

CHAPTER-IV
Data Analysis and Interpretation

Note: Strongly Agreed(SA) , Agreed(A) , Undecided(UD) , Disagreed(DA) , Strongly Disagreed(SD),N=40 , *Percentage

The above table no-4.1 indicates attitude of Secondary students towards readiness for E-learning. As presented in above table the findings revealed that 97.5 percent (% of student responded SA +A) perceived that they are easily access the internet as needed for their studies.

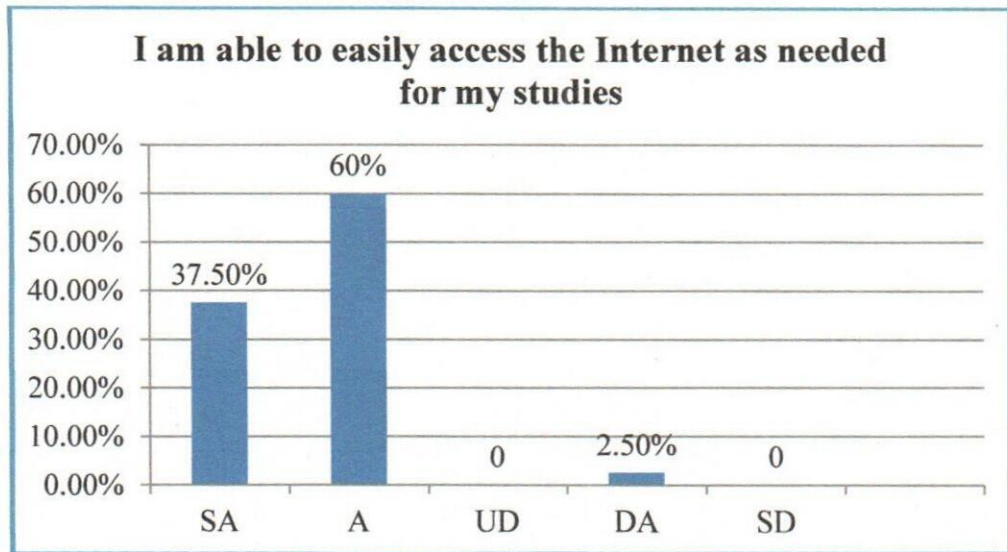


Fig.4.0 Readiness towards E-learning (S1)

While a high majority of the students (85% of responded SA +A) stated that they have sound electronic device (computer/Smartphone) required to register for an Online learning class. The results also indicated that 90% percent of students are confident in their knowledge and skills to operate software (Google Meet) for online-learning; confident in performing the basic functions of Microsoft Office programs. (75% of student responded SA +A); regular power supply to support their online learning class (70% of student responded SA +A); majority of student (72.5% of student responded SA +A) stated that they access good internet broadband to get connected to an online learning class.

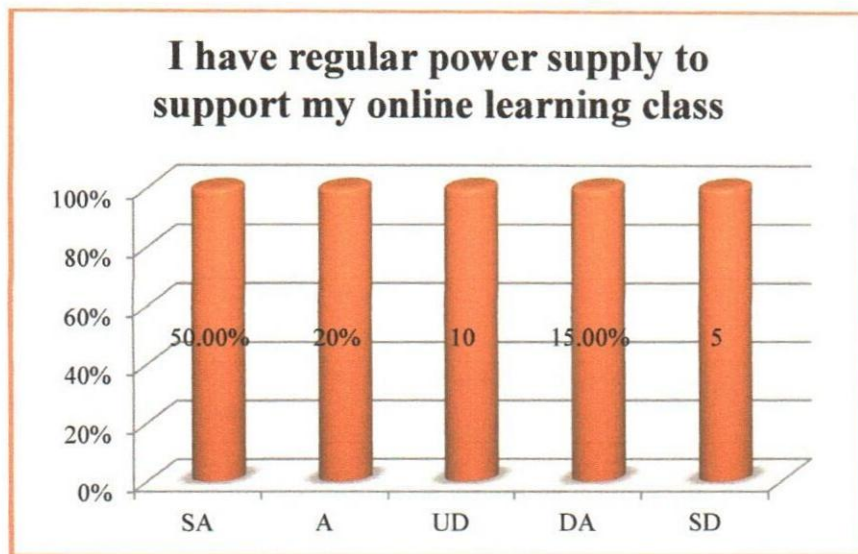


Fig.4.1 Readiness towards E-learning (S5)

From the above discussion, it can be concluded that majority of students have positive attitude towards e-learning readiness with reference to easy access to internet, sound electronic device, confident in performing basic internet functions, good power supply and internet connectivity.

