

## **CHAPTER- IV**

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## **CHAPTER - IV**

### **ANALYSIS AND INTERPRETATION OF DATA**

#### **4.00 INTRODUCTION :**

The data collected from the test may have little meaning to the investigator until they have been arranged or classified in some systematic way. Statistics is a body of mathematical technique or process for gathering, organising, analysing and interpreting numerical data.

The research worker who uses statistics is concerned with more than the manipulation of data. The statistical method serves the fundamental purpose of description and analysis and its proper application involves answering the following questions:

1. What facts need to be gathered to provide the information necessary to answer the question or to test the hypothesis?
2. How are these data to be selected, gathered, organised and analysed?
3. What assumptions underlie the statistical methodology to be employed?
4. What conclusions can be validly drawn from the analysis of the data?

#### 4.1 INTERPRETATION :

After collecting and analysing the data, the researcher has to accomplish the task of drawing inferences followed by report writing. This has to be done very carefully, otherwise misleading conclusions may be drawn and the whole purpose of doing research may get vitiated. It is only through interpretation that the researcher can expose relations and processes that underlie his findings.

Interpretation refers to the task of drawing inferences from the collected facts after an analytical and/ or experimental study. In fact, it is a search for broader meaning of research findings. The task of interpretation has two major aspects viz.

- i) the effort to establish continuity in research through linking the results of a given study with those of another and
- ii) the establishment of some explanatory concepts.

“In one sense, interpretation is concerned with relationships within the collected data, partially overlapping analysis. Interpretation also extends beyond the data of the study to include the results of other research, theory and hypotheses.” Thus, interpretation is the device through which the factors that seem to explain what has been observed by researcher in the course of the study can be better understood and it

also provides a theoretical conception which can serve as a guide for further researches.

The chapter comprises of two sections :

**Section I-** Statistical Analysis and Interpretations have been undertaken as follows:

- A. Self role perception of teacher communicators at D.Ed. and B.Ed. levels- sex-wise.
- B. Job satisfaction of teacher communicators at D.Ed. and B.Ed. levels- sex-wise.

**Section II-** Analysis of self role perception and job satisfaction of Teacher communicators at D.Ed. and B.Ed. levels- sex-wise.

**4.2 SECTION- I** - In this section, the self role perception and job satisfaction sex-wise of Teacher communicators is analysed.

**4.2.1 Section-I-A** - Statistical Analysis of self role perception of Teacher communicator at D.Ed. and B.Ed. levels of Education- sex-wise.

**Table 4.1 - Analysis of self role perception of Teacher Communicators at D.Ed. levels of Education.**

Self Role Perception	High	100%	Medium	100%	Low	100%
Managers	35	73	13	27	0	--
Facilitators	35	73	13	27	0	--
Researchers	28	58	20	42	0	--
Extension Workers	41	85	20	42	0	--
Counsellors	38	79	10	21	0	--
Educators	42	87	6	13	0	--

**Findings -**

In table 4.1 the self role perception of teacher communicators at D.Ed. level for both males and females is seen.

It is found that out of 48 teacher communicators 42 and 41 of them i.e. 87% and 85% perceive their roles as Educators and Extension workers respectively as high with only 13% and 15% i.e. 6 and 7 teacher communicators respectively perceiving their roles as medium or average.

38 Teacher communicator i.e. 79% perceive their role as Counsellor as high with only 10 of them i.e. 21% perceiving it as medium or average.

35 Teacher communicators i.e. 73% perceive their roles as Manager and Facilitator as being high while 27% i.e. 13 teacher

communicators perceive them as being medium or average. 28 Teacher communicators i.e. 58% perceive their role as Researcher as being high while 20 of them i.e. 42% perceive it as being medium or average.

### **Conclusions :**

All the 6 roles are perceived by the Male and Female teacher communicators as high indicating that majority of them perform these 6 roles at a high level. Out of the 48 teacher communicators none of them have perceived their 6 roles as low.

**Table 4.2 Analysis of Self Role Perception of Male teacher communicators at D.Ed. levels of Education**

Role Perception	High	100%	Medium	100%	Low	100%
Managers	22	71	9	29	0	--
Facilitators	22	71	9	29	0	--
Researchers	14	45	17	55	0	--
Extension Workers	28	90	3	10	0	--
Counsellors	25	81	6	19	0	--
Educators	29	94	2	6	0	--

### **Findings -**

From Table No. 4.2 it can be inferred that out of the 31 male teacher communicators at the D.Ed. level 29 of them i.e. 94% perceive their role as Educators as high and only 2 of them i.e. 6% perceive it at

the medium level. 28 Of them i.e. 90% perceive their role as Extension workers as high and only 10% perceive it at the medium level. 25 of them i.e. 81% perceive their role as Counsellors as high, whereas 6 of them i.e. 19% perceive it at the medium level.

22 Of them i.e. 71% perceive their role as Managers and facilitators as high whereas only 29% i.e. 9 perceive it at the medium level.

As compared to the above 55% i.e. 17 male teacher communicators at D.Ed. level perceive their role as researchers at the medium level whereas 45% i.e. 14 of them perceive it at the high level.

### **Conclusions-**

From table 4.2 it can be concluded that the male teacher communicators at the D.Ed. level perceive their roles as Educators, Extension workers, Counsellors, Managers and Facilitators as high but as Researchers they rate themselves as medium.

Out of the 31 teacher communicators none of them have perceived their 6 roles as low.

