



## EVALUATION OF INSTRUCTIONAL PROGRAMMES IN PHYSICAL EDUCATION

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**ABSTRACT** The paper presents the results of a study on Evaluation of Instructional Programmes in Physical Education in High/ Higher Secondary Schools in Tamil Nadu. The effectiveness of Management is studied with reference to Overall Instructional Programmes and its five dimensions.

The study involved 166 schools in Kanchipuram Revenue District, in Tamil Nadu. A Questionnaire on Physical Education Instructional Programmes Evaluation was developed. It consisted of 50 items and evaluated five dimensions of instructional programmes in Physical Education.

The data collected through this questionnaire were analysed with respect to Location, School-sex, Type of Management and Educational Districts. Descriptive, Differential and Correlational Statistical Techniques were used.

The study revealed that Welfare Schools got the highest mean score (72.00%) and the schools at Thiruvallur educational district, the least mean score (56.07%). Among the five dimensions of IPES, the teacher conduct (TC) got the highest mean score in all the categories of schools except Aided and the schools at Chengalpattu educational district.

PEIPES- Questionnaire may be used by the authorities of the schools and Government to find out the effectiveness of the Management of instructional Programmes in Physical Education in schools and take necessary further actions to improve the physical education programmes in schools

### KEYWORDS :

#### 1.1 The Present Study

The present study is a normative study of Evaluation of Instructional Programs in Physical Education in High/ Higher Secondary Schools in Tamil Nadu. The main objective is to study the effectiveness of Management with reference to instructional programmes and its dimensions.

#### 1.2 Objectives

The objectives of the present study are:

To study the management of instructional programmes in Physical education in schools with respect to;

1. Physical education objectives,
2. Teacher conduct,
3. General procedures, methods and techniques,
4. The participant conduct, and
5. The safe and healthy environment

#### 1.3 Hypotheses

The following hypotheses are formulated on the basis of the objectives of the study

1. Urban and Rural schools differ in the effectiveness of instructional programmes of Physical Education.
2. Boys, Girls and Co-education schools differ in the effectiveness of instructional programmes of physical Education.
3. Government, Private Aided, Matriculation and Welfare schools differ in the effectiveness of instructional programmes of Physical education.
4. Schools in Chengalpattu, Kanchipuram, Saidapet and Thiruvallur Educational districts differ in the effectiveness of instructional programmes of Physical Education.

#### 1.4 Methodology

The present study is a normative study. The data were collected from Headmasters and Physical Education personnel in schools at Kanchipuram Revenue District.

##### 1.4.1 Sample

The study was carried out in Kanchipuram Revenue District in Tamil Nadu. Ninety one High Schools and seventy five Higher Secondary schools from four educational districts representing different managements, localities and compositions were involved in the study.

##### 1.4.2 Tool

To collect information relating to the present study, Physical Education Instructional Programmes Evaluation Scale (PEIPES) was used.

##### 1.4.3 Description of the Tool

Physical Education Instructional Programmes Evaluation Scale (PEIPES).

To evaluate the dimensions of instructional programmes in physical education such as.

- i. Meeting of physical education objectives (Item 1-10),
- ii. Teacher conduct (Items 11-20)
- iii. General Procedures, methods and techniques (21-30)
- iv. Participant Conduct (items 41-40)
- v. Safe and healthy environment (Items 41-50)

in schools, Physicals Education Instructional Programmes Evaluation Scale (PEIPES) was constructed. It consists of 50 items modified and developed on the lines evolved by Charles A. Bucher (1987). The response to each item was collected through a five point scale (Excellent, very Good, Good, Fair and Poor).

The reliability of the questionnaire was established through Test re-test method. The reliability co-efficient was (0.73) and the validity ('r') was (0.85).

##### 1.4.4. Scheme and Data Analysis

For data analysis the scores under each dimension were converted into percentages. The percentage scores were used for all data analyses. Descriptive, Differential, Correlational statistics such as Mean, SD, Correlation and ANOVA were computed.

##### 1.5 Analysis and Interpretation

The data collected were first analysed for describing the total sample (i.e., 166 schools studied) with reference to the dimensions studied. The details are furnished below. The whole sample is first described and sub-samples are then described separately and compared.

