



RESPONSE AND SATISFACTION IN ONLINE LEARNING AMONG HIGHER SECONDARY STUDENTS

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ABSTRACT

The present study was undertaken to study the Response and Satisfaction in online learning among higher secondary students. A total sample of 211 higher secondary school students were selected through stratified random sampling technique based on Gender, Type of Management of schools, and Stream of study from 10 higher secondary schools for the present study. For the collection of data the investigator used Students' Satisfaction in Online learning scale constructed and standardized by Fayyaz Ahmad Faize and Muhammad Nawaz (2020). Students' response in Online Learning Scale was constructed and validated by the investigator and research supervisor was used to measure higher secondary students' response in online learning.

The results of the study showed that the response in online learning among higher secondary student is substantial(69%) and the satisfaction in online learning among higher secondary student is moderate (66.8%). Further no significant difference was found in response and satisfaction in online learning with respect to the gender,type of management of schools and stream of study. Student's good response in online learning environments leads to increased student satisfaction in online learning. The study will be helpful for the educationists and academics to identify the factors which will enhance student response and satisfaction in online learning.

Key words – Response, Satisfaction, Online learning, Higher Secondary Students

1. INTRODUCTION:

Traditional face-to-face learning typically occurs in a teacher-directed environment with interpersonal interaction in a live synchronous environment. This learning environment is costly with less access flexibility. On the other hand, the online learning environments that has grown and expanded dramatically as new technologies have expanded the possibilities for communication, interaction with the students for the academic development. Although the online learning may increase access, flexibility and improve cost effectiveness, it suffers from a lack of social interaction between learners and instructors. For students, online classes have become an imminent trend in the education sector around the globe. Digital learning has provided easy access to the files and folders that can now be organized and saved without any physical damage. With one click, students can access their notes and assignments without the fear of misplacing or spoiling them. With advanced technology, this mode of learning has not only been simpler but fun and engaging as well. Technology-enabled learning is beneficial and has proven to be more engaging as it helps in making those subjects interactive and fun which are traditionally considered dull by students. It became very convenient for the students to attend classes from anywhere in the world as both classes and learning content was easily accessible at home. Integration of the learning platforms with new-age interactive applications has made online classes more convenient for both students and teachers as more students are able to express their views at the same time using certain online

applications. Students have been more particular with their online submission as they are notified on a regular basis and it is an effortless task for the teachers to track down the students who have failed to submit their assignments on time. Online learning has helped students to become independent learners before they make their way into the real world. Students got opportunities to explore new learning applications and platforms during the class, which helped them to develop new skills and capabilities accelerating their growth trajectory. Some of the students have been responding well to the active learning environment created online by the teachers whereas others need a push in fits and starts.

Online learning is rapidly becoming one of the most effective ways to impart education. The impact of the COVID –19 virus was so strong that online education became a seemingly ubiquitous part of our growing world, which resulted in the closure of schools and no further physical interaction of teachers with students. Fortunately, soon enough most of the schools and educational institutions moved to online mode to resume their studies which is more feasible and cheap. As a result, education has changed dramatically, with the distinctive rise of online learning, whereby teaching is undertaken remotely on digital platforms instead of physical classrooms. COVID pandemic made us realize the importance of online training for our students. Students' response and satisfaction levels with online learning reveals the impact of online learning on the morale of our students by creating a diversion from the ongoing pandemic situation..

2. NEED FOR THE STUDY

Online classes and technology have emerged as a superhero during the lockdown days. We have all been under house arrest but are still connected with the world of education. Due to the lockdown, students have not been able to stay connected with the outer world and the lack of exposure is evident. The only reprieve for the students' mental well-being has been the transition to online classes. Teachers made sure that the learning for students was not compromised, so they took a great leap forward to find solutions and create new learning environments for their students to ensure that learning never stops. With little time to prepare, curriculums were modified, new lesson plans were created, activities were planned, all so that their students remain actively involved through online learning.

The findings of the study reflect the impact of online learning, students' interest in using online learning resources, and their performance. When students are satisfied with their experience of online learning will determine knowledge of the factors that influence students' satisfaction with online learning can help improve such online courses. The online teaching is feasible, cheap and must be made a part of the training in India beyond the prevailing lockdown. Online learning is carried out as an effort to utilize information technology available in higher education institutions in anticipation of changes in the educational environment. Using appropriate technology in learning management is believed to be a drive to improve learning performance particularly in literary learning.