**Table 4.3 Analysis of Self Role Perception of Female teacher communicators at D.Ed. levels of Education.**

Self role perception	High	100%	Mediu m	100%	Low	100%
Managers	13	76	4	24	0	--
Facilitators	13	76	4	24	0	--
Researchers	14	82	3	18	0	--
Extension Workers	13	76	4	24	0	--
Counsellors	13	76	4	24	0	--
Educators	13	76	4	24	0	--

#### **Findings -**

From Table No.4.3, it can be inferred that out of the 17 female teacher communicators at the D.Ed. level, 14 female teacher communicators at D.Ed. level i.e. 82% perceive their role as Researcher as high whereas 18% i.e. 3 of them perceive it as medium. 13 Of them i.e. 76% perceive their roles as Managers, Facilitators, Extension Workers, Counsellors and Educators as high whereas 24% i.e. 4 of them perceive these roles at the medium level.

#### **Conclusions -**

76% to 82% Of the D.Ed. female teacher communicators perceive all their six roles as high indicating they are good Managers, Facilitators, Researchers, Extension workers, Counsellors and Educators only 18% to 24% of them perceive their 6 roles as medium indicating



they are average. None of them have perceived their roles as being low or below average.

**General Conclusions from Tables 4.2 and 4.3 :**

At the D.Ed. level of Education, comparing sex-wise, the teacher communicators both Males and Females have high perception at their roles as Managers, Facilitators, Extension Workers, Counsellors and Educators. However, there is difference in their perception of their role as researcher. Males perceive their role as medium whereas females perceive it as high.

**Table 4.4 - Analysis of Self Role Perception of Teacher Communicators at B. Ed. levels of Education.**

Self Role Perception	High	100%	Medium	100%	Low	100%
Managers	47	77	14	23	0	--
Facilitators	52	85	9	15	0	--
Researchers	50	82	11	18	0	--
Extension Workers	56	92	5	8	0	--
Counsellors	53	87	8	13	0	--
Educators	53	87	8	13	0	--

**Findings :**

In Table No.4.4, the self role perception and teacher communicators at B.Ed. level both males and females is seen.

It is found that out of 61 teacher communicators, 56 of them i.e. 92% perceive their role as Extension Workers as high with only 5 of them i.e. 8% perceiving it as medium or average. 53 Teacher communicators i.e. 87% perceive their roles as Counsellors and Educators as being high, while 13% i.e. 8 teacher communicators perceive them as being medium. 52 Teacher communicators i.e. 85% perceive their role as Facilitator as high with only 9 of them i.e. 15% perceiving it as medium or average. 50 Teacher communicators i.e. 82% perceive their role as Researcher as high with only 11 of them i.e. 18% perceiving it as medium. 47 Teacher communicators i.e. 77% perceive their role as Manager as high with only 14 of them i.e. 23% perceiving it as medium or average.

**Conclusions :**

All the 6 roles are perceived by the male and female teacher communicators as high indicating that majority of them perform these 6 roles at a high level. Out of the 61 teacher communicators at B.Ed. level none of them have perceived their six roles as low.

**Table 4.5 - Analysis of Self Role Perception of Male Teacher Communicators at B. Ed. levels of Education.**

Self role perception	High	100%	Medium	100%	Low	100%
Managers	27	75	9	25	0	--
Facilitators	31	86	5	14	0	--
Researchers	29	81	7	19	0	--
Extension Workers	33	92	3	8	0	--
Counsellors	32	89	4	11	0	--
Educators	32	89	4	11	0	--

**Findings :**

From Table No.4.5, it can be inferred that out of the 36 male teacher communicators at B.Ed. level 33 of them i.e. 92% perceive their role as extension workers as high with only 3 of them i.e. 8% perceiving it as medium. 32 Of them i.e. 89% perceive their roles as Counsellors and Educators as high with only 4 of them i.e. 11% perceiving it as medium or average. 31 Of them i.e. 85% perceive their role as Facilitator as high with only 5 of them i.e. 14% perceiving it as medium. 29 of them i.e. 81% perceive their role as Researcher as high with only 7 of them i.e. 19% perceiving it as medium or average. 27 of them i.e. 75% perceive their role as Manager as high with only 9 of them i.e. 25% perceiving it as medium.

### Conclusions :

75% to 92% of the B.Ed. male teacher communicators perceive all their six roles as high indicating they are good Managers, Facilitators, Researchers, Extension Workers, Counsellors and Educators, only 11% to 25% of them perceive their 6 roles as medium indicating they are average. None of them have perceived their roles as being low or below average.

**Table 4.6 - Analysis of Self Role Perception of Female Teacher Communicators at B. Ed. levels of Education.**

Self Role perception	High	100%	Medium	100%	Low	100%
Managers	20	80	5	20	0	--
Facilitators	21	84	4	16	0	--
Researchers	21	84	4	16	0	--
Extension Workers	23	92	2	8	0	--
Counsellors	21	84	4	16	0	--
Educators	21	84	4	16	0	--

### Findings :

From Table No.4.6, it can be inferred that out of 25 female teacher communicators at the B.Ed. level 23 of them i.e. 92% perceive their role as Extension Workers as high, whereas 2 of them i.e. 8% perceive it as medium. 21 of them i.e. 84% perceive their roles as Facilitators, Researchers, Counsellors and Educators as high, whereas

16% i.e. 4 of them perceive these roles at the medium level. 20 Of them i.e. 80% perceive their role as Manager as high, whereas only 20% i.e. 5 of them perceive it at the medium level.

**Conclusions :**

From Table No.4.6, it can be concluded that 80% to 92% of the female teacher communicators at the B.Ed. level perceive their all 6 roles as high indicating they are good Managers, Facilitators, Researchers, Extension Workers, Counsellors and Educators. Only 8% to 20% of them perceive their six roles as medium indicating they are average. None of them have perceived their roles as being low or below average.