4.1.2 Attitude of Secondary students towards Acceptance of E-learning

Table-4.2: Acceptance of E-learning

Dimension 2: Acceptance of E-learning						
Sl.no	Statements	SA	A	UD	DA	SD
1.	I believe that e-learning gives me the opportunity to acquire new knowledge	16(40%)	18(45%)	2(5%)	4(10%)	0
2.	I believe that e-learning enhances my learning experience	10(25%)	20(50%)	5(12.5%)	5(12.5%)	0
3.	I enjoy using E-learning for my studies	8(20%)	22(55%)	5(12.5%)	4(10%)	1(2.5%)
4.	I feel e-learning is more suitable for me	7(17.5%)	14(35%)	0	7(17.5%)	7(17.5%)

4.1.3 Attitude of Secondary students towards motivation for E-learning

Table-4.3: Motivation for E-learning

Dimension 3: Motivation For E-learning						
Sl.no	Statements	SA	A	UD	DA	SD
1.	I feel confident in using online tools to effectively communicate with others.	8(20%)	26(65%)	5(12.5%)	1(2.5%)	0
2.	I feel confident in posting questions in online discussions	8(20%)	24(60%)	5(12.5%)	2(5%)	1(2.5%)
3.	I feel confident in expressing myself (emotions and humour) through text	12(30%)	18(45%)	3(7.5%)	6(15%)	1(2.5%)
4.	I am able to manage my study time effectively and easily complete assignments on time.	7(17.5%)	24(60%)	7(17.5%)	1(2.5%)	1(2.5%)

Note: Strongly Agreed (SA) , Agreed(A) , Undecided(UD) , Disagreed(DA) , Strongly Disagreed (SD),N=40, *Percentage

The above table no-4.3 indicates attitude of Secondary students towards motivation for E-learning. As presented in above table the findings revealed that 85 percent (% of student responded SA +A) feel confident in using online tools effectively to communicate with others.

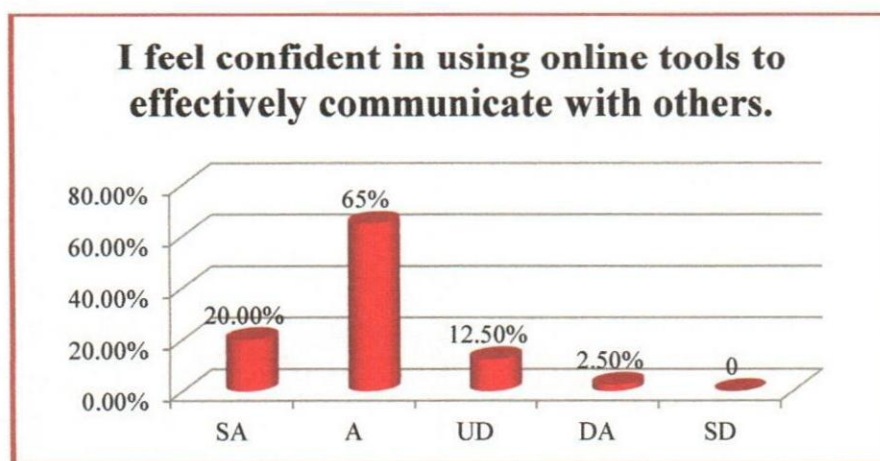


Fig.4.3 Motivation for E-learning (S1)

While a high majority of the students (80% of responded SA +A) stated that they feel confident in posting questions in online discussions. The results also indicated that 75% percent of students feel confident in expressing them self (emotions and humour) through text; majority of student (75.5% of student responded SA +A) stated that they are able to manage study time effectively and easily on time.