Nevertheless, the effectiveness of online learning varies amongst age groups. The general consensus on children, especially younger ones, is that a structured environment is required, because kids are more easily distracted. To get the full benefit of online learning, it is necessary to analyze the higher secondary student's response and satisfaction in online learning. Educational effectiveness and learning are national issues, and online education has become a major topic in the last decade for education. Higher education institutions consider students' response and satisfaction to be one of the main factors in determining the quality of their online learning. The educational institutions switched to online instruction, the instructors and learners both resisted due to technological complexities. Online sessions bring a variety of technical problems such as login issues, poor audio and video quality, and downloading errors, as a result students may feel depressed and dis-satisfactory. Online teaching aims to enhance the target of learning outcome in Education through the effective uses of the online technology tools and empower the innovative learning. As online learning provides an effective teaching method that brings out the best in students during the pandemic period and also helps to find out solutions to improve the self-study skills of students, it is felt that there is need to assess the response and satisfaction in online learning among higher secondary school students.

3. OBJECTIVES OF THE STUDY

To find whether there is any significant relationship between response and satisfaction in online learning of higher secondary students.

To find whether there is any significant difference in the response and satisfaction in online learning of higher secondary students with respect to

- Gender
- Type of Management of school
- Stream of study

4. HYPOTHESES OF THE STUDY

The following hypotheses are formulated based on the objectives of the study.

- There will be a significant and positive relationship between response and satisfaction in online learning of higher secondary students.
- There will be no significant difference between boys and girls with respect to their response and satisfaction in online learning.
- There will be no significant difference in response and satisfaction in online learning with respect to type of management of schools.
- There will be no significant difference in response and satisfaction in online learning with respect to stream of study.

5. METHODOLOGY

The research design is of normative survey method and sampling technique used for the study is stratified random sampling technique. To find out the students' Response and students' Satisfaction in Online learning, data were collected from higher secondary students studying in various types of schools through Google forms.

5.1 - POPULATION AND SAMPLE

The population of the study includes all the higher secondary students studying in schools of Chennai district. Keeping in view the aim of the study 211 students were randomly selected. Samples were collected from higher secondary students of government schools, government aided schools, self-finance schools.

5.2 - SAMPLE DISTRIBUTION

Keeping in view the aim of the study 211 students from higher secondary schools were randomly selected was selected on the basis of gender, namely boys and girls. Further, the sample were drawn from government school, government aided school, self-finance School, who study pure science group, science with mathematics group, arts with computer science group, arts with business mathematics group at higher secondary level in Chennai district.

5.3 - INSTRUMENTS USED

Students Response in Online Learning Scale was constructed and validated by the investigator as there is no standardized tool for measuring students' response in online learning. The scale has 16 items relating to assess the students' behaviour in terms of responsibilities, creative thinking, enthusiasm and, energetic level on a five point scale ranging from 'Strongly disagree' to 'Strongly Agree'. Students' Response in online learning is a Likert form of five points with the response to the categories

strongly disagree, Disagree, Neither Disagree or Agree, Agree, Strongly Agree from 5 to 1. The maximum score for each statement is 5 and the minimum score is 1. The maximum score of the tool is 80 and the minimum is 16.

Students' Satisfaction in Online learning scale constructed and standardized by Fayyaz Ahmad Faize and Muhammad Nawaz (2020) was used to assess Satisfaction in Online learning among higher secondary students. . The scale consists of 7 items relating to assess faculty student – interaction and student peer interaction on a five point scale ranging from 'Less satisfied' to 'Highly satisfied'. Students' Satisfaction in online learning is a liker form of five point with the response to the categories Less satisfied,, Simply satisfied, Moderately satisfied, Adequately satisfied, Highly satisfied. The maximum score for each statement is 5 and the minimum score is 1. The maximum score of the tool is 35 and the minimum is 7.

5.4 - ANALYSIS AND INTERPRETATION OF DATA

The data collected in the present study were analyzed using t- test and Analysis Of Variance (ANOVA)

Table 1

Mean and Standard deviation of response and satisfaction in online learning among higher secondary students

| Variables | N | Maximum Score | Mean | SD |
|--------------|-----|---------------|-------|--------|
| Response | 211 | 80 | 55.22 | 14.203 |
| Satisfaction | 211 | 35 | 23.38 | 7.767 |

The table shows the mean and standard deviation of response and satisfaction in online learning among higher secondary students. The maximum possible score in the overall of response in online learning is 80. The obtained mean score for response is 55.22 which is about 69%. Hence, the response in online learning among higher secondary student is substantial.

The maximum possible score in the overall of satisfaction in online learning is 35. The obtained mean score for satisfaction is 23.38 which is about 66.8%. Hence, the satisfaction in online learning among higher secondary student is moderate.

