CHAPTER-V

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5.0 Introduction

In order to determine the levels of perception and attitude as well as the difference based on gender and locality of college students of Nagaon district of Assam towards computer education, the present study was designed. With the help of the self-developed questionnaire and attitude scale, data were collected and by using various statistical techniques, analysis of data were made and presented in chapter- IV. On the basis of the analysis of data, various results were found regarding students’ level of perception and attitude towards Computer Education, difference in students’ level of perception towards the same, difference between male and female students’ attitude towards Computer Education, difference in attitude between students of urban and rural colleges towards Computer Education etc.

This chapter is an overview of the important findings revealed from the analysis and interpretations of data according to the objectives. Moreover, this chapter also made a clear discussion on the findings, and educational implications of the findings.
5. 1 Findings of the study

The following findings were drawn from the present study after data analysis and interpretation. The investigator divided the findings under the following heads.

1. Level of perception of college students towards Computer Education.

2. Difference in the level of perception of college students towards Computer Education.

3. Level of attitude of college students towards Computer Education.

4. Difference in attitude between male and female college students towards Computer Education.

5. Difference in attitude between students of rural and urban colleges towards Computer Education.

The different findings related to different objectives were discussed in the following ways.

5.1.1 Findings related to the level of perception of students towards Computer Education

1. The levels of perception were divided into seven categories and accordingly number of students and the percentages were found against each level. In the extremely high level 11 (3.25%), 23 (6.80%) in high, 70 (20.71%) in above average, 111 (32.84%) in average or moderate, 83
(24.56%) in below average, 26 (7.69%) in low and 14 (4.14%) students showed extremely low level of perception.

2. The Mean and SD in the level of extremely high was 24.27 and .79 respectively, High 21.52 and .51, Above average 19.37 and .49, Average 17.57 and .50, Below average 15.69 and .47, Low 13.73 and .45 and Extremely low 11.36 and 1.60.

3. The highest number of students i.e., 111 (32.84%) showed average or moderate level of perception. The less number of students i.e., 11 (3.25%) showed extremely high level of perception towards Computer Education.

4. Out of 176 male students, 7 (3.98%) showed extremely high, 18 (10.23%) high, 26 (14.77%) above average, 61 (34.66%) average or moderate, 41 (23.30%) below average, 11(6.25%) low and 12 (6.82%) extremely low levels of perception.

5. Out of 162 female students 4 (2.47%) showed extremely high, 5 (3.09%) high, 44 (27.16%) above average, 50(30.86%) average or moderate, 42 (25.93%) below average, 15(9.26%) low and 2 (1.23%) extremely low level of perception.

6. Out of 193 students of rural colleges, 5 (2.59%) showed extremely high, 11 (5.70%) high, 39 (20.21%) above average, 66 (34.20%) average or moderate, 48 (24.87%) below average, 17(8.81%) low and 7 (3.63%) extremely low level of perception.
7. Among the students of urban colleges (N=145) 6 (4.14%) showed extremely high, 12 (8.28%) high, 31 (21.38%) above average, 45 (31.03%) average or moderate, 35 (24.14%) below average, 9 (6.21%) low and 7 (4.83%) extremely low level of perception.

8. In both the categories i.e., rural and urban, highest number of students showed moderate or average level of perception.

5.1.2 Findings related to difference in the levels of perception of college students towards Computer Education

1. The Mean and SD of male students were found as Extremely high 24.14 and .90 respectively, High 21.61 and .50, Above average 19.52 and .51, Average or moderate 17.46 and .50, Below average 15.63 and .49, Low 13.73 and .41 and Extremely low 11.25 and 1.71. The Mean and SD in the levels of perception regarding locality were Extremely high 24.50 and .58 respectively, High 21.20 and .45, Above average 19.29 and .46, Average or moderate 17.60 and .49, Below average 15.74 and .45, Low 13.73 and .46 and Extremely low 12.00 and .00 respectively.