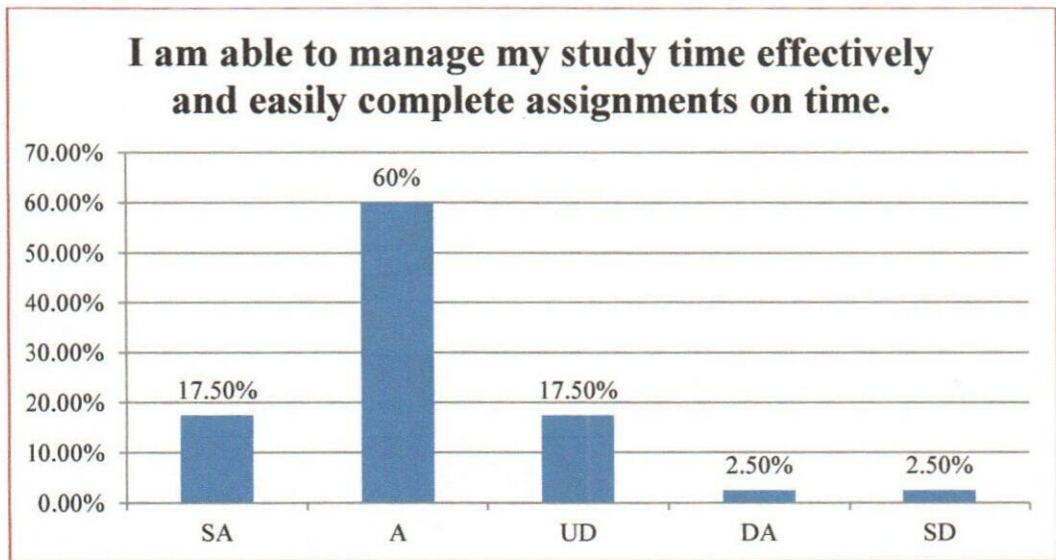


Fig.4.4 Motivation for E-learning (S4)

From the above discussion, it can be concluded that majority of students have positive attitude towards motivation for e-learning with reference confident in using online tools, confident in questioning during online discussion, confident in expressing themselves and manage time effectively.

4.1.4 Attitude of Secondary students towards Problems in E-learning

Table-4.4: Problems in E-learning

Dimension 4: Problems in E-learning						
Sl.no	Statements	SA	A	UD	D	SD
1	I am not distracted by other online activities during online learning such as (instant messages and incoming calls)	7(17.5%)	15(37.5%)	5(12.5%)	10(25%)	3(7.5%)
2	There is no adequate personal space at home for E-learning	5(12.5%)	18(45%)	4(10%)	12(30%)	1(2.5%)
3	I get continuous electricity supply for E-learning	4(10%)	21(52.5%)	2(5%)	10(25%)	3(7.5%)
4	Interrupted and poor internet connectivity for e-learning is a challenge for me	11(25%)	21(52.5%)	3(7.5%)	5(12.5%)	0
5	Arranging adequate devices (smart phone/computer) for E-learning is a challenge for me	10(25%)	16(40%)	4(2.5%)	11(27.5%)	2(5%)

Note: Strongly Agreed (SA), Agreed (A), Undecided (UD), Disagreed (DA), Strongly Disagreed (SD), N=40, *Percentage

The above table no-4.4 indicates attitude of Secondary students towards problems in E-learning. The findings revealed that 55 percent (% of student responded SA +A) perceived that they are not distracted by other online activities during online learning such as (instant messages and incoming calls), where as 32% students are distracted by the same. It is evident from the study that majority of students (55% of responded SA +A) stated that there is no adequate personal space at home for E-learning.