Table 2

HYPOTHESIS - 1

There will be a significant and positive relationship between response and satisfaction in online learning of higher secondary students.

| Variables | N | Pearson correlation | Result |
|---------------------------------|-----|---------------------|---|
| Response in Online Learning | 211 | 0.771 | Positively and significantly correlated |
| Satisfaction in Online Learning | 211 | 0.771 | |

From the table above the coefficient of correlation value is 0.771 which reveals that there is a positive and significantly correlation between response and satisfaction in online learning of higher secondary students.

Table 3

HYPOTHESIS - 2

There will be no significant difference between boys and girls with respect to their response and satisfaction in online learning

| Variable | Gender | N | Mean | SD | t Value | Level of Significance |
|---------------------------------|--------|-----|-------|--------|---------|-----------------------|
| Response in Online Learning | Boys | 115 | 23.58 | 15.087 | 1.67 | NS |
| | Girls | 96 | 23.15 | 12.919 | | |
| Satisfaction in Online Learning | Boys | 115 | 56.7 | 8.075 | 0.4 | NS |
| | Girls | 96 | 53.44 | 7.417 | | |

df = 209, N = 211.

From the above table it is observed that the mean scores and standard deviation of response in online learning of boys are 56.7 and 15.087 and of girls are 53.44 and 12.919 respectively. The critical ratio of response in online learning of boys and girls students is 1.67 which is not significant. It indicates that boys and girls do not differ significantly in their response in online learning.

Also from the above table it is observed that the mean scores and standard deviation of satisfaction in online learning of boys are 23.58 and 8.075, and of girls are 23.15 and 7.417 respectively. Also the critical ratio of satisfaction in online learning of boys and girls students is 0.40 which is not significant. It indicates that boys and girls do not differ significantly in their satisfaction in online learning. It shows the boys and girls students possess similar response and satisfaction in online learning. This may be due to the same characteristics and attitude of boys and girls towards online learning.

Table 4

HYPOTHESIS - 3

There will be no significant difference in response and satisfaction in online learning with respect to type of management of schools.

| Variables | Group Status | Sum of Square | df | Mean Square | F value | Sig value | Level of Significant |
|---------------------------------|----------------|---------------|-----|-------------|---------|-----------|----------------------|
| Response in Online Learning | Between groups | 160.201 | 3 | 53.4 | 0.262 | 0.853 | NS |
| | Within groups | 42201.77 | 207 | 203.873 | | | |
| | Total | 42361.972 | 210 | | | | |
| Satisfaction in Online Learning | Between groups | 83.689 | 3 | 27.896 | 0.459 | 0.711 | NS |
| | Within groups | 12586.216 | 207 | 60.803 | | | |
| | Total | 12669.905 | 210 | | | | |

From the table 4, F- ratio calculated for the response and satisfaction in online learning with respect to type of management of schools reveals that students belongs to government, government aided and self- finance schools do not differ significantly in their response and satisfaction in online learning. Hence, the formulated hypothesis there will be no significant difference in response and satisfaction in online learning with respect to type of management of schools is accepted. This may due to fact that online learning becomes more mandatory for all type of management of schools at this pandemic situation, students' possess

similar response and satisfaction in online learning.

Table 5

HYPOTHESIS – 4

There will be no significant difference in response and satisfaction in online learning with respect to stream of study.

| Variable | Group Status | Sum of Square | df | Mean Square | F value | Sig | Level of Significant |
|---------------------------------|----------------|---------------|-----|-------------|---------|-------|----------------------|
| Response in Online Learning | Between groups | 288.324 | 3 | 96.108 | 0.473 | 0.702 | NS |
| | Within groups | 4207.647 | 207 | 203.254 | | | |
| | Total | 42361.972 | 210 | | | | |
| Satisfaction in Online Learning | Between groups | 79.341 | 3 | 26.447 | 0.435 | 0.728 | NS |
| | Within groups | 12590.564 | 207 | 60.824 | | | |
| | Total | 12669.905 | 210 | | | | |

From the table 5, F- ratio calculated for the response and satisfaction in online learning with respect to streams of study for education reveals that students belongs to pure science group, science with mathematics group, arts with computer science group, arts with business mathematics group do not differ significantly in their response and satisfaction in online learning. Hence, the formulated hypothesis will have no significant difference in response and satisfaction in online learning with respect to stream of study. This may due to the style of studying pattern among the different groups of students has become same in the present days.

