Behavioural Pattern of School Students towards E-learning Platform during Covid 19 period with special reference to Coimbatore city – An Emperical study.

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Abstract

E-learning has taken it full fudged emergence with regards to Covid Scenario. Also, the lockdown of schools and playgrounds, the restriction of outdoor activities, physical and social isolation leads to the behavioural change among school children. Students are more attached to their schools, teachers and friends. But Covid 19 has changed the entire situation changed and they were held in their home itself. Students were not able to meet their friends and teachers, they especially miss their school and class environment. It is to be noted that maintaining social isolation and following "Stay at Home" plays a very high impact among school students. Also, the lockdown created for families and children sit inside their homes. Which ,We cannot leave children's education as it is. In order to continue their education, Indian Government has taken many efforts. Even schools are doing their best to bridge the gap between teachers and students by providing online education because of the absence of regular classroom education. Because of the introduction of online class by schools, on the one side students are not missing the education, on the other side students and parents faces a lot of problems (Physical and mental. It also puts them at the risk of unsupervised access to websites and other unwanted sites in internet.

As a researcher, my study is all about Behavioural Pattern among school students and its sustainability.

Key Words:

E-Learning, Sustainability, ICT, Problems Faced, Subject Taught,

1. INTRODUCTION

The current scenario is experiencing speedy changes in the field of education. These changes are due to revolts in information and communication technology (ICT). Introduction of computers, mobiles, and the Internet, sharing information has become very easy. Similarly, new computing models such as cloud computing and data centres offer unlimited computing and storage facilities. With the Sustainability increasing penetration of ICT, new technology-mediated learning methods such as E-learning have evolved. This offers lifelong continuous learning chances to remain well-organized and efficient E-learning delivers richer resources than the traditional classroom in improving teaching/learning and the barriers of conventional teaching. E-learning has become an effective methodology of teaching and learning at educational institutions. E-learning may prove to be motivational in terms of multimedia usage than conventional method. Also, it can be energized with gamification technology in order to provide learning motivation, and initiatives such as some skill based subjects may facilitate better learning through teamwork and fun. The United Nations Educational, Scientific, and Cultural Organization (UNESCO)

ISSN: 2005-4289 IJDRBC Copyright ©2020 SERSC considers E-learning as "learning through the internet and multimedia". In the present scenario of knowledge and information society, E-learning, using advanced ICT. As the latest teaching methods such as E-learning are very much in demand, educational institutions are becoming prudent in prioritizing the adoption of E-learning. Factors like infrastructure and environment, educators' competency, delivery of course contents, and change-agents must be considered and adapted appropriately to achieve successful E-learning implementation.

A. Need for the Study

E-Learning is one of the most effective teaching methods used to replace conventional Teaching method. Also, due the concern of educational quality and student's safe due to this closure of months were teaching is replaced by E-learning. This closure may extend till this academic year and this effect has influenced to the usage of technology Thus, this research enhances the prior research on students' learning behaviours for the closure of schools, with experiential evidence from a developing country.

B. Scope of the Study

This article contributes to declining the long-term side effects of COVID-19, fostering sustainable development e-learning education, not only in school and extended throughout regular activities for all dimension in academic and progression. Also, the scope of the study is enhancing capabilities when reacting to similar chaotic situations in the future.

C. Objectives of the Study

- To examine the gender difference towards the factors of E-Learning
- To Analyse Income group difference towards the factors of E-Learning
- To find the association between hours of studying and satisfaction of Parents
- To find the association between Fees collected by schools and satisfaction of Parents.
- To identify the factors of problems faced by the students which are highly influencing for different education group

2. REVIEW OF LITERATURE

Naim Ahmad et al., (2018) explain about the E-learning, which is a technology-mediated learning approach, is adopted for teaching/learning mode for shifting knowledge. Attaining sustainability and performance in its delivery is of dominant importance. Fifteen CSFs have been identified through the literature review and experts opinion. These CSFs have been modelled for interdependence using structural modelling and analysis. Further, the model has been authenticated through in-depth interviews. Hence, it provides quantification of CSFs of E-learning in terms of their driving and dependence powers and their classification thorough analysis.

