

CHAPTER - 4

Analysis of Data and Interpretation of Results



4.0 Analysis of Data and Interpretation of Results

The researcher prepared a questionnaire with 20 statements related to online learning during the COVID- 19 pandemic. Each student responded on a 5-point Likert scale where a score of “1” represented “strongly disagree” and a score of “5” represented “strongly agree”. The statements were related to the online teaching- learning process in general, content delivery, student-teacher interaction, level of satisfaction among the students.

Respondents in the study were students from different higher secondary schools of Agartala Municipal Area who actively participated in online lectures during COVID- 19 pandemic. A total of 124 students responded. There were 66 male students and 58 female students. The responses were taken from class IX (70 responses) and class XII (54 responses) students.

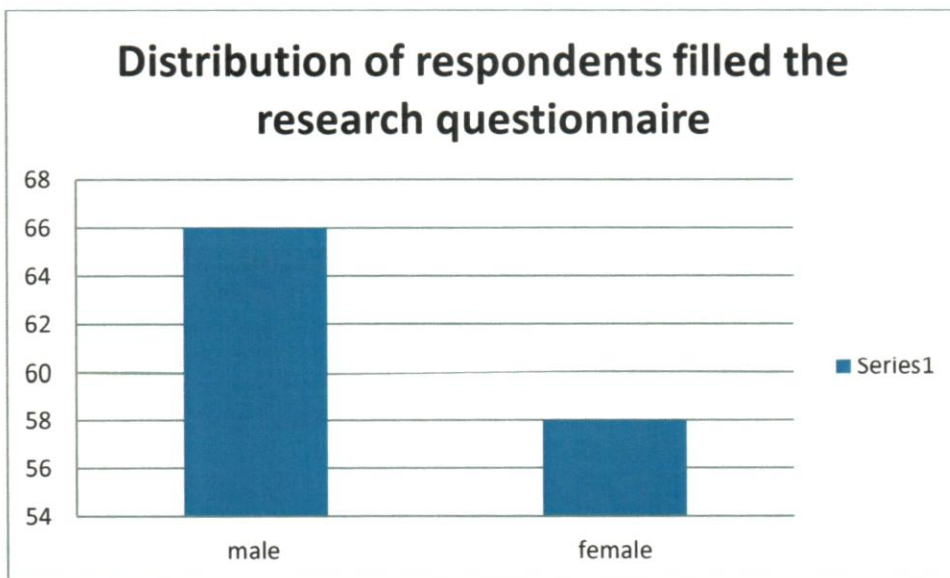


Figure 4.1. Distribution of respondents filled the research questionnaire

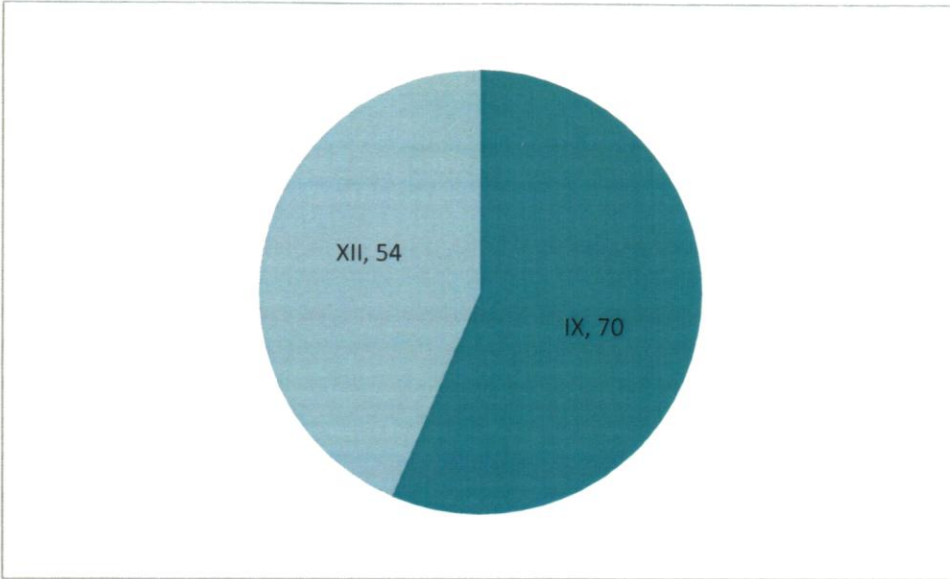


Figure 4.2. Class wise distribution of the respondents

Data were collected from 6 schools (3 Government schools and 3 Private schools) within Agartala Municipal Corporation area.

