

#### **CHAPTER – IV**

### ANALYSIS AND INTERPRETATION OF DATA

#### **4.0.0 INTRODUCTION**

Introduction and the review of researches are presented in the chapter I and chapter II, respectively. The methodology employed for the study along with the techniques of sample selection, design of the study, tools, procedure of data collection and the statistical techniques for the analysis of data are presented in the chapter III. The fundamental aim of any analysis is to organize the data in a meaningful form; so that meaningful conclusions can be drawn from them .The analysis and interpretation give shape and form to aims and objectives of the study. Value of the research depends very largely on the degree of intellect to which its results are analyzed and interpret. In the present chapter the results and interpretations, objective-wise.

### 4.0.1 TREATMENT OF THE DATA

The essential step in the process of research, after the collection of data, is the organization, analysis and interpretation of the data and formulation of conclusions and generalizations to get a meaningful picture out of the raw information thus collected. The mass of data collected needs to be systematized and organized, i.e. edited, classified and tabulated before it can serve the purpose. Here, editing implies checking of the gathered data for accuracy, utility and completeness; classifying refers to the dividing of the information into different categories, classes or heads for use; and tabulating denotes the recording of the classified material in accurate mathematical terms i.e., making and counting frequency tallies for different items on which information is gathered. Analysis of data means studying the tabulated material in order to determine inherent facts or meanings. It involves splitting down the existing complex factors into simpler parts and putting the parts together in new arrangements for the purpose of interpretation. Data are meaningless heaps of material without analysis and interpretation. The purpose of analysis is to find out the relationship between variables, which lead to the verification of hypothesis. This is achieved by logical organization of data and use of relevant statistical techniques. After analysis, the process of interpretation is especially one of asking questions like: What do the results show? What is the answer to the original research problem? What are their meaning and significance? Thus, interpretation has to be done carefully, logically and critically by examine the results obtained after analysis, keeping in view the limitations of the sample chosen, tools selected and used in the study.

### 4.2.0 ANALYSIS OF DATA

The study was conducted with the broad objective to analyse strength, weaknesses, opportunities and challenges to the adaptations of internship programme for future teachers in the Era of COVID-19 Pandemic as perceived by the stakeholders, viz. Teacher interns and teacher educators. The results of the study are based on the data collected through attitude scale for these stakeholders. Keeping in view of the objectives of the study, the data were analysed under the following headings:

- 4.2.1 Strategies adopted for internship during Covid-19.
- 4.2.2 Perception of teacher internees about alternative models of internship.
- 4.2.3 Perception of teacher educators about alternative models of internship

4.2.4 Strengths, Weaknesses, Opportunities, and Challenges of alternative modalities of internship

## 4.2.1 Identification of various strategies adopted by RIE Bhopal for internship of teacher interns in response to Covid-19:

On the basis of data collected from the teacher internees of RIE Bhopal along a schedule the following 5 alternative modalities of internship were identified -

- 1. Online Internship (OI)
- 2. Internship in Community(IC)
- 3. Internship with Peer Group (IPG)
- 4. Internship with Children with Special Needs (ICWSN)
- 5. Internship in Nearby School with COVID-19 Protocol (INS)
- Online Internship (OI): In COVID 19 pandemic, most of the schools were not able to organize classes for their students in the face to face mode, they were organizing classes in virtual or online mode. Realizing the scenario, RIE Bhopal provided opportunities to their teacher internees to join such schools like KVS, NVS and other state government schools where online classes were being conducted during COVID-19 pandemic.
- 2. Internship in Community (IC): Under this modality, internees completed their internship with the support of community. By the help of community members internees constituted a group of students like a class. They conducted all internship activities with that group.
- 3. Internship with Peer Group (IPG): Those internees, who were not able to get schools for entire duration of internship, were allowed to conduct internship activities in peer group.

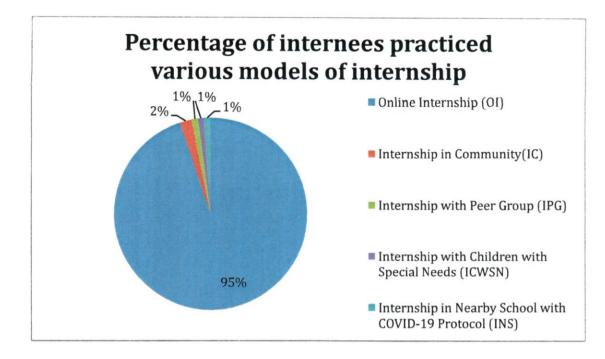
- 4. Internship with Children with Special Needs (ICWSN): Under this modality, internees were allowed to conduct internship activities with the children with special needs.
- **5. Internship in Nearby School:** Internees belong to such states or UTs or such areas where schools were functioning with COVID-19 protocol were allowed to complete their internship in such a school.

