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STUDY ENGAGEMENT AMONG SECONDARY SCHOOL STUDENTS DURING COVID-19 PANDEMIC

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Quality concerns, inculcating moral values, and developing life skills among young learners are the motto of an educational institution. In these processes, every individual learner expects to engage with their curricular and co-curricular activities in a positive manner. Due to the global challenge of the COVID-19 pandemic, the academic processes in all educational systems are getting collapsed. Students and teachers are missing face-to-face interactions, getting a lot of hurdles in connectivity, and planning their academic engagements on online platforms. Apart from these, many other factors influence the student's academic engagement and getting subject knowledge during this pandemic period. Students' involvement and engagement in the virtual mode might vary with the variables like school types, gender, and locality. Therefore, in this study, the investigators attempt to elicit secondary school students' perceptions of their study engagements during the pandemic. The study reveals that most students engaged in the academic activities at an average level during the pandemic. There is a significant difference between the male and female students study engagements.

KEYWORDS: COVID-19, Pandemic, Secondary School Students, and Study Engagement.

INTRODUCTION

Secondary school education is a crucial stage for every student as they fix their

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career in the upcoming years. This stage helps the students to acquire adequate knowledge and skills and also provides opportunities to them to develop physically, mentally and socially. The government of India grants huge funds for education departments to ensure greater access and to provide equal opportunities to all learners. The government of India launched educational schemes, such as Sarva Shiksha Abhiyan (SSA) and, Rashtriya Madhyamik Shiksha Abhiyan (RMSA) to expand the quantitative and to ensure qualitative improvements in the school education system. Qualitative improvements in the educational system are determined by many factors, among them the academic performance of students is an important factor. The academic performance of the students is the basis for promoting the students from one level to another level of education.

In India, the National Council of Educational Research & Training (NCERT) conducts National Achievement Surveys (NAS) to assess the academic performance of the school students especially classes V, VIII and, X at the national level. Most of the survey reports of NCERT indicate that the students' academic achievement levels in many states in the country are not at par with the national average achievement level. For instance, the NAS conducted on a sample of 15,49,570 students at class X level during 2017 reported that only 49% of class X students were assumed as the average performers in modern Indian languages, 36% of students were assumed as the average performers in English language, 34% of students were assumed as the average performers in Mathematics, 34% of students were assumed as the average performers in Science and 39% of students were assumed as the average performers in Social Science subject. The NAS reports in India urge the school education system to enhance and maintain the academic performance of the school students at par with the national average achievement scores. Simply completing the course of study is not the expected outcome but acquiring adequate knowledge and academic competencies is a need of hours for coping up with the modern challenges.

It is a fact that some of the students can do well in their studies with very minimum effort, some other students can do well with a little struggle, some of them can perform better with some special assistance and some others may not be able to succeed in their studies properly. For better performance in academic activities, every student must involve and pay attention to the study. Study involvement makes the students succeed in their course of study easily if they invest their physical and psychological energy qualitatively and quantitatively. Presently, the academic activities at various levels of the education system globally collapsed due to the COVID-19 pandemic. Especially, the school education systems have serious negative effects on education. The pandemic and lockdowns are the root causes for implementing full-time online classes at all levels of the education system. The changes in pedagogical approaches are unavoidable during this pandemic situation. The teachers and parents must

observe and encourage the children to utilize their time properly and learn academic subjects seriously. In this context, the investigators attempted to conduct the research study to assess and analyse the study engagement among the secondary school students during the COVID-19 pandemic.

Review of Related Literature

Lahaderne, (1968) says that students who paid attention gained the most from the instruction. Samuels and Turnure (1974) conducted a study on attention and reading achievement among the fifth graders and found that the rate of word recognition increased as attention increased. Skinner et al., (1990) found through their study that higher engagement leads to higher academic performance. The study conducted by Akey (2006) found that student engagement in learning activities is positively correlated with teacher support. Similarly, the research report of Garcia-Reid et al., (2005) stated that parental support is directly linked to student engagement in learning. Mandernach (2009) says that school engagement influences students' positive feelings towards the school. Also, many research findings revealed that there is a strong correlation between students' study involvement and their achievement. Dotterer and Lowe (2011) found in their study that school engagement is a major factor that has both direct and indirect influences upon students' learning achievement in the classroom context.

Cents-Boonstra et al., (2020) found that there were some reasonably positive associations between motivating teaching behaviour and indicators of student engagement. That is, teachers' autonomy support (e.g., encouraging students' participation, using inviting language), structure during activity (e.g. providing positive feedback, addressing students by their first name), and all items of relatedness support were positively connected with students' attention and enjoyment (passive student engagement). Senior et al., (2018) found that the engaged students feel more empowered by their peers to affect a change compared to their non-engaged counterparts. Beck (2010) found that students who are unable to ask questions directly and do not receive feedback from instructors depend more on other students. Lowyck and Poysa (2001) stated that collaborative learning helps the students positively to develop analytical skills and enables them to develop their knowledge further.