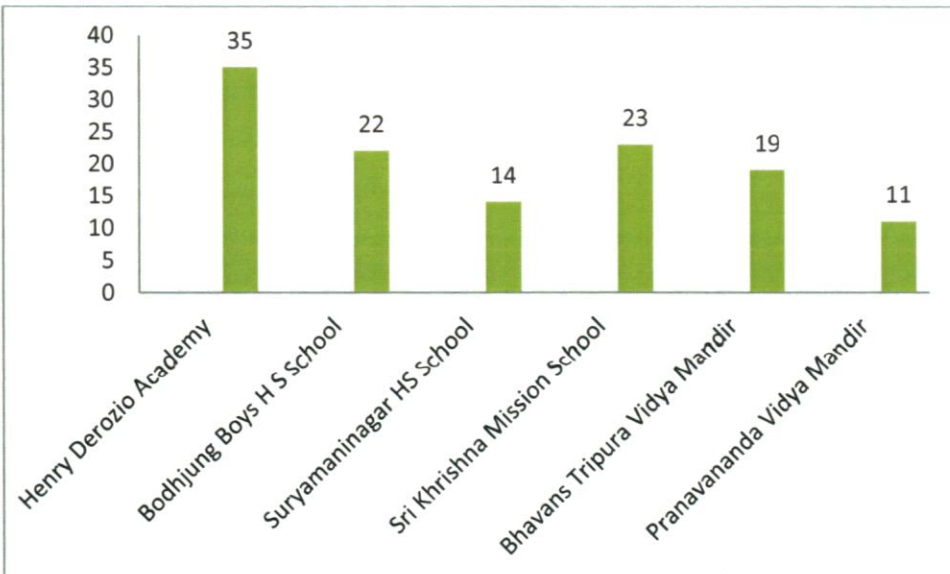


Figure 4.3. Distribution of the schools from where data had collected

Table 4.1 shows the frequency of the 19 items in case of Govt. Schools

| Items | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|--|---------------------|------------|------------------------------|---------|------------------|
| Equipments and facilities to participate for online lectures | 4.22 | 1.40 | 1.40 | 88.73 | 4.22 |
| Knowledge of computer and IT skills to manage online lectures | 7.04 | 11.26 | 18.30 | 57.74 | 5.63 |
| Guidelines are provided before starting online lectures by your lecturer | 7.04 | 18.30 | 22.53 | 42.25 | 9.85 |
| Online tools are easy to use | 1.40 | 15.49 | 14.08 | 61.97 | 7.04 |
| Satisfied about online teaching methods and lecture materials | 11.26 | 29.57 | 23.94 | 28.16 | 7.042 |
| Frustration and lack of interest in learning while being locked down | 8.45 | 16.90 | 25.35 | 30.98 | 18.30 |
| Online lectures are effective than traditional/live classroom lectures | 29.57 | 33.80 | 15.49 | 12.676 | 8.45 |
| Gained experience of learning in a new online environment | 4.22 | 9.85 | 12.67 | 50.70 | 22.53 |

| | | | | | |
|--|-------|-------|-------|-------|-------|
| Flexibility in participating for online lectures | 7.04 | 15.49 | 29.57 | 38.02 | 9.85 |
| Lack of direct contact with other students/colleagues/friends | 2.81 | 18.30 | 5.63 | 61.97 | 11.26 |
| Motivation is high in participating online lectures | 7.04 | 28.16 | 15.49 | 36.61 | 12.67 |
| Do you happy about the student-teacher interaction during online teaching & learning | 4.22 | 19.71 | 19.71 | 46.47 | 9.85 |
| You have facility to ask questions or clear doubts during online lectures | 7.04 | 14.08 | 25.35 | 26.76 | 26.76 |
| Lecturer's personal attention are less | 11.26 | 26.76 | 32.39 | 28.16 | 1.40 |
| Home environment is suitable for participating online lectures | 2.81 | 8.45 | 22.53 | 43.66 | 22.53 |
| Possibility of distractions from other family members during online lectures | 12.67 | 29.57 | 19.71 | 25.35 | 12.67 |
| Like to participate for online lectures with | 18.30 | 16.90 | 29.57 | 26.76 | 8.45 |

| | | | | | |
|--|------|-------|-------|-------|------|
| conventional lectures after COVID-19 pandemic over | | | | | |
| Online learning is cost effective | 5.63 | 29.57 | 14.08 | 45.07 | 5.63 |
| Online assessment is conducted at regular interval | 4.22 | 8.45 | 23.94 | 59.15 | 4.22 |