2. The average of the Mean and SD of male students were 17.36 and 2.99 respectively, whereas the Mean and SD of female students were 17.44 and 2.29 respectively.

3. The t-value -.281 with degree of freedom 336 was not significant at 0.01 and 0.05 levels of significance.
4. The null hypothesis was accepted regarding the difference in levels of perception between male and female students towards computer education. It was concluded that there existed no significant difference in the levels of perception between male and female college students towards Computer Education.

5. The Mean score and SD of students of rural colleges were 17.32 and 2.54 respectively, whereas the Mean and SD of students of urban colleges were 17.51 and 2.84 respectively.

6. The t-value -0.662 with degree of freedom 336 was not significant at 0.01 and 0.05 levels of significance.

7. The null hypothesis was accepted and it was concluded that there existed no significant difference in the levels of perception of students of rural and urban colleges towards Computer Education.

5.1.3 Findings related to level of attitude of college students towards Computer Education

1. The Mean scores and S.D in positive attitude level of college students were 150.49 and 4.65 respectively, whereas Mean and S.D found in negative attitude level of students were 134.85 and 7.78 respectively.

2. 187(55.33%) students showed positive and 151 (44.67%) negative attitude out of 338 students towards Computer Education.
3. 83 (47.16) male students showed positive and 93 (52.84%) showed negative attitude towards Computer Education.

4. 104 (64.20%) female students showed positive and 58 (35.80%) showed negative attitude towards the same.

5. 98 (50.78%) students of rural colleges showed positive and 95 (49.22%) negative attitude towards Computer Education.

6. 89 (61.38%) students of urban colleges showed positive and 56 (38.62%) negative attitude towards Computer Education.

7. In both the categories i.e., rural and urban the numbers of students showing positive attitude were more than those showing negative attitude.

5.1.4 Findings related to the difference in attitude between male and female college students towards Computer Education

1. Mean score and SD of male students were 142.13 and 9.53 respectively; the Mean score and SD of female students were 144.98 and 10.26 respectively.

2. The t-value was -2.643 with degree of freedom 336 and it was not significant at 0.01 and 0.05 levels of significance.

3. The null hypothesis was accepted and it was concluded that there existed no significant difference in the attitude levels of male and female students towards computer education.
5.1.5 Findings related to the difference in attitude between students of rural and urban colleges towards Computer Education

1. The Mean score and SD of students of rural colleges were 142.17 and 11.16 respectively; the Mean score and SD of students of urban colleges were 145.28 and 7.82 respectively.

2. The t-value was -.286 with degree of freedom 336 and it was not significant at 0.01 and 0.05 levels of significance.

3. The null hypothesis was accepted and it was concluded that there existed no significant difference in the attitude of students of rural and urban colleges towards computer education.

5.2 Discussions on the findings

The discussions on the findings on the basis of the analysis and interpretation of data incorporated in Chapter IV has been presented in this chapter in the context of the theoretical background that was presented in Chapter I and Chapter II. The discussions on the findings have been presented according to the objectives of the study.

5.2.1 The level of perception of college students towards Computer Education

In the present study, the first objective was to know the levels of perception of college students towards computer education. The results of the study indicated
that the highest number of students showed average or moderate level of perception out of the total students. Therefore, it was concluded that more number of college students possessed average or moderate level of perception towards computer education.

The study showed that out of the total seven levels of perception, both the male and female students’ numbers were highest in the average or moderate level. Similarly, both the numbers of rural and urban students were more in the average or moderate level. Therefore, irrespective of gender and locality, the highest numbers of students showed moderate or average level of perception towards computer education.

There were a few studies that investigated students’ perception towards computer education. The study of Salako, Emmanuel. Adekunle. (2016) resembled and contradicted the present study. The point of resemblance lied between the present study and the study of Salako was that both the studies investigated students’ perception towards computer education. But, the major point of contradiction was that the study of Salako divided students’ level of perception into two parts-positive and negative. According to that study, a good number (76.95%) of students showed positive perception. So, the number of students showing negative perception was very few.