Hence, the teachers and parents should analyse the needs of students for better learning and, encourage them to involve in academic activities positively. In the pandemic situation, the students are engaged with online classes and educational television programs. Even though adequate learning opportunities are provided, the interest and involvement of the students are very important factors that lead to excel the students in their academic performances.

Objectives of the Study

The study focuses on the following objectives:

- to know the perception of secondary school students on their study engagement during the COVID-19 pandemic.
- to study if any significant differences exist on the perceptions of government and private secondary school students in their study engagement
- to study if any significant differences exist on the perceptions of secondary school male and female students in their study engagement; and
- to study if any significant differences exist on the perceptions of secondary school rural and urban students in their study engagement.

Methods and Material Used

The investigators planned to assess and analyse the perceptions of secondary school students' study engagement during the COVID-19 pandemic and hence the survey method has been used as the research method for the study.

Participants

The survey research was conducted on a sample of 120 randomly selected X standard students from twelve schools in the Coimbatore and Theni districts of Tamil Nadu. Out of the 120 students, there were 51.67% students from government schools and remaining 48.33% were from private schools; among them, most of the students (55.00%) were female, whereas 45.00% were male. Also, 44.17 % of students were from rural areas and 55.83% of students were from urban areas

Instrument Used

The required data for the study were collected by administering the Study Engagement Scale (SES). The SES was prepared by the investigators in bi-lingual (Tamil and English) with three sub-scales, namely, participation in academic tasks, completing the assigned tasks, and sharing the task outcomes with others. Each sub-scale consists of 10 statements and therefore the study engagement scale consisted of 30 statements in total. The sample selected for the study are expected to respond to each statement with the two-point rating scale, viz., accepted and not accepted. Accepted response to each statement gets the score of 1 (one) and not accepted response to a statement gets the score of 0 (zero). The sum of scores of the sample in each statement of the scale is assumed as the level of students' study engagement during the COVID-19 pandemic. Therefore, the minimum and maximum score of SES is 0 and 30

respectively.

Through the study, the investigators were interested to identify the three types of students concerning their study engagement. Among the sample, those who have acquired scores above one standard deviation (Mean + SD) of the mean score were labelled as 'students with good study engagement'. Likewise, those who have acquired the scores below one standard deviation (Mean - SD) of the mean score were labelled as 'student with poor study engagement' and the middle ones were considered as 'students with average study engagement'.

Before administering the tool, the prepared research tool was presented to teacher educators, secondary school teachers, and higher secondary school teachers. All the experts carefully read each item of the scale and gave suggestions. Based on their valid comments, the investigators modified the tool and again it was presented to the jury for seeking their final comments. After careful verifications, the experts ensured that the research tool has face validity and content validity. The reliability of the research tool was established through the test and re-test method by administrating the tool to 15 students. The correlation coefficient score of test and re-test for the research tool was 0.727 in total; for sub-scale- participation in academic tasks was 0.770; completing the assigned tasks was 0.727, and sharing the task outcomes with others was 0.894. These measures of the reliability of the Study Engagement Scale (SES) indicate that the prepared scale is reliable to use for the research purpose. After establishing validity and reliability the investigators administered the Study Engagement Scale to the selected sample and collected the required data carefully.

To make the completion of the study meaningfully, the investigators collected the opinions of the secondary school students by requesting them to fill the distributed research tool- Study Engagement Scale without omitting any statements and columns of the scale.

DATA ANALYSIS AND INTERPRETATIONS

Table 1

Mean, SD, and Frequency Scores of the Sample in the Study Engagement Scale.

Class Interval	Frequency	Percentage (%)
21-25	10	8.33
16-20	68	56.67
11-15	40	33.33
06-10	02	1.67
Mean	16.73	
SD	3.01	

Table 1 reveals that the acquired mean scores and standard deviation (SD) of the study engagement scale among the sample are 16.73 and 3.01 respectively.

The maximum score of the study engagement scale is 30. Out of 120 samples

- 8.33 percent of the sample scored a score between 21-25
- 56.67 percent of the sample scored between 16-20
- 33.33 percent of the sample scored between 11-15; and
- 1.67 percent of the sample scored between 06-10

In total, 22 (18.33 percent) students' scores are above one standard deviation of the mean score (=16.73 + 3.01) and therefore it indicates that 18.33% of the secondary school students are assumed as the students with good study engagement during the COVID-19 pandemic.