Hwang-Ji Lu (2017) mentioned in his study that through the growth of internet, correspondence learning has become an alternative alternative source for earning a degree. Social presence is one of the serious factors for forming and sustaining learning groups that keep deeper learning through knowledge sharing. Social presence does not occur naturally and is in need of cultivation. Hence author suggest that with the integration of software into classrooms, instructors can increase social presence, which enrich student's learning experience and satisfaction to reduce time and physical barriers existing in the online learning environment.

Hongchi Schi et al., (2016) in their work they have focused on the capacity of intelligent influencing factors in e-learning environments. For this research article they have used central problem modelling for Human learners to facilitate the personalized learning, Here solution used is connectionist approach. Hence, the Human instructor is replaced by intelligent agent which exploits the Self- Organising Model (SOM) learner behaviour model in order to achieve the goal. Finally based on the result SOM Model has been executed, to support the e-learning environment.

ISSN: 2005-4289 IJDRBC Copyright ©2020 SERSC Bejanyan et al., (2015) mentioned that parents from various backgrounds rarely forgot to put their desires into their children. That explains youngster's lack of interest in learning because of parents' pressure to follow their wishes.

Ji Won You (2015) aimed to investigate the effect of academic delay on e-learning course achievement. Because all of the interactions among students and contents in an e-learning environment were automatically recorded in a learning management system (LMS).

Postponing such as the delays in weekly schedule learning and submission of assignment could be identified from the log data,567 college students who enrolled in e-learning course in Korea, the absence and late submission of assignments were chosen to measure academic procrastination and course.

Yoshika et al., (2015) explain in their study about behavioural types in e-learning and their relationship with learning outcomes. For this survey they have choosen national university students of japan with regard to the visualization of learning behaviour were identified in seven distinct types they are Postponement, Knowledge habit, Accidental, Reduced Drive, Initial Bird, Badge and Catch-up. Also in their second part of their study result shows there is significant relationship between their learning type and ultimate learning outcomes. Hence from their result they have concluded that regulated learning could increase learning effectiveness, which will lead to wholesome learning Outcome in e-learning.

Garcia et al., (2012) found the moderating effect of adolescent—parent relationships over learning outcomes and self-efficacy. Specifically, the higher the self-efficacy, the better the learning outcomes.

Sawitri & Creed (2012) presumed that being compatible with parents' direction might never be a deadend road when their parents smooth their career aspirations by the frequent encouragement and unceasing concern. However, all of these results have supported some good points from the congruence without validating its direct impact on learning habits at home.

Stylianos Asteriadis et al., (2008) Most e-learning environments which utilize user feedback or profiles, collect such information based on questionnaire, the questionnaire is based on the behavioural state of the user for e-learning. Some observations are based on the gesture and posture movements and provides estimation for the level of interest and engagement in online platform.

3. RESEARCH METHODOLOGY

Sampling means selecting a sample from a population. There are five steps in sampling design which are defining the population, determine the sampling frame, select sampling techniques, determine the sample size and execute the sampling process. Through these steps, it helps to identify the qualified target respondents to participate in the survey (Kuul, 1984).

In order to address the research aim the participants are selected using a non-probability sampling method. For the purpose of the study, those students attending online classes in Coimbatore are selected as population. **Sampling procedure:**

The sampling procedure used is convenience sampling. The sampling is selected on the basis of convenience in and around Coimbatore which served as main factor for the selection of the sampling procedures. Hence the sampling method applied is convenient sampling. Convenience sampling is non-probability sampling technique, where subjects are selected because of their c convenience and closeness to the researchers.

Results and Discussions

1) To examine the gender difference towards the factors of E-Learning

Ho: There is no difference between Gender and subject taught, Problems and time spent on online class.

Table 1

Factors	Gender	N	Mean	SD	F	DF	Sig 2 tail	Mean diff	sig	Null Hypothesis
Subject taught	Female	45	2.9074	1.22400	.392	102	.432	.18707	.533	Accepted
	Male	59	2.7203	1.17788		92.934	.435	.18707		
Problems	Female	45	2.2848	.79598	.482	102	.781	.04448	.489	Accepted
	Male	59	2.2404	.81517		95.965	.781	.04448		
Time	Female	45	2.6000	.95926	.102	102	.270	.21017	.750	Accepted
spent	Male	59	2.3898	.95567		94.674	.270	.21017		

From the above table (1), *subject taught, problems faced by students and time spent* by students on online class have significance value of more than 0.05.