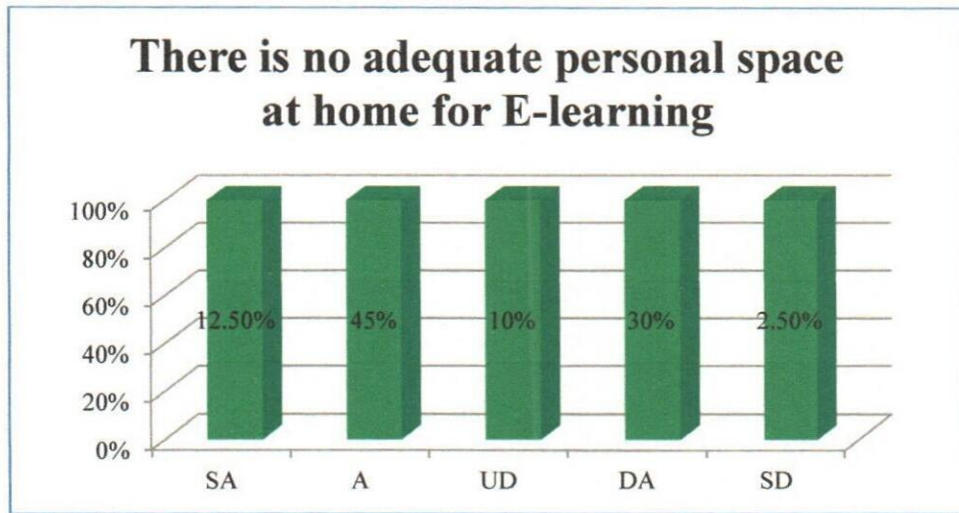


Fig. 4.5 Problems in E-learning (S2)

The results also indicated that 62.5% of students able to get continuous electricity supply for E-learning (62.5% of student responded SA +A). Majority of student (77.5% of student responded SA +A) stated that interrupted and poor internet connectivity for e-learning is a challenge for them and 65% students agreed that arranging adequate devices(smart phone/computer) for E-learning is a challenge for them.

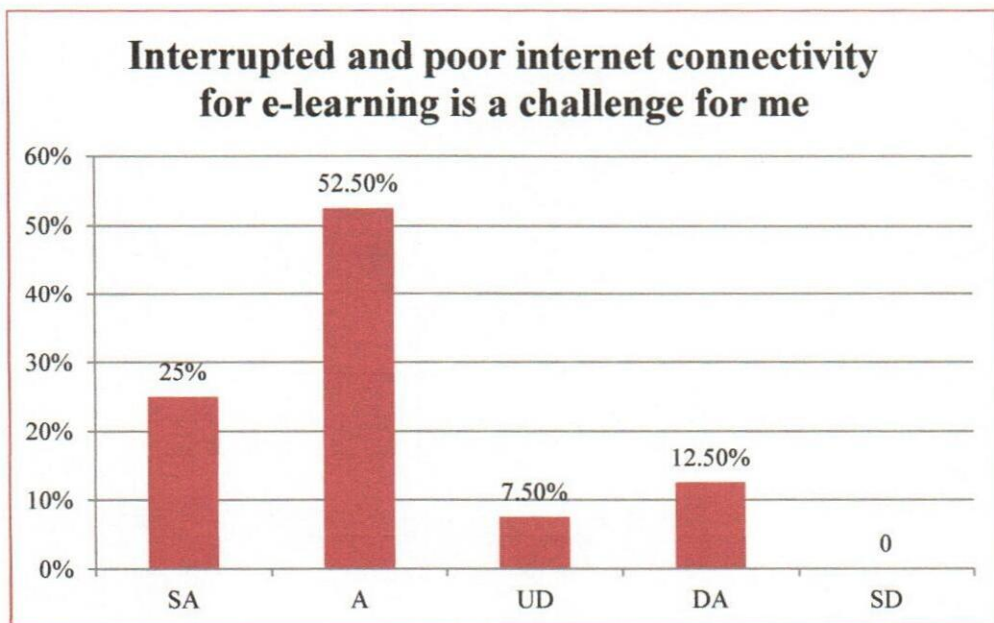


Fig. 4.6 Problems in E-learning (S4)

From the above discussion, it can be concluded that majority of students have some certain challenges for accessing and using e-learning with reference distraction, personal space, supply of electricity, poor internet connectivity and adequate device.

4.2 Attitude of Students about E-learning with reference to Gender

Significance difference between boys and girls in e-learning are categorized overall and component wise dimensions of readiness, acceptance, motivation and problems.

