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*This issue of the journal contains 7 research papers. We thank all the contributors and also invite researchers to send their articles to our journal.*

**Dr. A.R. Anandha Krishnaveni**  
**Editor in Chief**



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## AWARENESS OF BLENDED LEARNING AMONG SECONDARY TEACHER EDUCATION STUDENTS

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### Abstract

*The study was intended to find out the blended learning awareness of secondary teacher education students in Tuticorin District, Tamil Nadu. Random Sampling Technique was used to select a sample of 95 secondary teacher education students. Mean, SD, and 't' values were calculated for the analysis of data. The result showed that the gender, and the type of family had no significant difference. But the Locality, study of year and internet users exhibited significant difference in respect of their of secondary teacher education students. It recommended Institutional overhaul (service) of the blended courses and programs may have accelerating effect on bringing quality of education and transforming teaching - learning process. Academic officials should strategically create infrastructure and facilities that enable blended learning to be used in teaching learning environment. Besides, curricula could be revisited with regard to integration of blended learning in course delivery system of the different disciplines.*

**Keywords:** *Blended learning, secondary teacher education students, Awareness*

### Introduction

Blended learning is the combination of multiple approaches to learning. Blended Learning (BL) or Hybrid learning describes a learning environment that either combines teaching methods, delivery methods, media formats or a mixture of all these. It also refers to the integrated learning activities such as a mixture of online and face - to - face learning. In other words, BL is a mixture of e-learning and traditional types of learning. It is mentioned as the integrated combination of traditional learning with web based online approaches, the combination of a number of pedagogical approaches.

Blended learning strategies vary according to the discipline, the year level, student characteristics and learning outcomes, and have a student centered approach to the learning design. Blended learning can increase access and flexibility for learners, increase level of active learning, and achieve better student experiences and outcomes. For teaching staff, blended learning can improve teaching and class management practices. A blend might include:

- face to face and online learning activities and formats
- Traditional timetabled classes with different modes such as week end, intensive, external and trimester.
- Well established technologies such as lecture capture and or with social media and emerging technologies
- Simulations, group activities, site based learning, practical.

### Need for the Study

Today's era is full of technology and digital world thus creating new challenges for teachers. As teachers are the most effective interface between the students and knowledge, hence they need to be well updated and skill ful. With the advancement of technology it has become possible to modify the way of learning and presenting information to them. Our young generation is full of new information and quest for new knowledge. They can easy collect information through internet and the technology. The following researcher to find better result through blended learning.

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**bidoye J.A (2015)**, revealed that blended learning instructional approach was more effective in enhancing students achievement in geography than conventional teaching method. **Ahmed Yousif Abdelraheem (2014)**, indicates that students in the blended learning strategy group out scored in grades significantly their counter partners in conventional method. **Ali Abdi (2014)**, results showed that students who were instructed through inquiry - based learning were achieved higher score than the ones which were instructed through the traditional method. Therefore, the investigator made an attempt to study the awareness about blended learning of secondary teacher education students.

### **Statement of the Problem**

The problem selected for the present study may be stated as follows, "Awareness of Blended learning Among Secondary teacher education teachers".

### **Objectives of the Study**

The investigators have framed the following objectives for the study

1. To find out the significant difference in awareness of blended learning among Secondary teacher education students in terms of
  - 1) Gender,
  - 2) Locality,
  - 3) Type of family,
  - 4) Year of study and
  - 5) Internet users.

### **Hypotheses**

For the present study, based on the objectives the investigators framed the following hypotheses,

1. There is no significant difference between male and female secondary teacher education students in respect of their blended learning.
2. There is no significant difference between rural and urban secondary teacher education students in respect of their blended learning.
3. There is no significant difference between joint family and nuclear family secondary teacher education students in respect of their blended learning.
4. There is no significant difference between first year and second year Secondary teacher education students in respect of their blended learning.
5. There is no significant difference between internet users and non internet users secondary teacher education students in respect of their blended learning.

### **Methods of the Study**

Normative survey method was adopted. The tool is administered to the samples of 95 secondary teacher education students. The data was collected and subjected to statistical analysis to be arrived.

### **Tools Used**

Blended learning Awareness Questionnaire was constructed and standardized by Devadoss Vasantharaj.S and SivaKumar.D, (2016). The questionnaire consists of 22 statements. Each statement in this awareness questionnaire is set against three responses like as agree, Neutral, and disagree. An individual's score is sum of all the scores of 22 statements. The minimum score for this awareness questionnaire is 22 and then maximum is 66. A total score of the students reveals their level in awareness. The questionnaire has found the reliability of the tool as 0.86 by the split - half and got the face validity.

### Sample of the Study

In this present study conducted the 95 secondary teacher education students studying in the college of TNTDARMPPC college of education, and St. Joseph college of education in the Sathankulam Taluk, Tuticorin District. The random sampling technique has been used in the selection of the sample.

### Statistical Used

The Mean, Standard Deviation and the 't' test statistical techniques have been used in the present study for the analysis of collected data.

### Analysis and Interpretation

To investigate the significance of difference in the blended learning of secondary teacher education teacher ratio was worked out and the value is given in table below:

#### Null Hypothesis -1

There is no significant difference between male and female secondary teacher education teacher in respect of their blended learning.

**Table No 1 Difference between Male and Female Secondary Teacher Education Teacher in Respect of Their Blended Learning**

Variable	Categories	Mean	SD	t - value	Remarks
Gender	Male (N= 37)	25.37	3.73	1.82	Not Significant
	Female (N=58)	25.02	3.41		

(At 0.05 level of significance the table value of 't' is 1.99)

Since the calculated value of 't' is less than the table value for degrees of freedom at 5% level, the hypothesis is accepted. Therefore there is no significant difference between male and female secondary teacher education students in their blended learning.