The study by D, E. Jang (2011) showed that male students were more positive than female students in perception towards computer education. The only difference lied in the interpretation of difference between male and female students
was that the more availability of home computers was a factor for making male students more positive.

5.2.2 The difference in the levels of perception of college students towards Computer Education

The second objective of the study was to study the difference in the levels of perception of college students towards Computer Education.

The findings of the study revealed that, the t-value of the levels of perception of male and female students as well as students of rural and urban colleges were not significant at 0.01 and 0.05 levels of significance. The null hypothesis was accepted regarding the difference in levels of perception between male and female students towards computer education. It was concluded that there existed no significant difference in the levels of perception between male and female college students towards computer education. Again, the null hypothesis regarding difference in the levels of perception of students of rural and urban colleges was accepted and it was concluded that there existed no significant difference in the levels of perception of students of rural and urban colleges towards Computer Education.

The findings of the present study regarding objective 2 resembled the study of Salako, Emmanuel. Adekunle. (2016). According to that study, the Mean obtained from the two groups i.e., male and female were statistically not significant. Thus, the null hypothesis was accepted and concluded that there existed no
significant difference in the perception of male and female students towards computer education.

5.2.3 The level of attitude of college students towards Computer Education

The findings of the objective related to the level of attitude of students towards Computer Education revealed that the levels of attitude were divided into two categories i.e., positive and negative. The total number of students irrespective of gender showing positive attitude were more than those showed negative attitude. The number of male students showing positive attitude were less than those showing negative attitude. But, the numbers of female students showing positive attitude were more than those showing negative attitude.

There were some studies that resembled as well as contradicted the present study regarding students’ overall attitude towards computer education. Similar results were revealed by studies done by Martin, Heller. & Mahmoud (1992) which found that though there were some differences among boys and girls regarding use of computer and towards computer education, but overall they possessed positive attitude towards the same. That study apart from studying the gender issue also focused on parents’ attitude towards computer education with that of their children.

Moreover, the study of Shafi, Fahad. Almabhoub. (2000) concluded that though between boys and girls there existed no significant difference regarding the attitude towards computer and the overall attitude was positive. Killic, Gulsen.
Bagci (2001), Tengku, F (2005), Al-khadesh. Husan & Al-Beshtawl. Sulieman (2009), Das, Indrani (2003) and Borah, Samikha (2015) also concluded the same where the percentage of students possessing positive attitude towards computer education were more than the students possessing negative attitude irrespective of gender.

But, on the other hand the works of Shashaani, Lily. (1997) showed a different result. According to that study, male students scored higher than the female students’ regarding the attitude towards Computer Education. Male students were more positive than the female students and the percentage was more regarding liking to know about computer, to work with it, to pursue courses on Computer Education etc. Though the study was mainly about students’ attitude towards computer education, but another important dimension of the study absent in the present study was the relation between parental attitude and students’ attitude towards computer education.

Though, such revelation was not very common for most of the studies, as in most of them the percentage of male students possessing positive attitude towards computer education was more than the negative level and even most of the studies revealed male students’ percentage in positive attitude level was more than the female students. But in a few studies like the studies of Shafi, Fahad. Almahboub (2000), Shashaani, Lily & Khalili, Ashmed (2001), Opoku, Mustapha. Osman & Kuranchie, Alfred (2014), the percentage of female students were found more than the male counterparts regarding the positive attitude level towards computer
education. The study of Opoku, Mustapha. Osman & Kuranchie, Alfred (2014) showed that girls exhibited positive attitude towards computer education more than the boys showed. Moreover, the study of Shafi, Fahad. Almahboub (2000) also showed no significant difference between boys’ and girls’ attitude towards computer education along with significant correlation regarding the same. Moreover, study conducted by Usun, Salih.et.al. (2004) also resembled our present study. Opoku, Mustapha. Osman & Kuranchie, Alfred. (2014) who conducted a study on the undergraduate students’ attitude towards computer education revealed that overall students showed favourable attitude towards Computer Education and there existed no significant difference between the attitude of male and female students towards the same. The same revelation was observed in the study conducted by Padma, M.S. & Chakraborty, P. (1990).