**General conclusions from Tables 4.5 and 4.6 :**

At the B.Ed. level of Education comparing sex-wise, the teacher communicators both males and females have high perception of their roles as Managers, Facilitators, Researchers, Extension Workers, Counsellors and Educators.

**Table 4.7 - Self Role Perception of Male Teacher Communicators at D.Ed. and B. Ed. levels of Education.**

Self Role Perception	High %		Medium %		Low %	
	D.Ed.	B.Ed.	D.Ed.	B.Ed.	D.Ed.	B.Ed.
Managers	71	75	29	25	0	0
Facilitators	71	86	29	14	0	0
Researchers	45	81	55	19	0	0
Extension Workers	90	92	10	8	0	0
Counsellors	81	89	19	11	0	0
Educators	94	89	05	11	0	0

**Findings :**

Table No. 4.7 compares the Self role perception of Male teacher communicators of the D.Ed. and B.Ed. levels of education.

For all the 6 roles none of the male teacher communicators have perceived their roles in the low or below average category.

The Male B.Ed. teacher communicators perceived all the six roles as high percentage ranging from 75% to 92%. Only 25% to 8% have perceived their roles as being medium or average.

In the case of Male D.Ed. teacher communicators the Self role perception as Researcher is perceived by 55% teacher communicators as medium or average and 45% as high or above average. The other five

roles ranging between 71% to 94% in the high category and between 29% to 6% in the medium or average category.

**Conclusion :**

Majority of the male D.Ed. teacher communicators perceive their roles as Managers, Facilitators, Extension Workers, Counsellors and Educators as high and Researcher as medium, whereas majority of the male B.Ed. teacher communicators perceive all the six roles as high.

**Table 4.8 - Self Role Perception of Female Teacher Communicators at D.Ed. and B. Ed. levels of Education.**

Self Role perception	High %		Medium %		Low %	
	D.Ed.	B.Ed.	D.Ed.	B.Ed.	D.Ed.	B.Ed.
Managers	76	80	24	20	0	0
Facilitators	76	84	24	16	0	0
Researchers	82	84	18	16	0	0
Extension Workers	76	92	24	8	0	0
Counsellors	76	84	24	16	0	0
Educators	76	84	24	16	0	0

**Findings :**

Table No.4.8 compares the Self role perception of female teacher communicators of the D.Ed. and B.Ed. levels of education.

For all the six roles none of the female teacher communicators have perceived their roles in the low or below average category.

The female B.Ed. teacher communicators perceived all the six roles as high percentage ranging from 80% to 92% only 8% to 20% have perceived their roles as being medium.

The female D.Ed. teacher communicators perceived all the six roles as high percentage ranging from 76% to 82% only 24% to 18% have perceived their roles as being medium or average.

**Conclusion :**

Majority of the Female D.Ed. and B.Ed. teacher communicators perceive all the six roles as high.

**4.2.2. Section-I-B - Statistical Analysis of Job satisfaction of teacher communicators at D.Ed. and B.Ed. level of Education - Sex-wise.**

**Table 4.9 - Analysis of Job Satisfaction of Teacher Communicators at D.Ed. levels of Education**

	High	100%	Medium	100%	Low	100%
Job satisfaction	9	19	39	81	0	--

**Findings :**

From Table No.4.9, it can be inferred that out of 48 teacher communicators at the D.Ed. level 9 of them i.e. 19% have high level of Job satisfaction whereas 39 of them i.e. 81% teacher communicators



have medium or average level of job satisfaction. None of them have low level of job satisfaction.

**Conclusion :**

Majority of the teacher communicators at D.Ed. level have medium level of job satisfaction. None of them have low job satisfaction.

**Table 4.10 - Analysis of Job Satisfaction of Male Teacher Communicators at D.Ed. levels of Education**

	High	100%	Medium	100%	Low	100%
Job satisfaction	6	19%	25	81%	0	--

**Findings :**

From Table No.4.10, it can be inferred that out of 31 male teacher communicators at D.Ed. level 6 of them i.e. 19% have high job satisfaction whereas 25 of them i.e. 81% have medium or average job satisfaction.

**Conclusion :**

Majority of the male teacher communicators at D.Ed. level have medium level of job satisfaction. None of male teacher communicators are found to have low level of job satisfaction.

**Table 4.11 - Analysis of Job Satisfaction of Female Teacher Communicators at D.Ed. levels of Education**

	High	100%	Medium	100%	Low	100%
Job satisfaction	3	18%	14	82%	0	--

**Findings :**

From Table No.4.11, it can be inferred that none of Female teacher communicators at D.Ed. level have low level of job satisfaction. 18% Female teacher communicators at D.Ed. level have high job satisfaction, whereas 82% female teacher communicators have medium or average job satisfaction.

**Conclusion :**

Majority of Female teacher communicators at D.Ed. level have medium level of job satisfaction. None of female teacher communicators at D.Ed. level have low level of job satisfaction.

**General conclusions from Table 4.10 and 4.11 :**

At the D.Ed. level of Education, comparing sex-wise, the teacher communicators both Males and Females have medium levels of job satisfaction and none of them have low level of job satisfaction.

**Table 4.12- Analysis of Job Satisfaction of Teacher Communicators at B. Ed. levels of Education**

	High	100%	Medium	100%	Low	100%
Job satisfaction	7	11%	54	89%	0	--

**Findings :**

Most of teacher communicators at B.Ed. level i.e. 89% have medium job satisfaction, whereas 11% teacher communicators have high job satisfaction. None of the teacher communicators at B.Ed. level have low job satisfaction.

