

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

CHAPTER IV

4. DATA ANALYSIS AND INTERPRETATION

4.1. Introduction

The previous chapter was, therefore, focused on the methodology and sample for the study, in line with its definitions. The researcher prepared the tool for data collection including scoring criteria for that tool.

This chapter presents the analysis using the appropriate statistical the methods for data obtained from student teachers using Attitude towards ICT scale (ATIS), such as Percentage, Mean, Standard Error, Standard Deviation , Variance, CI(confidence intervals) followed by interpretation of the results.

The researcher will also want to investigate whether any differences exist between the various courses of prospective teachers regarding attitudes toward ICT.

It is observed that the majority has a positive attitude towards ICT most by the prospective teachers (78%) ,17% of them have a completely negative attitude towards it and 5% belong to neither positive nor negative they become neutral.

The research finding can include early exposure of prospective teachers into ICT during their Bachelor's and Master's degree courses created in them a positive attitude towards ICT tools. Another reason could be different awareness programs organized by the government in different academic institutions across India.

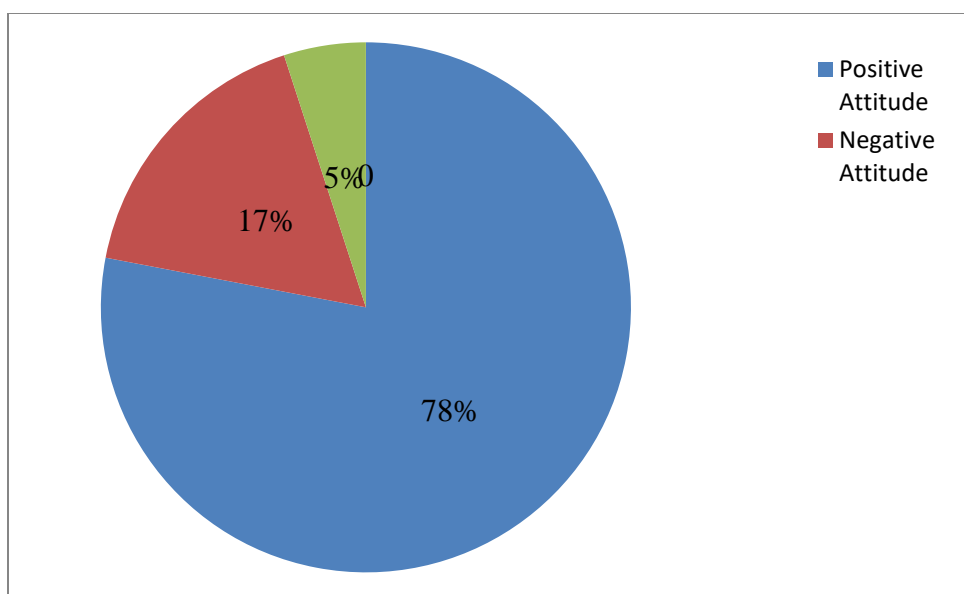


Figure No: 4.1 Showed the percentage of the positive, negative and neutral attitude of the prospective teacher of teacher education

This chapter reveals the data analysis and interpretation from the responses collected from the ETEI (Elementary Teacher Education Institution) prospective teacher from the Keonjhar district of Odisha. The intent was to understand the attitudes of prospective teachers towards ICT (Information and Communication Technology) in education. The analysis consists of both first-year and second-year students and follows descriptive statistics including mean, standard error (SE), variance, confidence intervals (CI), and t-test for comparisons.

Table:4. 1 Descriptive analysis of the ETEI Prospective Teacher

Items	ETEI 1st year				ETEI 2nd year				
	Mean	SE	Var	CI(95.0%)	Mean	SE	var	CI(95.0%)	t-Test
SA	3.88 (±2.30)	0.46	5.28	0.95	4.76(±2.65)	0.53	7.02	1.09	0.477
A	7.96(±2.13)	0.43	4.54	0.88	7.64(±2.37)	0.48	5.66	0.98	
N	4.04(±3.18)	0.64	10.12	1.31	3.72(±2.70)	0.54	7.29	1.11	
DA	2.96(±2.05)	0.41	4.21	0.85	2.6(±1.19)	0.24	1.42	0.49	
SDA	1.04(±1.72)	0.34	2.96	0.71	1.08(±1.11)	0.22	1.24	0.46	

Table No 4.1 showed that the descriptive analysis of the prospective teacher of the education that the ETEI 1st year prospective teacher had the mean and SD is 7.96(±2.13). In the ETEI 1st yrs prospective teacher had agreed toward the ICT in the teacher education.

The t-test result of 0.477 ($p > 0.05$) indicates that there is no statistically significant difference between ETEI 1st and 2nd year. The score of mean of SA is more 2nd year as compare to 1st year that means higher mean in 2nd-year students suggests their slight stronger agreement towards ICT use.

Mean score value of the A is nearly same, It indicates a general positive attitude towards ICT and Confidence intervals overlap, and there is not enough of difference to indicate significant difference for any year. Decrease from 4.04 to 3.72 for neutral response- possibly indicative to slight movement from indecision to more definite opinions in the 2nd year in the N.

Very low means in both groups (1.04 vs. 1.08) show little strong disagreement with ICT usage, this also reflects a more or less dominant positive or neutral attitude.