Similarly, 19 (15.83 percent) students' scores are below one standard deviation of the mean score (=16.73 - 3.01) and therefore it indicates that 15.83% of the secondary school students are assumed as the students with poor study engagement during the COVID-19 pandemic.

Data also shows that 79 (65.83 percent) students' scores are between 1 SD above (=16.73 + 3.01) and 1 SD below (=16.73 - 3.01) and therefore it indicates that 65.83% of the secondary school students are assumed as the students with average study engagement during the COVID-19 pandemic.

Table 2

Comparison of Mean Scores of the Sample with Grand Mean Score of Sub-scales of Study Engagement Scale

S.No.	Sub-Scales	Mean	Remark
1	Participation in Academic Tas	6.22	> GM
2	Completing the Tasks	4.28	< GM
3	Sharing the Task Outcomes	6.23	> GM
Grand Mean- GM		5.58	

Table 2 shows that:

- The Grand mean score of the secondary school students in sub-scales of the Study Engagement Scale is 5.58.
- The mean score of students in sub-scale- of participation in academic tasks is 6.22. It is greater than the grand mean score of sub-scales and hence it is concluded that the selected secondary school students were strong enough

in participating in their study tasks during the COVID-19 pandemic situation.

- The mean score of students in sub-scale- completing the assigned tasks is 4.28. It is less than the grand mean score of sub-scales and hence it is concluded that the selected secondary school students were weak in completing their study tasks in time during the COVID-19 pandemic situation.
- The mean score of students in sub-scale sharing the task outcomes is 6.23. It is greater than the grand mean score of sub-scales and hence it is concluded that the selected secondary school students were strong enough in sharing their study task outcomes with others during the COVID-19 pandemic.

Table 3

Comparison of Mean, SD of Study Engagement Scores Concerning the Variables- School Type, Gender and Locality.

Variables		N	Mean	SD	t	p-value
School Type	Government	62	16.87	2.83	0.59	0.55
	Private	58	16.60	3.21		
Gender	Male	66	16.17	2.86	2.29	0.02
	Female	54	17.41	3.07		
Locality	Rural	53	16.38	2.99	1.13	0.26
	Urban	67	17.00	3.02		

Table 3 shows the comparative results of students' mean scores in their study engagement.

- The study engagement mean scores of the government and private secondary school students are 16.87 and 16.60 respectively. The calculated 't' value (0.59) is less than the table 't' value (1.96) at 0.05 level of significance, indicates that there is no significant difference between the mean scores of study engagement among secondary school students of government and private schools.
- The study engagement mean scores of male and female secondary school students are 16.17 and 17.41 respectively. The calculated 't' value (2.29) is greater than the table 't' value (1.96) at 0.05 significant level, indicates that there is a significant difference between the study engagement of secondary school male and female students.
- The study engagement mean scores of secondary school rural and urban students are 16.38 and 17.00 respectively. The calculated 't' value (1.13) is less than the table 't' value (1.96) at 0.05 significant level, indicates that there is no significant difference between the study engagement of secondary

school rural and urban students.

Results and Discussion

The results of the study reveal the perceptions of secondary school students on their study engagements during the COVID-19 pandemic situation. From the data analysis, we concluded that the majority of secondary school students were engaged in their academic activities at an average level which coincides with the result of a study conducted by Marks (2000) who remarked that support of the learning environment and teachers' role is associated with higher levels of student engagement. Eddy and Hogan (2014) pointed out that when students are engaged more with academic activities and share their outcomes with peer groups and teachers, they will be confident enough to achieve and understand their learning. The findings of the present study reveal that the secondary students are actively participating in their academic tasks, and they also share their outcomes with others, but the secondary school students are weak in completing their tasks within the deadline. The study also found that the study engagement of male students was less than that of female students and there was a significant difference between the male and female students on their academic engagement. This result was supported by the result of a study conducted by Kinzie, et.al (2007) found that female students devoted more time and effort to academic activities; participated in more co-curricular activities and community-based projects and communicated their work more frequently with their teachers.

Conclusions

Results of the study indicated that 18.33 percent of selected secondary school students were good enough with their study engagement; 15.83 percent of students are found to be poor with their study engagement, and the remaining 65.83 percent of students are at an average level of involvement in their academic engagement during the COVID-19 pandemic situation. There was no significant difference between the secondary school students' study engagement in terms of school type and locality of students, but there was a significant difference between the secondary school students' study engagement in terms of gender. Hence, the schools and teachers must create a comfortable learning environment for the students for better learning and engaging them in academic events systematically. In this pandemic situation due to family circumstances, some students may drop their education and therefore the teachers should keep in touch with their students and, encourage them to involve in study engagements actively.

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