**Conclusion :**

Majority of teacher communicators at B.Ed. level have medium level of job satisfaction.

**Table 4.13 - Analysis of Job Satisfaction of Male Teacher Communicators at B.Ed. levels of Education**

	High	100%	Medium	100%	Low	100%
Job satisfaction	2	6%	34	94%	0	--

**Findings :**

From Table No. 4.13, it is inferred that out of 36 Male teacher communicators at B.Ed. level, 2 of them i.e. 6% have high job

satisfaction. Whereas 34 of them i.e. 94% have medium job satisfaction.

**Conclusions :**

Most of the male teacher communicators at B.Ed. level have medium or average level of Job satisfaction and none of them have low job satisfaction.

**Table 4.14 - Analysis of Job Satisfaction of Female Teacher Communicators at B.Ed. levels of Education**

	High	100%	Medium	100%	Low	100%
Job satisfaction	5	20%	20	80%	0	--

**Findings :**

Out of 25 female teacher communicators at B.Ed. level 20 of them i.e. 80% have average job satisfaction. Whereas 5 of them i.e. 20% have high job satisfaction. None of female teacher communicators at B.Ed. level have low job satisfaction.

**Conclusion :**

Most of female teacher communicators at B.Ed. level have medium level of job satisfaction.

**General conclusions from Table No.4.13 and 4.14 :**

At the B.Ed. level of Education, comparing sex-wise, the teacher communicators both Males and Females have medium levels of job satisfaction and none of them have low level of job satisfaction.

**Table 4.15 - Job Satisfaction of Male D.Ed. and B.Ed. Teacher Communicators.**

	High %		Medium %		Low %	
	D.Ed.	B.Ed.	D.Ed.	B.Ed.	D.Ed.	B.Ed.
Job satisfaction	19	6	81	94	0	0

**Findings :**

Table No. 4.15 shows the level of job satisfaction among teacher communicators at the D.Ed. and B.Ed. levels of Education. It is seen that 94% B.Ed. and 81% D.Ed. Male teacher communicators have medium or average level of job satisfaction, whereas only 19% D.Ed. and 6% B.Ed. Male teacher communicators have high level of job satisfaction.

None of the D.Ed. or B.Ed. Male teacher communicators have low level of job satisfaction.

**Table 4.16- Job Satisfaction of Female D.Ed. and B.Ed. Teacher Communicators.**

	High %		Medium %		Low %	
	D.Ed.	B.Ed.	D.Ed.	B.Ed.	D.Ed.	B.Ed.
Job satisfaction	18	20	82	80	0	-

**Findings :**

Table No. 4.16 shows the level of job satisfaction among female D.Ed. and B.Ed. teacher communicators.

It is found that like this male counter parts 82% D.Ed. and 80% B.Ed. teacher communicators also indicate medium or average job satisfaction. Whereas 18% D.Ed. and 20% B.Ed. teacher communicators have high job satisfaction. None of the female teacher communicators of D.Ed. and B.Ed. show low level of job satisfaction.

**General Conclusion :**

The job satisfaction levels among Male and Female teacher communicators of the D.Ed. and B.Ed. education levels show similar pattern of majority at them having medium level of job satisfaction.

**4.3 SECTION-II :** Analysis of Self role perception and job satisfaction of Teacher Communicators D.Ed. and B.Ed. levels - Sex-wise.

**A. ROLE AS MANAGER :**

**Table 4.17: Chi-square analysis of Self Role Perception as Manager and Job satisfaction of Male Teacher Communicators at D.Ed. level.**

<b>Role as Manager</b>				
Job satisfaction	H	M	L	Total
H	5	1	0 (0)	25
M	17	8	0 (0)	0
L	0 (0)	0 (0)	0 (0)	0
	22	9	0	31

Obtained  $X^2 = 0.5297$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is less than tabulated  $X^2$  value at DF = 4, at 0.05 level of significance. Hence there was no significant relationship between self role perception as Managers and job satisfaction of Male teacher communicators at B.Ed. level.

**Table 4.18 : Chi-square analysis of Self Role Perception as Manager and Job Satisfaction of Female Teacher Communicators at D.Ed. level.**

<b>Role as Manager</b>				
Job satisfaction	H	M	L	Total
H	1 (2.29)	2 (0.70)	0 (0)	3
M	12 (10.71)	2 (3.30)	0 (0)	14
L	0 (0)	0 (0)	0 (0)	0
	13	4	0	17

Obtained  $X^2 = 3.8082$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value at  $DF = 4$ , 0.05 level of significance. Hence there was no significant relationship between self role perception as Managers and job satisfaction of female teacher communicators at D.Ed. level.

**Table 4.19: Chi-square analysis of Self Role Perception as Managers and Job Satisfaction of Male Teacher Communicators at B. Ed. level.**

<b>Role as Manager</b>				
<b>Job satisfaction</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>Total</b>
H	0 (1.5)	2 (0.5)	0 (0)	2
M	27 (25.5)	7 (8.5)	0 (0)	34
L	0 (0)	0 (0)	0 (0)	0
	27	9	0	36

Obtained  $X^2 = 6.3529$ ,      Tabulated  $X^2 = 9.49$ ,       $DF = 4$   
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Managers and job satisfaction of Male teacher communicators at B.Ed. level.