Hence, null hypothesis has been accepted. Therefore, it is evident from the table there is no significance difference exists between gender and *subject taught, problems and time spent by students* on online class.

2) To Analyse Monthly Income of the respondents and Factors of E-Learning

Null Hypothesis: There is no significant difference between the Monthly Income and Factors of E-Learning

Table 2

Factors	Monthly Income	Sum of Squares	Df	Mean Square	F	Sig.	Null Hypothesis
Problems faced by	Between Groups	7.336	4	1.834	3.070	.020	Rejected
the students	Within Groups	59.134	99	.597			
	Total	66.470	104				
Time spent	Between Groups	6.376	4	1.594	1.789	.137	Accepted
	Within Groups	88.210	99	.891			
	Total	94.587	104				

From the above table (2), it is observed that the null hypothesis (0.05) is rejected for the factor **Problem** faced by students. But for the factor Monthly Income by the student on online class is accepted stating that there is no relationship between time spent on study and board of study.

3) To find the association between hours of studying and satisfaction of Parents

Null Hypothesis: There is no association between the hours of study and satisfaction of Parents Table 3

		Hours								
		Less than 1 hr	1-2 hrs	2-3 hrs	More than 3 hrs	Total				
Satisfaction	Yes	6	12	4	12	34				

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	19.179 ^a	4	.001
Likelihood Ratio	17.750	4	.001
		1	
Linear-by-Linear Association	4.832	1	.028
N of Valid Cases	104		

It is inferred form the above table that, the calculated value (0.001) is less than the table value (0.05). Hence there is no association between fees collected by schools and satisfaction of parents for online class.

4) To identify the factors of problems faced by the parents which are highly influencing for different education group

Table 5

Score in Dimention					Contribution					
Class	Mass	1	2	Inertia	Of Point to Inertia of Dimension		Of Dimension to Inertia of Point		nertia of	
		1	2		1	2	1	2	Total	
Kinder garden	.087	200	.155	.007	.007	.008	.214	.076	.290	
Lowr Primary	.240	865	.022	.085	.389	.000	.977	.000	.978	

Upper primary	.269	.872	.477	.112	.443	.223	.845	.151	.996
secondary education	.144	.551	-1.204	.078	.095	.759	.260	.740	1.000
Higher sec.edu	.260	343	.102	.015	.066	.010	.916	.048	.964
Active Total	1.000			.298	1.000	1.000			

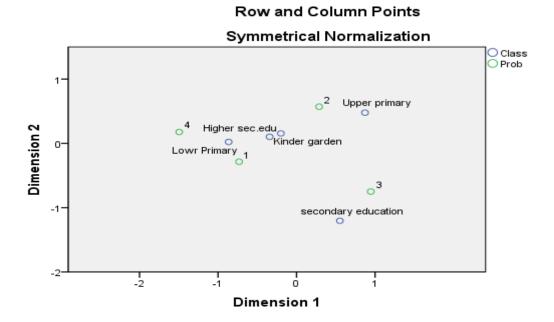
1. Symmetrical normalization

Table: 6
Overview Column Points^a

		Score in Dimention			Contribution					
Problem	Mass	1	2	Inertia	Of Point to Inertia of Dimension		Of Dimension to Inertia of Point			
		1	2		1	2	1 2		Total	
1	.356	732	286	.097	.413	.106	.907	.082	.989	
2	.423	.288	.569	.054	.076	.498	.300	.699	1.000	
3	.192	.945	750	.110	.372	.393	.728	.272	.997	
4	.029	-1.495	.177	.037	.139	.003	.809	.007	.815	
5	.000									
6	.000									
7	.000									
8	.000									
9	.000									
10	.000									
11	.000									
Active Total	1.000			.298	1.000	1.000				

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a. Symmetrical normalization



It is observed form the analysis that Dimension 1 is *students of different classes* and Dimension 2 is *problems faced by the students*. Problems with codes such as 1,2,3 & 4 are coming under this dimension which is faced by the students. Students feeling bore, missing friends, missing class environment and inattentive during online class are the major problems comes under this dimension which is majority faced by the students.

FINDINGS:

Majority of the respondent are Male (56.7%) and belongs to the age category of 11-14 years (36.5%). Also, the respondents belongs to CBSE board (33.7%) and they belongs to Secondary education (26.9%).

They spent more than 3 hours for their online class (36.5%) and also nearly 80% of students attending on daily basis.