1.5.1 Instructional Programmes in Physical Education in All the Schools (whole Sample M=166)

The dimensions contributing to the effectiveness of instructional programmes in physical education in all the schools were studied. The relevant statistical data are shown in Table 1.1

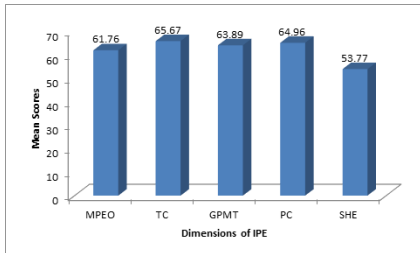
**Table 1.1 reveals that All the schools secured more than 50 of the maximum scores with reference to IPE scores and its**

**Table 1.1 Mean and Standard Deviation of the Dimensions of instructional**

**Programmes (whole sample M= 166)**

Sl. No	Dimensions	Mean	S.D	% Score
1	Meetings of Physical Education Objectives (MPEO)	30.88	6.99	61.76
2	Techniques (GPMT)	32.84	7.55	65.67
3	General Procedures, methods and Techniques (GPMT)	31.95	7.46	63.89
4.	Participant Conduct (PC)	32.48	7.73	64.96
5	Safe and healthy Environment (SHE)	26.87	7.96	53.77
<b>Overall Instructional Programmes Score (IPES)</b>		<b>155.03</b>	<b>32.90</b>	<b>62.01</b>

five dimensions. A Bar diagram showing the dimensions of IPE scores with respect to whole sample is presented in Figure 1.1



**Fig. 1.1 Five Dimensions of IPE Scores with Respect to Whole Sample (N=166 Schools)**

**1.5.2 Instructional Programmes in Physical Education in Schools in Different Locations**

The schools are divided into two categories urban and rural and the data are analysed to find out whether these two categories of schools differ in IPE scores.

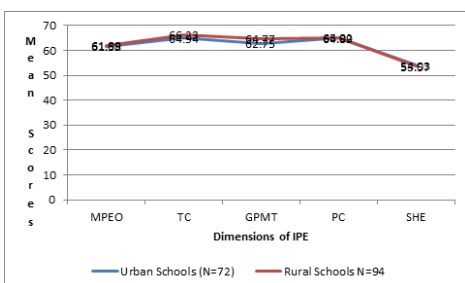
An inspection of results in Table 1.2 reveals the following:

1. In the rural schools the dimension of Teacher Conduct (TC) gets the highest mean score (66.23%) and safe and healthy environment, the least (53.57%).

Sl. No	Dimensions	Urban Schools (N=72)			Rural Schools (N=94)		
		M1	SD1	%Score	M2	SD2	%Score
1.	Meeting of Physical Education Objectives (MPEO)	30.79	5.98	61.58	30.95	7.73	61.89
2.	Teacher conduct (TC)	32.47	7.55	64.94	33.12	7.63	66.23
3.	General procedures Methods and Techniques (GPMT)	31.37	7.26	62.75	32.38	7.65	64.77
4.	Participant Conduct (PC)	32.44	7.39	64.89	32.51	8.06	65.02
5.	Safe and healthy Environment (SHE)	27.01	7.20	54.03	26.79	8.58	53.57
Overall IPE Scores		154.10	30.73	61.64	155.70	34.80	62.30
Df = 164		't' = 0.32		P > 0.05 N.S			

2. There is no significant difference in overall IPE Scores between urban and rural schools.

Profile of the dimensions of IPE scores with respect to location of schools are shown in figure 1.2



**Fig. 1.2 Profiles of the Dimensions of IPE Scores with Respect to Location of Schools**

**1.5.3 Instructional Programmes in Physical Education with Respect to Schools–Sex**

The schools are categorized on the basis of sex into Boys, Girls and Coeducation schools. The data are analyzed to find out whether these three categories differ in the dimensions studied.

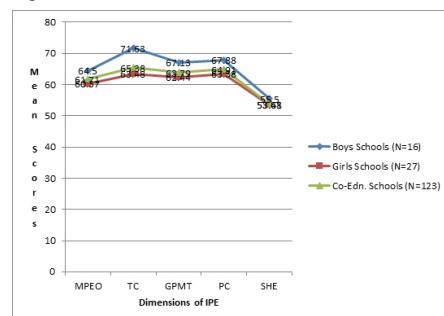
**Table 1.3 Mean, Standard Deviation, F-Test Results for the Dimensions of IPE Scores with Respect to school –Sex**