**Table 4.20: Chi-square analysis of Self Role Perception as Managers and Job Satisfaction of Female Teacher Communicators at B.Ed. level.**

<b>Role as Manager</b>				
Job satisfaction	H	M	L	Total
H	3 (4)	2 (1)	0 (0)	5
M	17 (16)	3 (4)	0 (0)	20
L	0 (0)	0 (0)	0 (0)	0
	20	5	0	25

Obtained  $X^2 = 1.5625$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is less than tabulated  $X^2$  value, DF = 4 at 0.05 level of significance. Hence there was no significant relationship between self role perception as Managers and job satisfaction of female teacher communicators at B.Ed. level.

**Table 4.21 : Role as Manager and Job Satisfaction of Teacher Communicators at D.Ed. and B.Ed. levels**

	D.Ed.		B.Ed.	
	Male	Female	Male	Female
$X^2$ Value	0.5297	3.8082	6.3529	1.5625
Significance	NS	NS	NS	NS

**Conclusion :**

From Table No. 4.21, we conclude that the hypothesis (3), i.e. three was no significant relationship between self role perception as Managers and job satisfaction of teacher communicators at D.Ed. and B.Ed. levels is accepted.

**B. ROLE AS FACILITATOR OF LEARNING :**

**Table 4.22 : Chi-square analysis of Self Role Perception as Facilitator of Learning and Job Satisfaction of Male Teacher Communicators at D.Ed. level.**

Role as Facilitator				
Job satisfaction	H	M	L	Total
H	4 (4.26)	2 (1.74)	0 (0)	6
M	18 (17.74)	7 (7.26)	0 (0)	25
L	0 (0)	0 (0)	0 (0)	0
	22	9	0	31

Obtained  $X^2 = 0.0677$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is less than tabulated  $X^2$  value, DF = 4 at 0.05 level of significance. Hence there was no significant relationship between Self role perception as facilitator of learning and job satisfaction of Male teacher communicators at D.Ed. level.

**Table 4.23: Chi-square analysis of Self Role Perception as Facilitator of Learning and Job Satisfaction of Female Teacher Communicators at D.Ed. level.**

<b>Role as Facilitator</b>				
Job satisfaction	H	M	L	Total
H	3 (2.29)	0 (0.70)	0 (0)	3
M	10 (10.71)	0 (0)	0 (0)	14
L	0 (0)	0 (0)	0 (0)	0
	13	4	0	17

Obtained  $X^2 = 1.1155$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value, DF = 4 at 0.05 level of significance. Hence there was no significant relationship between self role perception as facilitator of Learning and job satisfaction of female teacher communicators at D.Ed. level.

**Table 4.24: Chi-square analysis of Self Role Perception as Facilitator of Learning and Job Satisfaction of Female Teacher Communicators at B.Ed. level.**

<b>Role as Facilitator</b>				
Job satisfaction	H	M	L	Total
H	3 (4.2)	2 (0.8)	0 (0)	5
M	18 (16.8)	2 (3.2)	0 (0)	20
L	0 (0)	0 (0)	0 (0)	0
	21	4	0	25

Obtained  $X^2 = 2.6785$ ,      Tabulated  $X^2 = 9.49$ ,       $DF = 4$   
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is less than tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Facilitator of learning and job satisfaction of Female teacher communicators at B.Ed. level.

**Table 4.25: Role as Facilitator of Learning and Job Satisfaction of Teacher Communicators at B. Ed. levels.**

	D.Ed.		B.Ed.	
	Male	Female	Male	Female
$X^2$ value	0.0677	1.1155	6.3529	2.6785
Significance	NS	NS	NS	NS

**Conclusion :**

From Table No. 4.26, we conclude that the hypothesis (3) i.e. there was no significant relationship between self role perception as Facilitator of learning and job satisfaction of teacher communicators at D.Ed. and B.Ed. levels is accepted.

### C. ROLE AS RESEARCHER :

**Table 4.26 : Chi-square analysis of Self Role Perception as Researcher and Job Satisfaction of Male Teacher Communicators at D.Ed. level.**

<b>Role as Researcher</b>				
<b>Job satisfaction</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>Total</b>
H	6 (2.7)	0 (3.29)	0 (0)	6
M	8 (11.3)	17 (13.71)	0 (0)	25
L	0 (0)	0 (0)	0 (0)	0
	14	17	0	31

Obtained  $X^2 = 9.0765$ ,      Tabulated  $X^2 = 9.49$ ,      DF = 4  
 SIG. Level = 0.05

#### **Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value, DF = 4 at 0.05 level of significance. Hence there was no significant relationship between self role perception as Researcher and job satisfaction of Male teacher communicators at D.Ed. level.

**Table 4.27: Chi-square analysis of Self Role Perception as Researcher and Job Satisfaction of Female Teacher Communicators at D. Ed. level.**

Role as Researcher				
Job satisfaction	H	M	L	Total
H	3 (2.47)	0 (0.53)	0 (0)	3
M	11 (11.53)	3 (2.47)	0 (0)	14
L	0 (0)	0 (0)	0 (0)	0
	14	3	0	17

Obtained  $X^2 = 0.7817$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value, DF = 4 at 0.05 level of significance. Hence there was no significant relationship between self role perception as Researcher and job satisfaction of Female teacher communicators at D.Ed. level.

**Table 4.28: Chi-square analysis of Self Role Perception as Researcher and Job Satisfaction of Male Teacher Communicators at B. Ed. level.**

Role as Researcher				
Job satisfaction	H	M	L	Total
H	1 (1.61)	1 (0.39)	0 (0)	2
M	28 (27.39)	6 (6.61)	0 (0)	34
L	0 (0)	0 (0)	0 (0)	0
	29	7	0	36

Obtained  $X^2 = 1.2549$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Researcher and job satisfaction of Male teacher communicators at B.Ed. level.