It is evident from the table that there is no significance difference exists between gender and subject taught, problems and time spent by students on online class.

It is observed that the null hypothesis (0.05) is rejected for the factor Problem faced by students. But for the factor time spent by the student on online class is accepted stating that there is no relationship between time spent on study and board of study.

Hence there is no association between hours of study and satisfaction of parents.

There is no association between fees collected by schools and satisfaction of parents for online classes and similarly there is no association between adoption of online class by students and satisfaction of parents for online class.

SUGGESTIONS:

- 1 The school should ensure that whether all students or students' parents have smart phones or desktop/laptop.
- 2. If there is students with no smart phones or laptop, school should make alternative arrangements for their study.

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- 3. Many of the respondents have suggested that to reduce time for online class.
- **4.** It is suggested that online class is not suitable for kindergarten children's and lower primary students.
- **5.** Apart from just finishing the portions, teachers need to ensure the child has acquired the required knowledge. They should be stricter like how they are in the regular classes.

4.CONCLUSION

It is very clear and evident that due to Covid 19 pandemic, students really missing their day to day school and class environment. Students were not able to meet their friends and teachers, they especially miss all these. Hence, online class has evolved in a great way to connect students and teachers. On the education front, even though schools are trying their best to bridge the gap by providing online education, not all of the students have access to the required equipment's or internet connectivity. On the side of parents, it remains important that the children's have a daily study schedule. It should be understood that for complete school and class environment cannot be brought into home. In this pandemic scenario, because of lock down and isolation, students are facing various stress. Students ability to learn is as much as affected by their inter and intrapersonal behaviour. In a real class room environment teachers have a contact with students and employ practices to manage students day to day behaviour. But today parents find behaviour management challenging while adjusting to virtual or at home education. Now a days students are facing more stress and problems like inattentiveness, late night sleep, eye irritation, isolation etc they are not in a mind to welcome online class. According to the research, this E-learning cannot be a long sustainable one for the students. It is concluded that through this research, a machine cannot replace teachers. Students preferred to go to

REFERENCES:

- 1. Abad-Segura, E.; González-Zamar, M.-D.; Infante-Moro, J.C.; García, G.R. Sustainable Management of Digital Transformation in Higher Education: Global Research Trends. Sustainability 2020, 12, 2107. [Google Scholar] [CrossRef]
- 2. Bandura, A.; Barbaranelli, C.; Caprara, G.V.; Pastorelli, C. Multifaceted Impact of Self-Efficacy Beliefs on Academic Functioning. *Child Dev.* **1996**, *67*, 1206. [Google Scholar] [CrossRef] [PubMed]
- 3. Bejanyan, K.; Marshall, T.C.; Ferenczi, N. Associations of Collectivism with Relationship Commitment, Passion, and Mate Preferences: Opposing Roles of Parental Influence and Family Allocentrism. *PLoS ONE* **2015**, *10*, e0117374. [Google Scholar] [CrossRef]
- 4. Garcia, P.R.J.M.; Restubog, S.L.D.; Toledano, L.S.; Tolentino, L.; Rafferty, A. Differential Moderating Effects of Student- and Parent-Rated Support in the Relationship Between Learning Goal Orientation and Career Decision-Making Self-Efficacy. *J. Career Assess.* **2012**, *20*, 22–33. [Google Scholar] [CrossRef]
- 5. General Statistics Office of Vietnam. General Education Statistics. GSO; 2020. Available online: https://www.gso.gov.vn/default_en.aspx?tabid=782 (accessed on 26 March 2020).
- 6. Hemphill, S.; Broderick, D.; Heerde, J. Positive associations between school suspension and student problem behaviour: Recent Australian findings. *Trends Issues Crime Crim. Justice* **2017**, *531*, 1. [Google Scholar]
- 7. Ko, C.-H.; Yen, C.-F.; Yen, J.-Y.; Yang, M.-J. Psychosocial impact among the public of the severe acute respiratory syndrome epidemic in Taiwan. *Psychiatry Clin. Neurosci.* **2006**, *60*, 397–403. [Google Scholar] [CrossRef]