EDUCATIONAL IMPLICATION

Online learning environment may hold significant potential for increasing educational productivity. The results of this study have numerous practical implications for educators, students and researchers. It also contributes to the literature by demonstrating that multiple factors are responsible for student response and satisfaction in the context of online classes during the period of the COVID-19 pandemic. This study was different from the previous studies (Baber, 2020; Ikhsan et al., 2019; Eom & Ashill, 2016) have found that the factors–interaction in the classroom, student motivation, course structure, instructor knowledge, and facilitation–are positively influencing students’ perceived learning outcome and student satisfaction. None of the studies had examined the effect of students’ response and satisfaction. The previous empirical findings have highlighted the importance of examining the factors affecting student satisfaction (Maqableh & Jaradat, 2021; Yunusa & Umar, 2021). Still, none of the studies has examined effect of gender, types of management and streams of study in the response and satisfaction of online learning among higher secondary school students, all together with online classes during the pandemic period. To improve the response and satisfaction in online learning among higher secondary students, some of the recommendations to the teachers are:

Online sessions has to create a positive response among students through introducing many interactive sessions which provokes the students interest on studies and also to make feel valued. Care and patient is needed at any situation, recording and editing of the class is required, face of the teachers need to be projected in the screen to the students during the online class, videos should be precise and it should be to the point in connect with the content of the lesson and avoid boringness, usage of proper teaching aids will cultivate the creative skills and inspiration, clear explanation is needed to connect the lesson content with real world and also help students in getting satisfaction level in studies. Responsibility of the teacher is more important to look after the need of the students which will create a good bondage with students in a friendly touch and also to build confidence level among students.

CONCLUSION

Both offline learning and online learning would go hand-in-hand and online education will eventually become an integral component of school education. Somewhere in the future, education is going to be hybrid. During COVID Pandemic Period, technology has become a part of academics and is here to stay. Online applications and programs have helped both teachers and students to develop new skills and capabilities that supported them and enhance their knowledge. Online teaching cannot replace the position of traditional classroom teaching and we will need to get back to traditional teaching after the pandemic ends. It has to believe that learning never stopped, in fact, it evolved itself not just to survive but to thrive and technology has proven to be the most important enabler of the same which in itself is an invention that is an outcome of learning. Technology has helped in learning and learning has led to the advancement of technology. Students need both parents' and teachers' guidance as they navigate through this difficult time to learn more and more. Students also need to interact with each other and with the content. The student interaction was found to be the strongest predictor of student satisfaction in online learning, and students may derive motivation in online learning from various aspects associated with it. However, future research is needed to further explore different predictors of student motivation that can ultimately lead to their satisfaction with the learning experience. Meanwhile, even though the study found that perceived challenges of online learning negatively affect student satisfaction, those challenges that the learners encounter in online learning can be diverse: inherent challenges of learning such as isolation, challenges of the new learning environment, and challenges imposed by technology are some examples. Therefore, the relationship between the students' response and students' satisfaction with online learning deserves attention in future research. Finally, this study replicated that the good response in online learning environments leads to increased student satisfaction in online learning.

REFERENCES

1. Agarwal, S., & Kaushik, J. S. (2020). Student's perception of online learning during COVID pandemic. *The Indian Journal of Pediatrics*, 87, 554–554.
2. Baber, H. (2020). Determinants of Students' perceived outcome and satisfaction in online learning during the pandemic of COVID-19. *Journal of Education and e-Learning Research*, 7(3), 285–292.
3. Dziuban, Charles; Moskal, Patsy; Thompson, Jessica; Kramer, Lauren; DeCantis, Genevieve; Hermsdorfer, Andrea . Mar 2015, Student Satisfaction with Online Learning: Is It a Psychological Contract? *Online Learning*, v19 n2.
4. Evaluation and Improvement of students' satisfaction in online learning during COVID-19 *Open Praxis*, v12 n4 p495-507. <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/><https://onlinelibrary.wiley.com/doi/10.1002/hbe2.240>
5. Ikhsan, R. B., Saraswati, L. A., Muchardie, B. G., & Susilo, A. (2019). The determinants of students' perceived learning outcomes and satisfaction in BINUS online learning. Paper presented at the 2019 5th International Conference on New Media Studies (CONMEDIA). IEEE.
6. Maqableh, M., & Jaradat, M. (2021). Exploring the determinants of students' academic performance at university level: The mediating role of internet usage continuance intention. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-021-10453-y>.
7. Measuring Student Engagement in the Online Course: The Online Student Engagement Scale (OSE)
8. Rajabalee, Y. B., & Santally, M. I. (2020). Learner satisfaction, engagement and performances in an online module: Implications for institutional e-learning policy. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-020-10375-1>.
9. Sinclarie JK 2011 Student satisfaction with online learning:Lessons from organizational behavior Journal 11, 1- 2011
10. Turley, Chad; Graham, Charles 2019 Interaction, Student Satisfaction, and Teacher Time Investment in Online High School Courses *Journal of Online Learning Research*, v5 n2 p169-198.
11. Yunusa, A. A., & Umar, I. N. (2021). A scoping review of critical predictive factors (CPFs) of satisfaction and perceived learning outcomes in E-learning environments. *Education and Information Technologies*, 26(1), 1223–1270.