Sl. No	Dimensions	Boys Schools (N=16)			Girls School (N=27)			Co-Edn.Schools (N=123)		
		M1	SD1	%Score	M2	SD2	%Score	M3	SD3	%Score
1.	Meeting of Physical Education objectives (MPEO)	32.25	5.88	64.50	30.16	4.84	60.37	30.85	7.48	61.71
2.	Teacher Conduct(TC)	35.82	7.57	71.63	31.74	5.27	63.48	32.69	7.88	65.38
3.	General Procedures Methods and Techniques (GPMT)	33.56	7.82	67.13	31.22	5.93	62.44	31.89	7.68	63.79
4.	Participant Conduct (PC)	33.94	5.97	67.88	31.74	5.97	63.38	32.46	8.23	64.91
5.	Safe and Healthy Environment (SHE)	27.75	8.17	55.50	26.74	6.43	53.48	26.81	8.23	53.61
Overall IPE Scores		163.31	31.20	65.33	151.63	23.60	60.65	154.70	34.70	61.88
		F= 0.65			P>0.05			N.S		

The data in the Table 1.3 revealed the following :

1. Boys schools secured the highest mean scores in all the five dimensions of IPE scores.
2. In Boys schools, the dimension of Teacher Conduct (TC) got the highest mean score (71.63%) and in Girls schools, the Safe and Healthy Environment (SHE), the least (53.48%).
3. Overall IPE scores do not show any significant difference in schools with respect to school-sex.

Profile of the dimensions of IPE scores with respect to school -sex are shown in figure 1.3.



**Fig. 1.3 Profiles of the Dimensions of IPE Scores with Respect to schools –Sex**

**1.5.4 Instructional Programmes in Physical Education with Respect to Type of Management of Schools**

The schools are categorized on the basis of type of management and the data collected from them are analysed with reference to IPE scores. The data are presented in Table 1.4.

**Table 1.4 Mean, Standard Deviation, 'F'and 't' Test Values for the Dimensions of IPE Scores with Respect to Type of Management of Schools**

Sl. No	Dimensions	Government schools (N=121)			Aided schools (N=26)			Welfare schools (N=13)			Matriculation schools (N=13)		
		M1	SD1	%Score	M2	SD2	%Score	M3	SD3	%Score	M4	SD4	%Score
1	Meeting of Physical Education Objectives (MPEO)	29.93	6.86	59.87	31.92	5.26	63.85	36.67	7.95	73.33	34.92	7.63	69.85
2	Teacher conduct (TC)	31.86	7.51	63.52	34.42	6.66	68.85	38.33	7.09	76.67	36.23	7.26	72.46
3	General Procedures Methods and Techniques (GPMT)	30.81	7.31	61.62	34.85	6.05	69.69	36.67	8.44	73.33	34.54	7.78	69.08
4	Participant conduct (PC)	31.17	7.54	62.33	35.39	6.78	70.77	36.67	7.30	73.33	37.00	7.44	74.00
5.	Safe and Healthy Environmental (SHE)	25.29	7.40	50.58	29.69	6.11	59.38	31.67	12.20	63.33	33.92	7.47	67.85
	IPE Scores	149.06	31.50	59.62	166.27	25.00	66.51	180.00	40.50	72.00	176.62	33.50	70.65
		F=5.79			P>0.01								
	Government schools Aided Schools				Df = 145			't' = 2.98			P>0.01		
	Government schools Matriculation schools				Df=132			't' =2.60			P>0.05		

In inspection of the results in the Table 1.4 reveals the following:

1. The welfare schools, got the highest mean scores in Teacher Conduct (76.67%) and in Government schools, Safe and Healthy Environment, the least (50.58%).
2. The overall instructional programmes evaluation scores in these schools coming under various types of management show a significant difference at 0.01 level since the 'P' value is 5.79.
3. There is a significant difference between Government and Aided schools at 0.01 level on the overall IPE scores since the 'V' value obtained is 2.98
4. The f value of 2.60 indicates a significant difference at 0.05 level between Government and Matriculation schools on IPE scores.

Profile of the dimensions of IPE scores with respect to type of management of schools are shown in figure 1.4

The schools are categorized on the basis of educational districts and the data are analysed to find out whether these four educational districts differ in the dimensions of IPE scores.

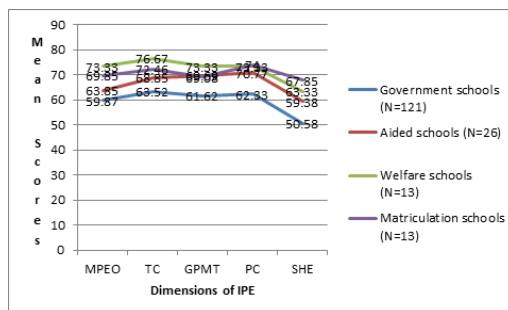


Fig. 1.4 Profiles of the Dimensions of IPE Scores with Respect to Type of Management of Schools.