Table 4.2 shows the frequency of the 19 items in case of private Schools

| Items | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|--|---------------------|------------|------------------------------|---------|------------------|
| Equipments and facilities to participate for online lectures | 3.77 | 20.75 | 33.96 | 28.30 | 13.20 |
| Knowledge of computer and IT skills to manage online lectures | 20.75 | 13.20 | 20.75 | 37.73 | 7.54 |
| Guidelines are provided before starting online lectures by your lecturer | 20.75 | 26.41 | 16.98 | 32.07 | 3.77 |
| Online tools are easy to use | 7.54 | 9.43 | 24.52 | 45.28 | 13.20 |
| Satisfied about online teaching methods and lecture materials | 28.30 | 35.84 | 22.64 | 7.54 | 5.66 |
| Frustration and lack of interest in learning while being locked down | 9.43 | 15.09 | 15.09 | 33.96 | 26.41 |
| Online lectures are effective than traditional/live classroom lectures | 37.73 | 24.52 | 20.75 | 3.77 | 13.20 |
| Gained experience of learning in a new online environment | 11.32 | 11.32 | 22.64 | 41.50 | 13.20 |

| | | | | | |
|--|-------|-------|-------|-------|-------|
| Flexibility in participating for online lectures | 16.98 | 33.96 | 28.30 | 16.98 | 3.77 |
| Lack of direct contact with other students /colleagues/ friends | 11.32 | 7.54 | 13.20 | 52.83 | 15.09 |
| Motivation is high in participating online lectures | 30.18 | 22.64 | 18.86 | 20.75 | 7.54 |
| Do you happy about the student-teacher interaction during online teaching & learning | 32.07 | 32.07 | 22.64 | 9.43 | 3.77 |
| You have facility to ask questions or clear doubts during online lectures | 16.98 | 15.09 | 28.30 | 39.62 | 0 |
| Lecturer's personal attention are less | 3.77 | 24.52 | 26.41 | 20.75 | 24.52 |
| Home environment is suitable for participating online lectures | 15.09 | 16.98 | 24.52 | 35.84 | 7.54 |
| Possibility of distractions from other family members during online lectures | 13.20 | 15.09 | 16.98 | 16.98 | 32.07 |
| Like to participate for online lectures with conventional lectures after COVID-19 pandemic | 20.75 | 32.07 | 18.86 | 18.86 | 15.09 |

| | | | | | |
|--|-------|-------|-------|-------|-------|
| over | | | | | |
| Online learning is cost effective | 16.98 | 18.86 | 26.41 | 26.41 | 18.86 |
| Online assessment is conducted at regular interval | 0 | 0 | 41.50 | 58.49 | 0 |

In order to examine the status of online learning and to find out is there any differences between government schools and private schools, the results have been presented in tabular form for further interpretation.

Table 4.3. Equipments and facilities to participate for online lectures

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 4.22 | 1.40 | 1.40 | 88.73 | 4.22 |
| Private schools | 3.77 | 20.75 | 33.96 | 28.30 | 13.20 |

In the above table, majority of the students from government school i.e., 88.73% respondents have “agreed” and 4.22% respondents have “strongly agreed” with the statement that they have sufficient Equipments and facilities to participate for online lectures. Whereas, in case of private school 33.96% marked as “neither agree nor disagree”. And a total of 41.50% respondents agreed that they have sufficient equipments and facilities to participate for online lectures.