**Table 4.29: Chi-square analysis of Self Role Perception as Researcher and Job Satisfaction of Female Teacher Communicators at B. Ed. level.**

<b>Role as Researcher</b>				
<b>Job satisfaction</b>	<b>H</b>	<b>M</b>	<b>L</b>	<b>Total</b>
<b>H</b>	4 (4.2)	1 (0.8)	0 (0)	5
<b>M</b>	17 (16.8)	3 (3.2)	0 (0)	20
<b>L</b>	0 (0)	0 (0)	0 (0)	0
	21	4	0	25

Obtained  $X^2 = 0.0743$ ,      Tabulated  $X^2 = 9.49$ ,       $DF = 4$   
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is less than tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Researcher and job satisfaction of Female teacher communicators at B.Ed. level.

**Table 4.30 : Role as Researcher and Job Satisfaction of Teacher Communicators at D. Ed. and B.Ed. levels.**

	D.Ed.		B.Ed.	
	Male	Female	Male	Female
X <sup>2</sup> value	9.0765	0.7817	1.2549	0.0743
Significance	NS	NS	NS	NS

**Conclusion :**

From Table No. 4.31, we conclude that the hypothesis (3) i.e. there was no significant relationship between self role perception as Researcher of and job satisfaction of teacher communicators at D.Ed. and B.Ed. levels is accepted.

**D. ROLE AS EXTENSION WORKER :**

**Table 4.31 : Chi-square analysis of Self Role Perception as Extension Worker and Job Satisfaction of Male Teacher Communicators at D. Ed. level.**

Role as Extension Worker				
Job satisfaction	H	M	L	Total
H	4 (5.42)	2 (0.58)	0 (0)	6
M	24 (22.58)	1 (2.42)	0 (0)	25
L	0 (0)	0 (0)	0 (0)	0
	28	3	0	31

Obtained  $X^2 = 4.7710$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05



**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Extension Worker and job satisfaction of Male teacher communicators at D.Ed. level.

**Table 4.32: Chi-square analysis of Self Role Perception as Extension Worker and Job Satisfaction of Female Teacher Communicators at D. Ed. level.**

Role as Extension Worker				
Job satisfaction	H	M	L	Total
H	2 (2.29)	1 (0.70)	0 (0)	3
M	11 (10.71)	3 (3.30)	0 (0)	0
L	0 (0)	0 (0)	0 (0)	0
	13	4	0	17

Obtained  $X^2 = 0.2002$ ,      Tabulated  $X^2 = 9.49$ ,       $DF = 4$   
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is less than tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Extension Worker and job satisfaction of Female teacher communicators at D.Ed. level.

**Table 4.33 : Chi-square analysis of Self Role Perception as Extension Worker and Job Satisfaction of Male Teacher Communicators at B. Ed. level.**

Role as Extension Worker				
Job satisfaction	H	M	L	Total
H	2 (1.83)	0 (0.17)	0 (0)	2
M	31 (31.17)	3 (2.83)	0 (0)	34
L	0 (0)	0 (0)	0 (0)	0
	33	3	0	36

Obtained  $X^2 = 0.1968$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is less than tabulated  $X^2$  value, DF = 4 at 0.05 level of significance. Hence there was no significant relationship between self role perception as Extension Worker and job satisfaction of Male teacher communicators at B.Ed. level.

**Table 4.34 : Chi-square analysis of Self Role Perception as Extension Worker and Job Satisfaction of Female Teacher Communicators at B. Ed. level.**

Role as Extension Worker				
Job satisfaction	H	M	L	Total
H	5 (4.6)	0 (0.4)	0 (0)	5
M	18 (18.4)	2 (1.6)	0 (0)	20
L	0 (0)	0 (0)	0 (0)	0
	23	2	0	25

Obtained  $X^2 = 0.5433$ , Tabulated  $X^2 = 9.49$ , DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Extension Worker and job satisfaction of Female teacher communicators at B.Ed. level.

**Table 4.35: Role as Extension Worker and Job Satisfaction of Teacher Communicators at D. Ed. and B.Ed. levels.**

	D.Ed.		B.Ed.	
	Male	Female	Male	Female
$X^2$ value	4.7710	0.2002	0.1968	0.5433
Significance	NS	NS	NS	NS

**Conclusion :**

From Table No. 4.36, we conclude that the hypothesis (3) i.e. there was no significant relationship between self role perception as Extension Worker and job satisfaction of teacher communicators at D.Ed. and B.Ed. levels is accepted.

**E. ROLE AS COUNSELLOR:****Table 4.36 : Chi-square analysis of Self Role Perception as Counsellors and Job Satisfaction of Male Teacher Communicators at D. Ed. level.**

Role as Counsellor				
Job satisfaction	H	M	L	Total
H	4 (4.84)	2 (1.16)	0 (0)	6
M	21 (20.16)	4 (4.84)	0 (0)	25
L	0 (0)	0 (0)	0 (0)	0
	25	6	0	31

Obtained  $X^2 = 0.9346$ ,      Tabulated  $X^2 = 9.49$ ,      DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is less than tabulated  $X^2$  value, DF = 4 at 0.05 level of significance. Hence there was no significant relationship between self role perception as Counsellors and job satisfaction of Male teacher communicators at D.Ed. level.