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- 8. Oyemi, S.; Noak, A.; Olakanmi, E.E. Effects of Excessive Usage of Social Networking on Students Learning Habit. In Proceedings of the EdMedia 2015-World Conference on Educational Media and Technology, Montreal, QC, Canada, 22–25 June 2015; pp. 523–531. [Google Scholar]
- 9. Romero-Rodríguez, L.M.; Ramírez-Montoya, M.S.; Aguaded, I. Determining Factors in MOOCs Completion Rates: Application Test in Energy Sustainability Courses. *Sustainability* **2020**, *12*, 2893. [Google Scholar] [CrossRef]
- 10. Tran, T.; Ho, M.-T.; Pham, T.-H.; Nguyen, M.-H.; Nguyen, K.-L.P.; Vuong, T.-T.; Nguyen, T.-H.T.; Nguyen, T.-D.; Nguyen, T.-L.; Khuc, Q.; et al. How Digital Natives Learn and Thrive in the Digital Age: Evidence from an Emerging Economy. *Sustainability* **2020**, *12*, 3819. [Google Scholar] [CrossRef]
- 11. Sawitri, D.R.; Creed, P.; Zimmer-Gembeck, M.J. Parental influences and adolescent career behaviours in a collectivist cultural setting. *Int. J. Educ. Vocat. Guid.* **2014**, *14*, 161–180. [Google Scholar] [CrossRef]
- 12. Sawitri, D.R.; Creed, P.A. Creed, Collectivism and Perceived Congruence with Parents as Antecedents to Career Aspirations. *J. Career Dev.* **2017**, *44*, 530–543. [Google Scholar] [CrossRef].
- 13. Turner, E.A.; Chandler, M.; Heffer, R.W. The Influence of Parenting Styles, Achievement Motivation, and Self-Efficacy on Academic Performance in College Students. *J. Coll. Stud. Dev.* **2009**, *50*, 337–346. [Google Scholar] [CrossRef]
- 14. Trung, T.; Hoang, A.-D.; Nguyen, T.T.; Dinh, V.-H.; Nguyen, Y.-C.; Pham, H.-H. Dataset of Vietnamese student's learning habits during COVID-19. *Data Brief* **2020**, *30*, 105682. [Google Scholar] [CrossRef] [PubMed]
- 15. Vietnam Ministry of Education and Training, Official dispatch 793/BGDÐT-GDTrH on enhancing Teaching on the Internet and on Television during the Time of Preventing and Fighting against Covid-19. 2020. Available online: https://e-ict.gov.vn/laws/detail/CV-so-793-BGDDT-GDTrH-ngay-12-3-2020-ve-viec-tang-cuong-day-hoc-qua-internet-tren-truyen-hinh-trong-thoi-gian-nghi-hoc-de-phong-chong-Covid-19-740/ (accessed on 25 March 2020).
- 16. Fujita, K. The effects of extracurricular activities on the academic performance of junior high students. *Undergrad. Res. J. Hum. Sci.* **2006**, *5*, 1–16. [Google Scholar]
- 17. Vuong, Q.-H.; Le, A.-V.; La, V.-P.; Vuong, T.-T.; Do, T.-H.; Vuong, H.-M.; Do, D.-L.; Hoang, P.-H.; Thi, H.V.; Ho, T.M.; et al. A Dataset of Vietnamese Junior High School Students' Reading Preferences and Habits. *Data* 2019, *4*, 49. [Google Scholar] [CrossRef]
- 18. Warner, S.; Murray, G.; Meyer, D. Holiday and school-term sleep patterns of Australian adolescents. *J. Adolesc.* **2008**, *31*, 595–608. [Google Scholar] [CrossRef]
- 19. Zheng, G.; Jimba, M.; Wakai, S. Exploratory Study on Psychosocial Impact of the Severe Acute Respiratory Syndrome (SARS) Outbreak on Chinese Students Living in Japan. *Asia Pac. J. Public Health* **2005**, *17*, 124–129. [Google Scholar] [CrossRef] [PubMed]
- 20. Yoshiko Goda et al., (2015), "Learning and Individual Differences", Volume 37, Pages 72-80.
- 21. Hongchi Schi et al., (2016), "An agent enabling personized learning in e-learning"
- 22. Ji Won You, (July 2015), Journal of Educational Technology & Society Vol. 18, No. 3 pp. 64-74
- 23. **Stylianos Asteriadis et al.,** (2008), Estimation of behavioral user state based on eye gaze and head pose—application in an e-learning environment, Studies in Computational Intelligence book series (SCI, Volume 14), pp 57-64