4.2.2 Choice of alternative models of Internship by teacher internees:

After 3 week orientation programme about internship, Internees were allowed choose internship modality from the list of given models. The following table depicts the data pertaining to choice of the internship model by the internees.

S.N 0.	Modality of Internship	No. of Internees completed internship through this modality	Percentage of Internees completed internship through this modality
1	Online Internship (OI)	91	94.79%
2	Internship in Community(IC)	2	2.08%
3	Internship with Peer Group (IPG)	1	1.04%
4	Internship with Children with Special Needs (ICWSN)	1	1.04%
5	Internship in Nearby School with COVID-19 Protocol (INS)	1	1.04%

Table 4.1: Percentage of internees practiced various models of internship



## Fig. 4.1 Percentage of teacher internees' participation in various adapted modalities

The results of table 4.1 show that a very high percentage of teacher internees(94.79%)chose online modality. The percentage of teacher internees who chose Internship in Community teaching is 2.08%. The percentage of teacher internees who chose the rest three models is negligible(1.04% for each category).

## 4.2.3 Analysis of the perception of teacher internees about adapted modalities of internship -

In order to ascertain the attitude of the teacher internees towards the alternative modalities of internship adopted by RIE Bhopal the data were collected from the teacher internees with the help of a Likert type attitude scale. The attitude score of teacher internes under different teacher education programme were analysed to find out the difference in their attitude towards different models. Three teacher education programmes, namely: a) B.Sc. B.Ed. b) B.A. B.Ed. and c) Int. B.Ed. M.Ed. were further divided into two categories such as: (A) B.Sc./B.A. B.Ed.; and (B). Int. B.Ed. M.Ed. Table 4.2 presents the mean attitude score,

Standard Deviations and Critical Ratio (t-value) in respect of these two categories of teacher internees.

 Table 4.2: Mean, Standard Deviation and t-value in respect of attitude scores of teacher internees

Name of Program.	Ν	М	S.D.	t-value
B.Sc./B.A. B.Ed.	53	73.60	10.474	
Int. B.Ed. M.Ed.	43	77.02	8.282	1.743
Total	96	75.13	9.775	p<0.05

The results of table 4.2, shows thatthere is no significant difference in the attitude of category (A) B.Sc./B.A. B.Ed.; and category (B). Int. B.Ed. M.Ed. teacher internees (M1=73.60, M2=77.02; t-value=1.743; p<0.05). On the basis of these results the null hypothesis (H0) "There is no significant difference between the perception of B.A. /B.Sc. B.Ed. and B.Ed.-M.Ed. teacher internees towards the adapted modalities of internship' is not rejected.

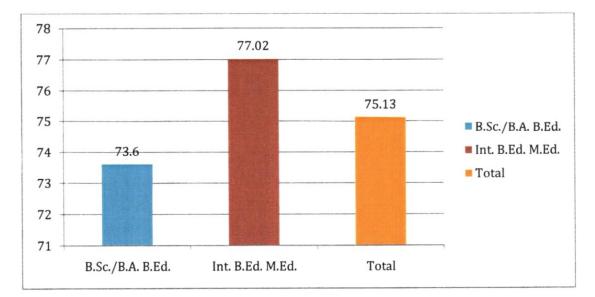


Fig. 4.2 Perception Score of Teacher Internees about adaptations in internship modalities

From the above Fig 4.2 it is clear that the mean attitude Score about adaptations in internship modalities obtained by two groups (B.Sc. /B.A. B.Ed. and Int. B.Ed. M.Ed.) have been found 73.6 and 77.02 respectively. Hence, it indicates that Int. B.Ed. M.Ed. group internees possess more positive attitudeas compare to that of B.Sc. /B.A. B.Ed. group. The combined mean attitude score 75.13 which show that the teacher internees as a whole have positive attitude towards alternative models of internship.