**Table 4.37 : Chi-square analysis of Self Role Perception as Counsellors and Job Satisfaction of Female Teacher Communicators at D. Ed. level.**

Role as Counsellors				
Job satisfaction	H	M	L	Total
H	3 (2.29)	0 (0.70)	0 (0)	3
M	10 (10.71)	4 (3.30)	0 (0)	14
L	0 (0)	0 (0)	0 (0)	0
	13	4	0	17

Obtained  $X^2 = 1.1155$ ,      Tabulated  $X^2 = 9.49$ ,      DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Counsellors and job satisfaction of Female teacher communicators at D.Ed. level.

**Table 4.38 Chi-square analysis of Self Role Perception as Counsellor and Job Satisfaction of Male Teacher Communicators at B. Ed. level.**

<b>Role as Counsellor</b>				
Job satisfaction	H	M	L	Total
H	0 (1.78)	2 (0.22)	0 (0)	2
M	32 (30.22)	2 (3.78)	0 (0)	34
L	0 (0)	0 (0)	0 (0)	0
	32	4	0	36

Obtained  $X^2 = 17.1248$ , Tabulated  $X^2 = 9.49$ ,  $DF = 4$   
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is greater than tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Counsellor and job satisfaction of Male teacher communicators at B.Ed. level.

**Table 4.39: Chi-square analysis of Self Role Perception as Counsellor and Job Satisfaction of Female Teacher Communicators at B. Ed. level.**

<b>Role as Counsellor</b>				
Job satisfaction	H	M	L	Total
H	5 (4.2)	0 (0.8)	0 (0)	5
M	16 (16.8)	4 (3.2)	0 (0)	20
L	0 (0)	0 (0)	0 (0)	0
	21	4	0	25

Obtained  $X^2 = 1.1903$ ,      Tabulated  $X^2 = 9.49$ ,      DF = 4  
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value, DF = 4 at 0.05 level of significance. Hence there was no significant relationship between self role perception as Counsellor and job satisfaction of Female teacher communicators at B.Ed. level.

**Table 4.40: Role as Counsellor and Job Satisfaction of Teacher Communicators at D. Ed. and B.Ed. levels.**

	D.Ed.		B.Ed.	
	Male	Female	Male	Female
$X^2$ value	0.9346	1.1155	17.1248	1.1903
Significance	NS	NS	SIG.	NS

**Conclusion :**

From Table No. 4.41, we conclude that the hypothesis (3) i.e. there was no significant relationship between self role perception as Counsellor and job satisfaction of teacher communicators at D.Ed. level is accepted. But Male teacher communicators at B.Ed. level shows significant relationship between self role perception as Counsellor and job satisfaction. Hence hypothesis (3) is rejected at Male teacher communicators at B.Ed. level and hypothesis (3) is accepted at female teacher communicators at B.Ed. level.

**F. ROLE AS EDUCATOR :**

**Table 4.41: Chi-square analysis of Self Role Perception as Educator and Job Satisfaction of Male Teacher Communicators at D. Ed. level.**

Job satisfaction	Role as Educator			Total
	H	M	L	
H	5 (5.61)	1 (0.38)	0 (0)	6
M	24 (23.39)	1 (1.62)	0 (0)	25
L	0 (0)	0 (0)	0 (0)	0
	29	2	0	31

Obtained  $X^2 = 1.3309$ ,

Tabulated  $X^2 = 9.49$ ,  
SIG. Level = 0.05

DF = 4

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Educator and job satisfaction of Male teacher communicators at D.Ed. level.

**Table 4.42: Chi-square analysis of Self Role Perception as Educator and Job Satisfaction of Female Teacher Communicators at D. Ed. level.**

Job satisfaction	Role as Educator			Total
	H	M	L	
H	5 (5.61)	1 (0.38)	0 (0)	6
M	24 (23.39)	1 (1.62)	0 (0)	25
L	0 (0)	0 (0)	0 (0)	0
	29	2	0	31

Obtained  $X^2 = 1.3309$       Tabulated  $X^2 = 9.49$ ,       $DF = 4$   
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Educator and job satisfaction of Male teacher communicators at D.Ed. level.



**Table 4.43: Chi-square analysis of Self Role Perception as Educator and Job Satisfaction of Female Teacher Communicators at D. Ed. level.**

Role as Educator				
Job satisfaction	H	M	L	Total
H	2 (2.29)	1 (0.70)	0 (0)	3
M	11 (10.71)	3 (3.30)	0 (0)	14
L	0 (0)	0 (0)	0 (0)	0
	13	4	0	17

Obtained  $X^2 = 0.2002$ ,

Tabulated  $X^2 = 9.49$ ,

DF = 4

SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value, DF = 4 at 0.05 level of significance. Hence there was no significant relationship between self role perception as Educator and job satisfaction of Female teacher communicators at D. Ed. level.

**Table 4.44: Chi-square analysis of Self Role Perception as Educator and Job Satisfaction of Male Teacher Communicators at B. Ed. level.**

Role as Educator				
Job satisfaction	H	M	L	Total
H	0 (1.78)	2 (0.22)	0 (0)	2
M	32 (30.22)	2 (3.78)	0 (0)	34
L	0 (0)	0 (0)	0 (0)	0
	32	4	0	36

Obtained  $X^2 = 17.1248$ ,

Tabulated  $X^2 = 9.49$ ,

DF = 4

SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value is greater than tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was significant relationship between self role perception as Educator and job satisfaction of Male teacher communicators at B.Ed. level.