Table 4.2: Descriptive analysis of the B.Ed Prospective Teacher

Items	B.Ed 1st year				B.Ed 2nd year				
	Mean	SE	Var	CI(95.0%)	Mean	SE	Var	CI(95.0%)	t-Test
SA	6.12(±2.69)	0.54	7.277	1.11	5.28(±2.33)	0.47	5.46	0.96	0.495
A	5.92(±2.39)	0.48	5.743	0.99	7.32(±2.30)	0.46	5.31	0.95	
N	2.76(±1.87)	0.38	3.523	0.77	3.44(±1.89)	0.38	3.59	0.78	
DA	3.32(±1.77)	0.35	3.143	0.73	2.36(±0.99)	0.20	0.99	0.41	
SDA	1.88(±1.87)	0.38	3.527	0.78	1.56(±1.38)	0.28	1.92	0.57	

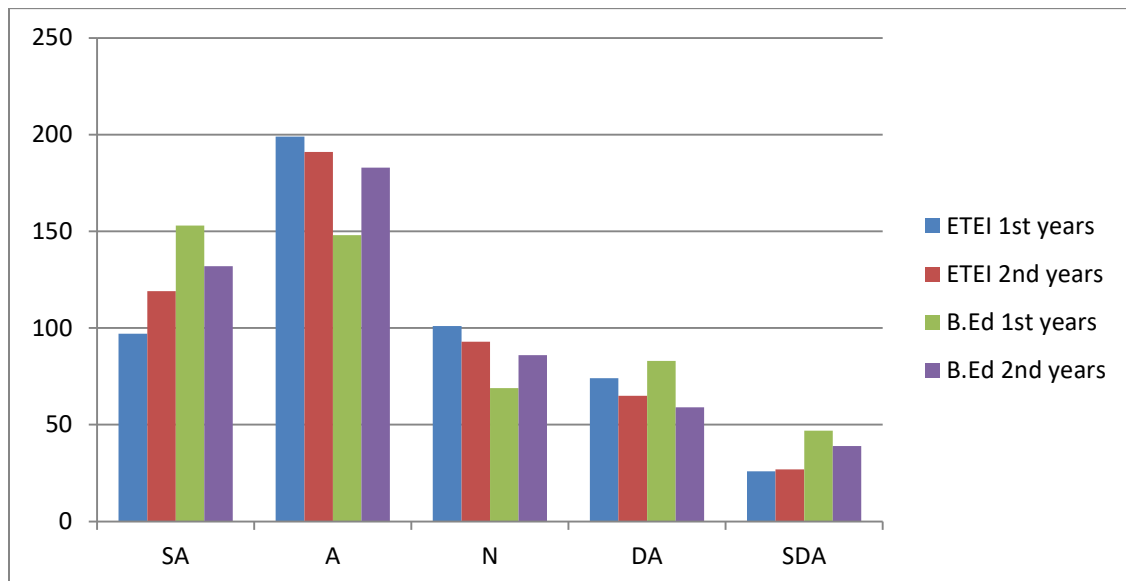
Table No 4.2 showed that the descriptive analysis of the prospective teacher of the education that the B.Ed 1st year prospective teacher had the mean and SD is 6.12(±2.69), In the B.Ed 1st year prospective teacher had SA and positive ICT use during first phase of training.

No significant difference exists on the comparison of t-test values (0.495) as applied to both course.

As students progress into another year of study, the score increased from 5.92 (1st year) to 7.32 (2nd year)" showing movement from disagreement to agreement along with greater exposure, comprehension, and appreciation of ICT by the second year in A.

In Disagree (DA) 3.32 (1st year) to 2.36 (2nd year-result); indicating that negative perceptions about ICT started fading away when the training was undertaken. Strongly disagree (SDA) ,Both groups recorded low mean values (1.88 and 1.56 respectively) showing that even in both years, strong negative attitudes did not exist. The lower score in the 2nd year barely measured in comparison indicates that such reluctance towards ICT has waned with time.

4.2. Visual Analysis of Attitudes Towards ICT



Graph 4.1: Visual Analysis of Attitudes Towards ICT

SA: Strongly Agree, A: Agree, N: Neutral, DA: Disagree, SDA: Strongly Disagree

ETEI :Elementary Teacher Education Institute, B.Ed: Bachelor Of Education

Graph 4.1 shows that the Attitudes Towards ICT prospective teacher had maximum agree of various courses. Graph showed that ETEI 1st year had used the ICT, while making presentation, writing documents and other style of teaching and learning process in the courses.

The SA-type response is more frequent among B.Ed 1st years, which shows the presence of a positive attitude towards ICT at the very beginning of their teacher training and having completely availability of resource like infrastructure, human, material . There are fewer SA responses amongst ETEI 2nd years as compared to B.Ed groups, which indicates a somewhat restraining attitude being developed as they progress through the training. This portion also shows prospective teacher going from ETEI 1st to 2nd year by gaining ICT skill through practice then shift to B.Ed. 1st also find more basic skill and use of ICT but B.Ed. , they have gone to high level content and practical work but unavailability of resource. Here we will saw clearly, the use of ICT , perception and attitude towards ICT has maximum courses of prospective teacher towards positive and agree with strongly Agree.

4.2.1. Correlation Analysis

The table below shows the Pearson correlation coefficients between the five rating categories (SA, A, N, DA, SDA).

Table: 4.3 Correlation of the Response of the ETEI and B.Ed. Prospective Teacher					
	<i>SA</i>	<i>A</i>	<i>N</i>	<i>DA</i>	<i>SDA</i>
SA	1				
A	-0.93	1			
N	-0.98	0.98	1		
DA	0.28	-0.61	-0.46	1	
SDA	0.94	-0.93	-0.96	0.36	1

Table: 4.3 shows that Correlation of the Response of the ETEI &B.Ed Prospective Teacher had SA vs. A ($r = -0.9311$) ,A strong negative correlation exists .A vs. N ($r = 0.9852$)A very strong positive correlation suggests that students who "Agree" might lean toward neutrality as a more mild or moderate form of agreement, as opposed to full-fledged confidence.