as a Learning Technology for University Students. International Journal of Instruction, 11(2), 281-296.

[18] Junco, R., Heiberger, G., andLoken, E. (2011) The effect of Twitter on college student engagement and grades. Journal of computer assisted learning, 27(2), 119-132.

[19] Krishnakumar, R., and Rajesh, K. M. (2011) Attitude of Teachers' of Higher Education towards E-learning. Journal of Education and Practice, 2(4).

[20] Kuppuswamy, S., and Narayan, P. S. (2010) The impact of social networking websites on the education of youth. International journal of virtual communities and social networking (IJVCSN), 2(1), 67-79.

[21] Laburi, R., Navulla, D., and Yamini, P. (2019) Effect of social media networks on academic performance of Indian students. Journal of Critical Reviews, 6(4), 71-78.

[22] Madhusudhan, M. (2012) Use of social networking sites by research scholars of the University of Delhi: A study. The International Information and Library Review, 44(2), 100-113.

[23] Mahdiuon, R., Salimi, G., andRaeisy, L. (2019) Effect of social media on academic engagement and performance: Perspective of graduate students. Education and Information technologies, 1-20.

[24] Malini, K., and Rajkumar, R. (2019) Understanding the factors which cause the language anxiety among the secondary school level teachers in language classroom and suggesting the ways of mitigation. Journal of Analysis and Computation (JAC), 1-16.

[25] Ortega-Maldonado, A., Llorens, S., Acosta, H., and Coo, C. (2017) Face-to-Face vs On-Line: An Analysis of Profile, Learning, Performance and Satisfaction among Post Graduate Students. Universal Journal of Educational Research, 5(10), 1701-1706.

[26] Rajkumar, R., and Hema, G. (2016) Modern mathematics classrooms facilitating innovative teaching methods and learning strategies for 21st century learners. Edusearch, 7, 70-74.

[27] Rajkumar, R., and Hema, G. (2021) Competitive exam aspirants on mathematics interest and anxiety: an analysis of undergraduate students. EPRA International Journal of Multidisciplinary Research (IJMR).7(8), 354-358. DOI: 10.36713/epra2013.

[28] Rajkumar, R., Hema, G., and Malini, K. (2019) Engage Stakeholders on Capacity Building Development Programme for Undergraduate Students in Mathematical Problem Solving Competence for Competitive Examination Using Multimedia Technology - An Innovative Focus on Startup India. The International Journal of Analytical and Experimental Model Analysis, 11(8), 488-493.

[29] Raman, A., Don, Y., Khalid, R., andRizuan, M. (2014) Usage of learning management system (Moodle) among postgraduate students: UTAUT model. Asian Social Science, 10(14), 186-192.

[30] SantoveñaCasal, S. (2019) The impact of social media participation on academic performance in undergraduate and postgraduate students. International Review of Research in open and Distributed learning, 20(1).

[31] Slim, H., andHafedh, M. (2019) Social media impact on language learning for specific purposes: A study in English for business administration. Teaching english with technology, 19(1), 56-71.

[32] Sofianidis, A., Meletiou-Mavrotheris, M., Konstantinou, P., Stylianidou, N., andKatzis, K. (2021) Let Students Talk about Emergency Remote Teaching Experience: Secondary Students' Perceptions on Their Experience during the COVID-19 Pandemic. Education Sciences, 11(6), 268.

[33] Sorden, S. D., and Ramírez-Romero, J. L. (2012) Collaborative learning, social presence and student satisfaction in a blended learning environment. In 2012 IEEE 12th International Conference on Advanced Learning Technologies (pp. 129-133). IEEE.

[34] Sponcil, M., andGitimu, P. (2013) Use of social media by college students: Relationship to communication and self-concept. Journal of Technology Research, 4(1), 37-49.

[35] Thiyagu, K. (2012) Perception towards Mobile Learning Activities among Post Graduate Students. Journal on School Educational Technology, 8(1), 35-40.

[36] Wang, Q., Chen, W., and Liang, Y. (2011) The effects of social media on college students. MBA Student Scholarship, 5, 1-12.

[37] Wankel, Charles.(2009) "Management education using social media." Organization Management Journal 6.4 : 251-262.

[38] Zhang, Z., and Bayley, J. G. (2019) Peer Learning for University Students' Learning Enrichment: Perspectives of Undergraduate Students. Journal of Peer Learning, 12(5), 61-74.