### 4.2.4 Item-wise Percentage Analysis of the perception of Teacher Interns about adapted modalities of internship –

To analyse the perception of teacher interns about adapted modalities of internship, percentage of interns were calculated item wise as shown in following table 4.3-

Table 4.3 Item-wise Percentage Analysis of the perception of T	eacher
Interns about adapted modalities of internship	

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S.No	Statement	R	espons	es in Po	ercenta	ge
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I feel that in COVID 19 pandemic, the internship modalities adapted by RIE Bhopal is exemplar for other teacher education institutions of the country.	44.8	49	6.3	0	0
2	I believe that objectives of internship cannot be achieved by other modalities except traditional mode of internship.	9.4	14.6	29.2	4.6	6.3
3	I believe that I have achieved desired skills to teach after going through alternative mode of internship.	22.9	57.3	14.6	5.2	0
4	Since I have completed my internship in a very challenging situation in an innovative way so I feel myself more	26	38.5	26	8.3	1

	skilled than others who have completed	1	1	1	1	
	skilled than others who have completed					
E	their internship in a traditional way.	1.0.0				
5	I feel that I have not completed my	15.6	44.8	21.9	17.7	0
	internship in traditional way so I fell that					
	I need more exposure to be competent to					
	teach in a traditional classroom.					
6	I feel my Institute has provided me	34.4	51	12.5	2.1	0
	proper orientation for execution of					
	internship in new modalities.					
7	I feel I did not get proper guidance and	2.1	6.3	17.7	55.2	18.8
	support from the teachers to meet the					
	requirements of the internship work due					
	to this new approach.					
8	I feel that lesson planning may not be	4.2	24	20.8	42.7	8.3
	practiced properly during internship					
	programme using the new modalities.					
9	I feel that in traditional internship, intern	26	47.9	13.5	11.5	1.0
	functions various duties and get					
	experiences like a regular teacher but					
	new internship modalities practiced by					
	me focused only on teaching					
10	I feel that the exposure of making time	46.9	39.6	9.4	3.1	1.0
	table, organization of morning assembly,					
	etc. could not be experienced during the					
	internship using new modalities					
11	I got more time for planning, preparation	24	42.7	25	6.3	2.1
	and execution of lesson plan due to new					
	modalities of internship since there is no					
	wastage of time on other formalities as in					
	traditional mode					
12	I feel that Preparation and use of variety	10.4	57.3	20.8	11.5	0
	of Teaching Learning Materials could					
	only be possible due to the innovative					
	modalities of internship practiced by me.					
13	I feel that the new internship modalities	40.6	53.1	4.2	2.1	0
	practiced by me enhanced my creativity					
14	I feel that the new modalities of the	25	51	20.8	2.1	1
	internship adapted by RIE Bhopal are					
	learner centred.					
15	I feel that I could not get proper feedback	4.2	16.7	19.8	46.9	12.5

from the learners for improving my practices during the period of internship.1717Proper feedback from the peer interns was not possible through the new4.219.814.652	3 1 2.1 9.4
16I feel that proper feedback was received from the learners for improving my practices during the period of internship.17.760.413.5717Proper feedback from the peer interns was not possible through the new4.219.814.652	
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was not possible through the new	9.4
modalities of internship.	
18 I feel that there is lot of scope for 30.2 56.3 10.4 2	.1 1
learning using the new modalities of	
internship.	
19It was a big challenge to get support from20.839.615.618	3.8 5.2
the school/community during the	
internship using new modalities.	
<b>20</b> It was difficult to complete activities like 25 45.8 17.7 9	.4 2.1
Action Research, Case Study using these	
new modalities of internship.	
21 I was able to identify the diversified 15.6 45.8 16.7 14	.6 7.3
needs of the various learners during the	
teaching-learning process using the new	
modalities.	
<b>22</b> I was able to practice the inclusive 11.5 41.7 30.2 13	.5 3.1
approach during the teaching-learning	
process using the new modalities of	
internship.	

The above table 4.3 shows that teacher internees have positive perception about adapted modalities since majority of the students are **agree** or **strongly agree** with the statements like; (i) I feel that in COVID 19 pandemic, the internship modalities adapted by RIE Bhopal is exemplar for other teacher education institutions of the country, (ii) I believe that I have achieved desired skills to teach after going through alternative mode of internship, (iii)Since I have completed my internship in a very challenging situation in an innovative way so I feel myself more skilled than others who have completed their internship in a traditional way, (iv)I got more time for planning, preparation and execution of lesson plan due to new modalities of internship since there is no wastage of time on other formalities as in traditional mode (v)I feel that Preparation and use of variety of Teaching Learning Materials could only be possible due to the innovative modalities of internship practiced by me (vi)I feel that the new internship modalities practiced by me enhanced my creativity (vii)I feel that the new modalities of the internship adapted by RIE Bhopal are learner centred.