Table 4.4 Knowledge of computer and IT skills to manage online lectures

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 7.04 | 11.26 | 18.30 | 57.74 | 5.63 |
| Private schools | 20.75 | 13.20 | 20.75 | 37.73 | 7.54 |

The above table illustrates that majority of the respondents from government schools i.e., 57.74% have knowledge of computer and IT skills to manage online lectures. On the contrary it has seen that, in case of private schools majority have marked that they do not have sufficient knowledge and skills to manage online lectures.

Table 4.5 Guidelines are provided before starting online lectures by your lecturer

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 7.04 | 18.30 | 22.53 | 42.25 | 9.85 |
| Private schools | 20.75 | 26.41 | 16.98 | 32.07 | 3.77 |

The data mentioned in the table showed that in government schools 42.25% respondents “agreed” and 9.85% “strongly agreed” with the statement. It means most of the respondents agreed with the statement.

In case of private schools, most of the respondents have opposed the statement (20.75% strongly disagreed and 26.41% disagreed).

Table 4.6 Online tools are easy to use

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|----------------------------|-------------------|-------------------------------------|----------------|-------------------------|
| Government schools | 1.40 | 15.49 | 14.08 | 61.97 | 7.04 |
| Private schools | 7.54 | 9.43 | 24.52 | 45.28 | 13.20 |

The above table elucidates that most of the respondents from both the groups agreed that online tools are easy to use. Few of them found it difficult.

Table 4.7 Satisfied about online teaching methods and lecture materials

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|----------------------------|-------------------|-------------------------------------|----------------|-------------------------|
| Government schools | 11.26 | 29.57 | 23.94 | 28.16 | 7.04 |
| Private schools | 28.30 | 35.84 | 22.64 | 7.54 | 5.66 |

The results in the above mentioned table showed that only 35.2% in total among the respondents from government schools agreed with the statement. Rest were not satisfied with this method.

In case of private schools, the level of satisfaction of the students was even worse.

Table 4.8 Frustration and lack of interest in learning while being locked down

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 8.45 | 16.90 | 25.35 | 30.98 | 18.30 |
| Private schools | 9.43 | 15.09 | 15.09 | 33.96 | 26.41 |

The table expounds that the level of frustration and lack of interest in learning while being in lockdown was worse in case of private school respondents.

Table 4.9 Online lectures are effective than traditional/live classroom lectures

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 29.57 | 33.80 | 15.49 | 12.67 | 8.45 |
| Private schools | 37.73 | 24.52 | 20.75 | 3.77 | 13.20 |

In the above table, only 12.67% respondents agreed with the statement and 8.45% strongly agreed in case of government schools. And in case of private schools also very few respondents (3.77% agreed and 13.20 % strongly agreed) agreed with the statement. It concludes that they prefer traditional classrooms over online teaching learning.

Table 4.10 Gained experience of learning in a new online environment

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 4.22 | 9.85 | 12.67 | 50.70 | 22.53 |
| Private schools | 11.32 | 11.32 | 22.64 | 41.50 | 13.20 |

The table depicts that a major number of respondents from both the group agreed that they gained new experience of learning in a new online environment.

Table 4.11 Flexibility in participating for online lectures

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 7.04 | 15.49 | 29.57 | 38.02 | 9.85 |
| Private schools | 16.98 | 33.96 | 28.30 | 16.98 | 3.77 |

The table showed that 38.02% respondents agreed with the statement and in the second group only 16.38% agreed with the statement. A good number of respondents from both the groups answered neutral about the statement.

Table 4.12 Lack of direct contact with other students/colleagues/friends

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|-------------------|---------------------|------------|------------------------------|---------|------------------|
| Government | 2.81 | 18.30 | 5.63 | 61.97 | 11.26 |

| schools | | | | | |
|----------------|-------|------|-------|-------|-------|
| Private | | | | | |
| schools | 11.32 | 7.54 | 13.20 | 52.83 | 15.09 |

In case of online education there is lack of direct contact with other students/ colleagues/ friends. This statement was being agreed by most of the respondents from both the groups (government schools- 61.97% agreed and 11.26% strongly agreed; private schools- 52.83% agreed and 15.09% strongly agreed with the statement).

Table 4.13 Motivation is high in participating online lectures

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|-------------------|----------------------------|-------------------|-------------------------------------|----------------|-------------------------|
| Government | | | | | |
| schools | 7.04 | 28.16 | 15.49 | 36.61 | 12.67 |
| Private | | | | | |
| schools | 30.18 | 22.64 | 18.86 | 20.75 | 7.54 |

The 36.61% respondents from the government schools agreed with the statement and 12.67% strongly agreed.