**Table 4.45: Chi-square analysis of Self Role Perception as Educator and Job Satisfaction of Female Teacher Communicators at B. Ed. level.**

Role as Educator				
Job satisfaction	H	M	L	Total
H	4(4.2)	1(0.8)	0 (0)	5
M	17 (16.8)	3 (3.2)	0 (0)	20
L	0 (0)	0 (0)	0 (0)	0
	21	4	0	25

Obtained  $X^2 = 0.0743$ , Tabulated  $X^2 = 9.49$ ,  $DF = 4$   
 SIG. Level = 0.05

**Findings :**

The obtained  $X^2$  value does not equal or exceeds the tabulated  $X^2$  value,  $DF = 4$  at 0.05 level of significance. Hence there was no significant relationship between self role perception as Educator and job satisfaction of Female teacher communicators at B.Ed. level.

**Table 4.46 : Role as Educator and Job Satisfaction of Teacher Communicators at D. Ed. and B.Ed. levels.**

	D.Ed.		B.Ed.	
	Male	Female	Male	Female
X <sup>2</sup> value	1.3309	0.2002	17.1248	0.0743
Significance	NS	NS	SIG.	NS

**Conclusion :**

From Table No. 4.46, we conclude that the hypothesis (3) i.e. there was no significant relationship between self role perception as Educator and job satisfaction of teacher communicators at D.Ed. level is accepted. But Male teacher communicators at B.Ed. level shows significant relationship between self role perception as educator and job satisfaction. Hence hypothesis (3) is rejected at Male teacher communicators at B.Ed. level and hypothesis (3) is accepted at female teacher communicators at B.Ed. level.

**4.4 Inferential Analysis Technique Used for Testing the Hypothesis:**

In order to establish the worth of a hypothesis, the researcher has to test it. This can be done by subjecting it to techniques of inferential analysis. Inferential analysis leads to the estimation of population parameters from observed sample values. It also helps in making inferences regarding the accuracy of those estimates by adopting levels

of significance. The levels of significance usually adopted in educational research are 0.01 and 0.05.

Testing of hypothesis requires the use of statistical techniques. For the purpose of present study, the researcher has used the analysis of variance (ANOVA) one-way classification. Here the total variance of all the scores is broken down into two parts.

1. The variance attributable to the different conditions or the variance among the means and
2. The variance arising from individual differences within the groups.

The next step is to determine whether the groups means differ significantly in view of the variability within separate groups.

For this purpose, the total sum of squares around general mean is obtained after applying correction to the sum of squares.

ANOVA is also referred to as 'F' test where 'F' is the ratio of the between groups variance and within groups variance.

The formula of 'F' test is as follows :

$$F = \frac{\text{Between groups variance}}{\text{Within groups variance}}$$

The significance of 'F' is determined by the 'F' value against the table value of 'F' for the given degrees of freedom.

#### **4.4.1 Testing of Hypothesis-I :**

The null hypothesis states that there is no significant difference in the self role perceptions of teacher communicators as Managers, Facilitator of Learning, Researchers, Extension workers, Counsellors and Educators at D.Ed. and B.Ed. levels of Education.

The ANOVA - one-way test was used to test the above mentioned null hypothesis. Table 4.47 shows the analysis of variance of scores of the self role perceptions of teacher communicators at D.Ed. and B.Ed. levels of Education.

Table 4.47

Self Role Perception	Group	Source of Variation	DF	Sum of Squares	Mean of Sum Squares	'F' Ratio	SIG level
Manager	D.Ed.	Between groups	1	1.82	1.82	0.243	NS
	B.Ed.	Within groups	107	801.45	7.49		
			108	803.27			
Facilitator of Learning	D.Ed.	Between groups	1	21.51	21.51	2.2771	NS
	B.Ed.	Within groups	107	1010.75	9.446		
			108	1032.26			
Researcher	D.Ed.	Between groups	1	- 757.76	- 757.56	- 43.38	SIG
	B.Ed.	Within groups	107	1869.01	17.467		
			108	1111.25			
Extension Worker	D.Ed.	Between groups	1	7.405	7.405	1.383	NS
	B.Ed.	Within groups	107	572.907	5.354		
			108	580.312			
Counsellor	D.Ed.	Between groups	1	4.763	4.763	0.6973	NS
	B.Ed.	Within groups	107	730.797	6.829		
			108	735.56			
Educator	D.Ed.	Between groups	1	0.011	0.011	0.0015	NS
	B.Ed.	Within groups	107	750.0	7.009		
			108	750.01			

The obtained 'F' value at D.Ed. and B.Ed. levels of teacher educational programmes is less than tabulated value of 'F' at 0.05 level of significance. Hence null hypothesis is accepted. Therefore, there is no significant difference in the Self role perception as Manager, Facilitator, Extension Workers, Counsellors and Educators of teacher communicators at D.Ed. and B.Ed. level. But the obtained 'F' value at D.Ed. and B.Ed. levels of teacher educational programmes is very very less than tabulated value of 'F'. Hence null hypothesis is rejected. Thus, there is significant differences in the self role perceptions as Researchers of teacher communicators at D.Ed. and B.Ed. levels.

#### 4.4.2 Testing of Hypothesis-II :

The null hypothesis states that, there is no significant differences in job satisfaction of teacher communicators at D.Ed. and B.Ed. levels of Education.

**Table 4.48**

	Group	Source of Variation	DF	Sum of Squares	Mean of Sum Squares	'F' Ratio	SIG level
Job Satisfaction	D.Ed.	Between groups	1	4.06	4.06	0.253	NS
	B.Ed.	Within groups	107	1716.94	16.04		
			108	1721.00			

The obtained 'F' value at D.Ed. and B.Ed. levels of teacher educational programmes is less than tabulated value of 'F' at 0.05 level of significance. Therefore the null hypothesis is accepted. Hence there is no significant difference in job satisfaction of teacher communicators at D.Ed. and B.Ed. levels of education.



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