### 4.2.5 Analysis of the perception of Teacher Educators about adapted modalities of internship –

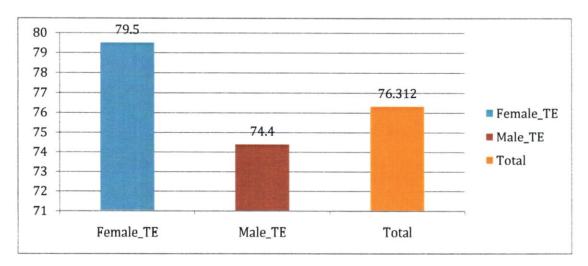
In order to ascertain the attitude of the teacher educators towards the alternative modalities of internship adopted by RIE Bhopal the data were collected from the teacher educators with the help of a Likert type attitude scale. The attitude score of teacher educators were analysed to by dividing into two categories such as: (A) Female; and (B).Male Table 4.3 presents the mean attitude score,Standard Deviations and Critical in respect of these two categories of teacher educators.

 TABLE 4.4:- Mean, Standard Deviation and t-value in respect of attitude scores of teacher educators

Teacher Educator	Ν	M	S.D.
Female	6	79.5	11.397
Male	11	74.4	7.867
Total	17	76.312	9.329

From the above table 4.4: it is clear that the mean attitude Score about adaptations in internship modalities obtained by two groups (Female teacher educators and Male teacher educators) have been found 79.5and 74.4 respectively. Hence, it indicates that Female teacher educator group internees possess more positive attitude as compare to that of Male teacher educator group. The combined mean attitude score is 76.312 which show that the teacher educators as a whole have positive attitude towards alternative models of internship.



# Fig. 4.3 Perception Score of Teacher Educators about adaptations in internship modalities

# 4.2.6 Percentage Analysis of the perception of Teacher Educators about adapted modalities of internship –

To analyse the perception of teacher educators about adapted modalities of internship, percentage of interns were calculated item wise as shown in following table 4.3-

S.N 0.	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I feel that in COVID 19 pandemic, the internship modalities adapted by RIE Bhopal is exemplar for other teacher education institutions of the country.	56.3	37.7	6.3	0	0
2	I believe that objectives of	0	18.8	6.3	56.3	18.8

 Table 4.5:Item-wise Percentage Analysis of the perception of

 Teacher educators about adapted modalities of internship

	internship cannot be achieved by	1				
	other modalities except traditional					
	mode of internship.					
3	I feel that the interns have	6.3	62.5	25	6.3	0
	achieved required skills to teach in					
	a traditional classroom after					
	completion of internship.					
4	Since interns have not completed	6.3	62.5	12.5	18.8	0
	their internship in the traditional					
	way so I feel that they need more					
	exposure to be competent to teach					
	in a traditional classroom.					
5	Since interns have completed the	18.8	37.5	6.3	31.3	6.3
	internship in a very challenging					
	situation in an innovative way so I					
	feel they are more skilled than					
	others who have completed their					
	internship in a traditional way.					
6	I feel that proper orientation has	18.8	68.8	12.5	0	0
	been provided by the institute to					
	interns for execution of internship					
	in new modalities.					_
7	I feel that I could not provide	0	25	12.5	56.3	6.3
	proper guidance and support to the					
	interns to meet the requirements of					
	the internship work due to this new					
	approach.					
8	I feel that lesson planning was not	6.3	18.8	18.8	56.3	0
	practiced by the interns properly					
	during internship programme using					
	the new modalities.					
9	I feel that evaluation of lesson	6.3	31.3	12.5	43.8	6.3
	plans could not be done effectively					
	57. m					

	during internship programme using					
	the new modalities.					
		25				0
10	I feel that in traditional internship,	25	75	0	0	0
	intern functions various duties and					
	get experiences like a regular					
	teacher but new internship					
	modalities practiced by the interns					
	focused only on teaching lessons.					
11	I feel that the exposure of making	37.5	50	6.3	6.3	0
	time table, organization of					
	morning assembly, etc. could not					
	be experienced by the interns					
	during the internship using new					
	modalities.					
12	I feel that interns got more time for	12.5	75	12.5	0	0
	planning, preparation, and					
	execution of lesson plan due to					
	new modalities of internship since					
	there is no wastage of time on					
	other formalities as in traditional					
	mode.					
13	I feel that the interns got more time	25	68.8	6.3	0	0
	for preparation and use of variety					
	of Teaching Learning Materials					
	due to the innovative modalities of					
	internship practiced by them.					
	I feel that the new internship	37.5	50	12.5	0	0
	modalities practiced by the interns					
	enhanced their creativity.					
15	I feel that the new modalities of	18.8	25	37.7	18.8	0
	the internship adapted by RIE					
	Bhopal are learner centered.					
16	I feel that I could not provide	-	18.8	6.3	62.5	12.5