**1.5.5 Instructional Programmes in Physical Education with Respect in Four Educational Districts**

**Table 1.5 Mean, Standard Deviation, 'F' and T Test Values for the Dimensions of IPE Scores with Respect t Four Educational Districts**

Sl. No	Dimensions	Chengalpattu (N=45)			Kancheepuram (N=49)			Saidapet (N=42)			Thiruvallur(N=30)		
		M1	SD1	%Score	M2	SD2	%Score	M3	SD3	%Score	M4	SD4	%Score
1	(MPEO)	29.98	7.73	59.96	31.14	5.97	62.29	33.29	7.12	66.57	28.43	5.98	56.87
2	(TC)	31.87	7.61	63.73	34.12	7.33	68.24	34.07	7.79	68.14	30.47	6.66	60.93
3	(GPMT)	31.27	8.06	62.53	33.33	6.64	66.65	33.50	7.06	67.00	28.53	7.06	57.07
4	(PC)	32.04	8.20	64.09	33.65	6.92	67.31	33.71	7.22	67.43	29.50	8.04	59.00
5.	(SHE)	26.60	8.59	53.20	28.37	7.63	56.73	28.07	6.87	56.14	23.23	7.73	46.47
	IPE Scores	151.76	36.20	60.70	160.61	29.60	64.24	162.64	30.80	65.06	140.17	30.00	56.47
		F=5.54			P>0.05								
	Kanchipuram Educational District Thiruvallur Educational District				Df = 77			't' = 2.91			P>0.01		
	Saidapet Educational District Thiruvallur Educational District				Df=70			't' = 3.06			P>0.01		

1. The schools at kanchipuram educational district, got the highest mean score (58.24%) in the dimension of Teacher Conduct (TC).
2. The schools at Thiruvallur educational district, secured the lowest mean score (46.47%) in the dimension of safe and Healthy Environment (SHE).
3. Overall IPE scores in these schools show a significant difference at 0.05 level as the obtained 'F' value is 3.54.
4. The schools at Kanchipuram and Thiruvallur educational districts show a significant difference at 0,01 level obtaining a X value of 2.91 on IPE scores.
5. The schools at Saidapet and Thiruvallur educational districts show a significant difference at 0.01 level since the X value is 3.06.
6. The other comparative analyses on these schools reveal no significant differences.

Profiles of the dimensions of IPE scores with respect to four educational districts are shown in figure 1.

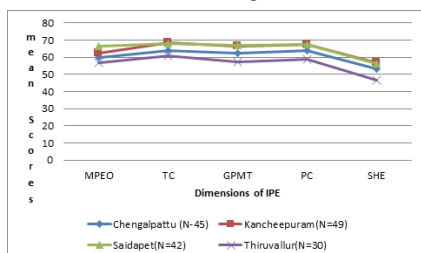


Fig. 1.5 Profiles of the Dimensions of IPE Scores with Respect to Four Educational Districts

**1.6 Summary of Main Findings**

The following are the main findings of the study regarding Instructional Programmes in Physical Education in schools.

1. In the Rural schools, the dimension of Teacher Conduct (TC) got the highest mean score (66.23%) and Safe and Healthy Environment, the least (53.57%)
2. In Boys schools, the dimension of Teacher Conduct (TC) got the highest and Healthy Environment, Girls Schools got the lowest mean score (53.48%).
3. Welfare schools got the highest mean score (76.67%) in Teacher Conduct (TC).
4. In the dimension of Safe and Healthy Environment (SHE:), Government Schools got the lowest mean score (50.58%).
5. The schools at Kanchipuram educational district got the highest mean score (68.24%) in the dimension of Teacher Conduct (TC).
6. The schools at Thiruvallur educational district, secured the lowest mean score (46.47%) in the dimension of Safe and Healthy Environment (SHE).

**The Effectiveness of Instructional Programmes Differs**

7. In Government (59.62%) and Aided Schools (66.51%),
8. In Government (66.51%) and Matriculation schools (70.65%).
9. In Schools at Kanchipuram educational district (64.24%) and Thiruvallureducational district (56,07%) and

10. In schools at Saidapet educational district (65.06%) and Thiruvallureducational district(56.07%).

### 1.7 Implications of the Study

The extensive study on the Management of Instructional Programmes in Physical Education in High/Higher Secondary Schools in Tamil Nadu rendered it possible to measure the effectiveness of instructional programmes in Physical Education.

The questionnaire PEIPES may be used the authorities of the schools and Government to find out the effectiveness of Management of Instructional Programmes in Physical Education in schools and take necessary further actions to improve the physical education programmes in schools.

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