4.2.1 Significant difference between Boys and Girls in overall attitude towards e-learning

Table-4.5: Significance of difference in overall attitude

Overall attitude towards E-learning	Gender	N	Mean	SD	df	p-value	Level of significance
	Boys	17	76.29	7.3	38	0.9	Not significant
	Girls	23	75.87	12.36			

Table 4.5 indicates that the value of p' (0.9) is greater than 0.05 and hence, not significant at 0.05 level. So, the null hypothesis, « There is no significant difference in the attitude of boys and girl at secondary level» is retained. Result leads to infer that attitude of boys and girls students is not differing significantly.

4.2.2 Significant difference between Boys and Girls in readiness towards e-learning:-

Table-4.6: Significance of difference in e-learning readiness

Dimension- 1	Gender	N	Mean	SD	df	p-value	Level of significance
Readiness of students towards E-learning	Boys	17	23.41	3.69	38	0.346	Not significant
	Girls	23	24.57	3.83			

Table 4.6 indicates that the value of p' (0.346) is greater than 0.05 and hence, not significant at 0.05 level. So, the null hypothesis, « There is no significant difference in Readiness towards e- learning between boys and girl of secondary school» is retained. Result leads to infer that e-learning readiness of boys and girls students is not differing significantly.

4.2.3 Significant difference between Boys and Girls in acceptance towards e-learning

Table-4.7: Significance of difference in e-learning acceptance

Dimension -2	Gender	N	Mean	SD	df	p-value	Level of significance
Acceptance of E-learning	Boys	17	19.82	2.81	38	0.219	Not significant
	Girls	23	18.13	5.02			

Table 4.7 indicates that the value of p' (0.219) is greater than 0.05 and hence, not significant at 0.05 level. So, the null hypothesis, « There is no significant difference in Acceptance towards e- learning between boys and girl of secondary school» is retained. Result leads to infer that e-learning acceptance of boys and girls students is not differing significantly.

4.2.4 Significant difference between Boys and Girls in motivation towards e-learning

Table-4.8: Significance of difference in e-learning motivation

Dimension- 3	Gender	N	Mean	SD	df	p-value	Level of significance
Motivation for E-learning	Boys	17	15.35	2.23	38	0.553	Not significant
	Girls	23	15.87	2.98			

Table 4.8 indicates that the value of p' (0.553) is greater than 0.05 and hence, not significant at 0.05 level. So, the null hypothesis, « There is no significant difference in Motivation towards e- learning between boys and girl of secondary

school» is retained. Result leads to infer that e-learning motivation of boys and girls students is not differing significantly.

4.2.5 Significant difference between Boys and Girls in the Problems in e-learning

Table-4.9: Significance of difference in E-learning problems

Dimension -4	Gender	N	Mean	SD	df	p-value	Level of significance
Problems in E-learning	Boys	17	17.71	2.73	38	0.68	Not significant
	Girls	23	17.3	3.21			

Table 4.9 indicates that the value of p' (0.680) is greater than 0.05 and hence, not significant at 0.05 level. So, the null hypothesis, « There is no significant difference between boys and girl of secondary school towards problems in e-learning» is retained. Result leads to infer that e-learning problems of boys and girls students are not differing significantly.

4.3 Relationship between dimensions of E-learning

In order to explore the relationship between three dimensions of E-learning, coefficients of correlation (Pearson's r) were calculated between the scores on the acceptance, readiness and motivation.

Table 4.10: Correlation between Acceptance, Readiness and Motivation of Students towards E-learning

Dimensions	Correlation Coefficient
Readiness and Acceptance	0.34*
Readiness and Motivation	0.43**
Acceptance and Motivation	0.62*

5. * $p < .05$, ** $P < 0.01$

From the Table 4.10, it can be seen that the correlation coefficients between readiness and acceptance (0.34*) was significant at $p < .05$ level, where, readiness and Motivation (0.43**) and acceptance and motivation (0.62**) were significant at $p < .001$ level indicating that the students who are ready towards E-learning are accepting it and vice versa. Similarly, those students are ready towards E-learning are highly motivated for it and vice versa and those students are accepting e-learning are also highly motivated for it and vice versa.

4.4 Summary

In this chapter, the investigator highlighted the analysis and interpretation of the collected data. It was done by using descriptive statistics and inferential statistics with referring to objectives and hypothesis of study. In the next chapter, the investigator would deal with the summary, major findings, educational implications and suggestions for further research.