5.2.4 The difference in attitude between male and female college students towards Computer Education

According to the objective to find the significant difference in the attitude of male and female students towards Computer Education, findings revealed that there existed no significant difference in attitude between male and female college students towards Computer Education.

The study conducted by Shafi, Fahad. Almahboub. (2000) found that there existed no significant difference in the attitude of boys and girls towards computer and Computer Education.
Moreover, the study of Stephens. D., & Creaser, Claire. (2002) concluded that between male and female students, there was no significant difference regarding the social aspects of computer, its use and courses related to it.

5.2.5 The difference in attitude between students of rural and urban colleges towards Computer Education

The objective to study the difference in the attitude between students of rural and urban colleges revealed that, the t-ratio was not significant at 0.01 and 0.05 levels of significance. The null hypothesis was accepted and it was concluded that there existed no significant difference in the attitude of students of rural and urban colleges towards Computer Education.

Many studies were found which studied the locality variable showing differences between rural and urban students towards computer education. The study conducted by Sarfo, F. & Amartis, Alex. (2011) reported that there existed no significant difference in the attitude between rural and urban students towards computer education. The study conducted by Sharma, Hemant. Lata. et.al (2013) also revealed that there was no significant difference regarding attitude of senior secondary school students towards Computer Education based on locality.

It was revealed from the study that out of the total students, more number of college students showed average or moderate level of perception towards Computer Education. Both male and female students’ number in average or moderate level of perception was more than other levels. Similarly, regarding locality of the colleges
also the study showed that both the students of rural and urban colleges showed average level of perception. So, students irrespective of gender and locality showed average or moderate perception towards Computer Education. It is a common belief that boys generally show more interest towards computer and like to spent more time on computer as well as they like to opt subjects like Computer Education. Side by side, boys like to go for vocations related to computer and other forms of information technologies. But, the increased popularity of computer and courses related to it make girls to perceive computer and computer related courses positively. Similarly, today the students of rural colleges nowhere remain inactive to know about computers, pursuing courses on computer due to the widespread development of technologies. This resulted in increasing awareness among students of rural colleges what are going in the field of information technologies and as a result they show positive perception towards choosing Computer Education as a subject equally with their urban counterparts.

Again, it was observed that overall the number of students showing positive attitude towards computer education was more than the students showing negative attitude. The study also showed that the percentage of female students in the total population pursuing Computer Education in the sample colleges was also satisfactory, though not more than the male population. It proved the increasing interest and enrolment of girls in Computer Education. The cause of belonging to the positive level of attitude more by female students than negative level might be due to the fact that female students were trying to break the so called assumption
that boys could better handle computer or go for courses related to it. The increased importance of Computer Education irrespective of gender towards it might make girls more positive to adopt Computer Education. They were developing a kind of thought that computer remained nowhere a subject of boys only and so the desire to take computer as a subject increased and they went forward by adopting it in future, which resulted more positivity in their attitude.

Moreover, students of urban and rural colleges showed more positive level of attitude than negative level towards Computer Education. The popularity of computer and courses related to it among the urban and rural students now-a-days made them more positive towards it. Generally, it is a common assumption that students of urban areas easily have the advantage of computer and other information technologies faster than the rural students. They get more exposure as well as opportunities to learn about computer and such courses whether at home or any institution. But, the present study proved that not only the urban students, but the students of rural colleges also had positive level of attitude towards Computer Education.