	proper feedback to the interns for					
	improving their practices.					
17	I feel that interns received the	6.3	68.8	12.5	12.5	0
	proper feedback from learners for					
	improving their practices during					
	the period of internship.					
18	Proper feedback from the peer	0	18.8	18.8	56.3	6.3
	interns was not possible through					
	the new modalities of internship.					
19	I feel that there is lot of scope for	12.5	87.5	0	0	0
	learning using the new modalities					
	of internship.					
20	It was a big challenge for the	37.5	56.3	0	6.3	0
	interns to get support from the					
	school/community during the					
	internship using new modalities.					
21	I feel it was difficult for interns to	18.8	62.5	0	18.8	
	complete activities like Action					
	Research, Case Study using these					
	new modalities of internship					
22	I feel interns were able to identify	12.5	50	0	37.5	0
	the diversified needs of the various					
	learners during the teaching-					
	learning process using the new					
	modalities.					
23	Interns were able to practice the	6.3	18.8	18.8	56.3	0
	inclusive approach during the					
	teaching-learning process using the					
	new modalities of internship.					
					L	

The above table 4.5 reflects that the perception of teacher educators is positive about adapted modalities of internship since very high percentage of teacher educators are agree or strongly agree with the statement like; (i) I feel that in COVID 19 pandemic, the internship modalities adapted by RIE Bhopal is exemplar for other teacher education institutions of the country, (ii) I feel that the interns have achieved required skills to teach in a traditional classroom after completion of internship (iii) I feel that proper orientation has been provided by the institute to interns for execution of internship in new modalities (iv) I feel that interns got more time for planning, preparation, and execution of lesson plan due to new modalities of internship since there is no wastage of time on other formalities as in traditional mode. (vi)I feel that the interns got more time for preparation and use of variety of Teaching Learning Materials due to the innovative modalities of internship practiced by them. (vii)I feel that the new internship modalities practiced by the interns enhanced their creativity (viii)I feel that the new modalities of the internship adapted by RIE Bhopal are learner centered.

### 4.2.6 Strengths, Weaknesses, Opportunities and Challenges (SWOC):

This section is devoted to presentation of results pertaining to Strengths, Weaknesses, Opportunities and Challenges (SWOC) of alternative modalities of internship adapted by RIE Bhopal during COVID 19 Pandemic period. In this connection the data collected from the teacher educators and teacher internees are analysed and summary of the results is presented as follows-

### **Key Strengths:**

- Promotes the skills of innovations in an emergency situation like COVID- 19 Pandemic.
- Fulfilled the course objectives without compromising the quality of internship programme.
- All the teaching learning skills expected from the teacher internees are acquired through various alternative modes.

- Promotion of the skills of integrating ICT in teaching learning process amongst the teacher internees.
- Promotion of the habit of self -learning amongst the teacher internees.
- Promotion of the habit of taking the onus of learning skills of internship amongst the teacher internees.
- Provided freedom to the internees to choose from among the list of alternatives.
- Promotion of 4 C skills of 21<sup>st</sup> Century like Creativity, Critical Thinking, Communication and Collaboration amongst the teacher internees through internship.
- Provided opportunity to different categories of learners, based on locale, Socio economic background and disability, to do internship at their convenience.
- Economically viable: the internees could save time, money and labour.

### **Major Weaknesses:**

- The internees missed face to face social interaction with learners, supervisors, mentor teachers and their fellow internees.
- Problems resulted due to lack of preparedness amongst the teacher internees and teacher educators, cooperating schools and the teacher education institution.
- Inadequate knowledge of internees, supervisors and mentor teachers about different digital platforms for online internship.
- Problem of electric facility and internet connectivity at the end of school, teacher internees and/or supervisors.
- Lack of authentic teaching learning environments.

- Difficulty in the completion of some important components of internship, e.g. action research and case study, effectively.
- Internees lacked promotion of some basic skills of teaching learning, e.g. use of black-board, hand on activities, experimentation.

### **Opportunities**

- Bringing about innovation in an emergency situation like COVID-19 pandemic.
- Promotion of ability to face similar challenges in future
- Promotion of the skills of using different digital platforms.
- Transfer of learning of ICT skills to other areas of human activity e.g. online banking, booking of tickets, attending seminar and conferences, communication with others.
- Helps pursuing different courses through blendedapproach.
- Provides opportunities for career progression by pursuing MOOCs and Open and Distance Learning (ODL) programmes.

### Challenges

- Interruption in internship activities as a result of unstable/poor internet connectivity.
- support from cooperating schools/community
- Health and emotional well -being of learners.
- Learning of selected components of the internshipe.g. Action Research and Case Study etc.
- Availability of electronic gazettes and sufficient internet data with the learners.

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