Whereas only 20.75% respondents agreed and 7.54% strongly agreed that they were motivated during the online lectures. Rest of them did not agreed with the statement.

Table 4.14 Do you happy about the student-teacher interaction during online teaching & learning

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|----------------|----------------------------|-------------------|-------------------------------------|----------------|-------------------------|
|----------------|----------------------------|-------------------|-------------------------------------|----------------|-------------------------|

| | | | | | |
|-------------------|-------|-------|-------|-------|------|
| Government | | | | | |
| schools | 4.22 | 19.71 | 19.71 | 46.47 | 9.85 |
| Private | | | | | |
| schools | 32.07 | 32.07 | 22.64 | 9.43 | 3.77 |

In the above table 46.47% respondents from government schools agreed that they were happy with the student teacher interaction during online lectures. But majority of the private school respondents strongly disagree with the statement.

Table 4.15 You have facility to ask questions or clear doubts during online lectures

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|----------------------------|-------------------|-------------------------------------|----------------|-------------------------|
| Government schools | 7.04 | 14.08 | 25.35 | 26.76 | 26.76 |
| Private schools | 16.98 | 15.09 | 28.30 | 39.62 | 0 |

The above table highlights that most of the respondents agreed with the statement from both the groups.

Table 4.16 Lecturer's personal attention is less

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|----------------------------|-------------------|-------------------------------------|----------------|-------------------------|
| Government schools | 11.26 | 26.76 | 32.39 | 28.16 | 1.40 |
| Private schools | 3.77 | 24.52 | 26.41 | 20.75 | 24.52 |

The table contains the responses of the respondents about the statement that lecturer’s personal attention is less in case of online lectures. Here, only 28.16% respondents agreed with the statement, while a good number of them responded as neither agreed nor disagreed in case of government schools. In case of private schools also majority have marked as neither agree nor disagree about the statement.

Table 4.17 Home environment is suitable for participating online lectures

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 2.81 | 8.45 | 22.53 | 43.66 | 22.53 |
| Private schools | 15.09 | 16.98 | 24.52 | 35.84 | 7.54 |

43.66% respondents agreed that their home environment is suitable for participating online classes. 22.53% respondents strongly agreed with the statement.

In case of private schools also 35.84% agreed and 7.54 strongly agreed with the statement.

Table 4.18 Possibility of distractions from other family members during online lectures

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 12.67 | 29.57 | 19.71 | 25.35 | 12.67 |
| Private schools | 13.20 | 15.09 | 16.98 | 16.98 | 32.07 |

The data in the above table shows that a greater percentage of students from the private schools agreed with the statement than of that from the government schools.

Table 4.19 Like to participate for online lectures with conventional lectures after COVID-19 pandemic over

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 18.30 | 16.90 | 29.57 | 26.76 | 8.45 |
| Private schools | 20.75 | 32.07 | 18.86 | 18.86 | 15.09 |

The responses of the respondents for this statement differ in both the groups. 16.90% respondents from the government schools disagreed with the statement whereas in case of private school respondents it is much higher i.e., 32.07% disagreed with the statement.

Table 4.20 Online learning is cost effective

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|---------------------|------------|------------------------------|---------|------------------|
| Government schools | 5.63 | 29.57 | 14.08 | 45.07 | 5.63 |
| Private schools | 16.98 | 18.86 | 26.41 | 26.41 | 18.86 |

Online learning is cost effective. 45.07% respondents agreed with the statement in case of the first group. In case of private school respondents 26.41% agreed with the statement.

Table 4.21 Online assessment is conducted at regular interval

| Schools | Strongly disagree % | Disagree % | Neither agree nor disagree % | Agree % | Strongly agree % |
|---------------------------|----------------------------|-------------------|-------------------------------------|----------------|-------------------------|
| Government schools | 4.22 | 8.45 | 23.94 | 59.15 | 4.22 |
| Private schools | 0 | 0 | 41.50 | 58.49 | 0 |

Majority of the respondents from both the groups agreed that online assessment was conducted at regular interval during the online teaching learning process.