According to the present study, there were a number of reasons behind choosing Computer Education as a subject on the part of the students. Maximum number of students opined that Computer Education could relate to their probable future vocations. Moreover, others choose it as a subject because of the reasons like it was an interesting subject, it was not a traditional subject taught in the college etc. As Computer Education developed innovative thinking, made students active,
computer practical was a part of that subject etc that is why students chose computer education as a subject.

But, there were students who apart from considering Computer Education interesting also faced some problems in pursuing it. The common problem that most of the students faced was the heavy course contents and they were not happy with it and found it too large. The other most significant problems were too much enrolment of students in the classes, insufficient number of computers according to the students’ enrolment, difficulty to follow teachers’ instruction etc.

Another most significant issue regarding Computer Education that came forward was the medium of instruction. Most of the respondents in the present study came from vernacular mediums and thus in pursuing Computer Education in English medium at undergraduate level stood as a hurdle for them.

Moreover, the study revealed that most of the teachers used traditional methods of teaching and the common methods of teaching were discussion, lecture, demonstration etc. Moreover, students considered that to pursue Computer Education, there should be some necessary tools in the classes like computer, projectors, laptops, loudspeakers etc.

As maximum number of colleges were running self-financed Computer Education courses, so all the facilities like required number of computers, other audio-visual aids, seating arrangement etc could not be provided as per the needs of
the students. In some colleges, overcrowding of students in Computer Education classes came out as a major problem.

According to students’ responses, they enjoyed practical classes more than the theory classes. The reasons behind it included practical classes involved fun, it drew students’ attention more, and it was like leisure time activities and so on. Moreover, students considered computer as an indispensable part of college to run various activities. They responded that computers were very useful in keeping some data like students’ evaluative data, admission related data, data regarding students and staff’s enrolment, records of co-curricular activities etc.

5.3 Educational implications of the findings

Most of the research studies done in the field of social sciences have some indirect implications for the system of education. The present study was all about the perception and attitude of college students towards computer education in the Nagaon district of Assam. It was considered as the first study of its kind in Assam, so far the best of the researcher’s knowledge is concerned. Thus, the findings or conclusions drawn from the present study could not be generalized. The educational implications of the findings of the present study were summarized as follows.

1. Computer Education in the state of Assam came to be recognized as a subject during the last few decades only. This subject has gaining attention due to the rapid development of computer and other information
technologies. But in spite of its immense importance, Governments have not been able to introduce Computer Education in all the educational institutions irrespective of their locality, type and so on compulsorily. Thus, it will lead the Government and policy makers to take up initiatives to introduce Computer Education compulsorily irrespective of all types of educational institutions to make it more popular in coming days.

2. The study revealed that more number of college students showed average or moderate level of perception towards Computer Education. So, the teachers, educationists and educational institutions in order to create high level of perception among students should take up innovative ways.

3. The present scenario of Computer Education in the colleges will help Government to keep proper eye on the facilities provided to the colleges to pursue Computer Education and to provide best infrastructural facilities for students so that they could be best benefitted by taking up courses on computer.

4. The study will be helpful for the Government as well as the educational institutions to provide support services on the probable future vocations in the field of computer and other information technologies. They will be able to start collaboration with the companies and other enterprises to recruit the successful candidates in that field after completion of their education or course.
5. The present study also showed students’ positive attitude towards Computer Education. Keeping in that view, the educational institutions will be able to take up initiatives to lead those students by motivating them to pursue vocations related to Computer Education.

6. The study gave us a clear picture of differences between male and female students as well as students of rural and urban colleges regarding their attitude towards Computer Education. The female students showed more positivity in their attitude than male students, while more number of students of rural colleges exhibited positive attitude towards the same. Thus, the educational institutions providing Computer Education now will take up steps in their own ways to make the students more motivated towards Computer Education as well as best benefitted in their future vocations.

7. The colleges will also become conscious to the fact that more number of students will enroll in Computer Education and develop positive attitude towards it. Since computer education is not still available in all the colleges, Government in order to popularize Computer Education among students should introduce Computer Education in more number of educational institutions.