#### Null Hypothesis -2

There is no significant difference between rural and urban secondary teacher education teacher in respect of their blended learning.

**Table No 2 Difference between Rural and Urban Secondary Teacher Education Teacher in Respect of Their Blended Learning**

Sub Variable	Categories	Mean	SD	t - value	Remarks
Locality	Rural (N= 41)	12.69	7.56	2.14*	Significant
	Urban (N=54)	15.30	8.96		

(At 0.05 level of significance the table value of 't' is 1.99)

Since the calculated value of 't' is greater than the table value for degrees of freedom at 5% level. So, the hypothesis is not accepted. Therefore there is significant difference between rural and urban secondary teacher education students in their blended learning.

#### Null Hypothesis -3

There is no significant difference between 1<sup>st</sup> year and 2<sup>nd</sup> year secondary teacher education teacher in respect of their blended learning.

**Table No 3 Difference between 1<sup>st</sup> Year and II<sup>ND</sup> Year Secondary Teacher Education Teacher in Respect of Their Blended Learning**

Sub Variable	Categories	Mean	SD	t - value	Remarks
Year of study	I <sup>st</sup> (N= 45)	13.21	7.89	2.03*	Significant
	2 <sup>nd</sup> (N=50)	16.02	8.21		

(At 0.05 level of significance the table value of 't' is 1.99)

Since the calculated value of 't' is greater than the table value for degrees of freedom at 5% level. So the hypothesis is not accepted. Therefore there is significant difference between First year and second year secondary teacher education students in their blended learning.

#### Null Hypothesis -4

There is no significant difference between Joint family and Nuclear family secondary teacher education teacher in respect of their blended learning.

**Table No 4 Difference between Joint Family and Nuclear Family Secondary Teacher Education Teacher in Respect of Their Blended Learning**

Sub Variable	Categories	Mean	SD	t - value	Remarks
Type of Family	Joint ( N= 32)	12.27	7.52	1.26	Not Significant
	Nuclear (N=63)	12.72	8.03		

(At 0.05 level of significance the table value of 't' is 1.99)

Since the calculated value of 't' is less than the table value for degrees of freedom at 5% level, the hypothesis is accepted. Therefore there is no significant difference between joint family and nuclear family secondary teacher education students in their blended learning.

#### Null Hypothesis -5

There is no significant difference between Internet users and Non Internet users secondary teacher education teacher in respect of their blended learning.

**Table No 5 Difference between Internet Users and Non Internet Users Secondary Teacher Education Teacher in Respect of their Blended Learning**

Sub Variable	Categories	Mean	SD	t - value	Remarks
Internet users	Yes (N=57)	16.25	6.86	2.47*	Significant
	No (N=38)	14.12	8.23		

(At 0.05 level of significance the table value of 't' is 1.99)

Since the calculated value of 't' is greater than the table value for degrees of freedom at 5% level. So, the hypothesis is not accepted. Therefore there is significant difference between internet user and non internet user of secondary teacher education students in their blended learning.

#### Major Findings

- 1) There is no significant difference between male and female secondary teacher education students in their blended learning.
- 2) There is significant difference between rural and urban secondary teacher education students in their blended learning.
- 3) There is significant difference between First year and second year secondary teacher education students in their blended learning.
- 4) There is no significant difference between joint family and nuclear family secondary teacher education students in their blended learning.
- 5) There is significant difference between internet user and non internet user of secondary teacher education students in their blended learning.

#### Interpretation

While comparing the mean scores of rural students have the mean score 12.69 and urban area student have the mean score 15.30. It proves that the urban area students are better than the rural area student in their blended learning. Moreover it is found that the urban area student have more blended

learning awareness than the rural area students. Because urban area student have more availability sources than the rural area student

While comparing the mean scores of first year students have the mean score 13.21 and second year student have the mean score 16.02. It proves that the second year students are better than the first year student in their blended learning. Moreover it is found that the second year student have more blended learning awareness than the first year students. Because the second year student have more experience in their teaching practice. And then they got the many opportunities and guided from their subject experience teacher in the school inner teaching program.

While comparing the mean scores of internet users have the mean score 16.25 and not internet users have the mean score 14.12. It proves that the internet users are better than the not internet users in their blended learning. Moreover it is found that the internet users have more blended learning awareness than not internet users. Internet gives more opportunity and many ideas for the learning purpose. Lots of information of different kinds is kept on the Net. This means that millions web sites include various data in the shape of images and text. On every subject of the planet information can be easily collected.

### **Educational Implications**

In the light of the study results, the researchers suggest the following:

1. Teachers should be aware of their student needs and abilities and train them on self - learning strategies to enhance blended potentials.
2. Active learning of students and continuous assessment approach may be more effective through the use of blended learning and this in turn may help ensure the quality of education.
3. Teacher should avoid teacher - centered class and move towards student - centered any technology - mediated classes.
4. Institutional overhaul (service) of the blended courses and programs may have accelerating effect on bringing quality of education and transforming teaching - learning process. Academic officials should strategically create infrastructure and facilities that enable blended learning to be used in teaching learning environment. Besides, curricula could be revisited with regard to integration of blended learning in course delivery system of the different disciplines.

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## IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ON TEACHING OF TEACHER EDUCATORS WITH RESPECT TO GENDER

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Dr. V. Kasirajan

### Abstract

*Information and communication Technology (ICT) helps in the professional development of teaching and learning and individuals involved in the programmes of teacher education. It can be infused in the learning process so as to acquire the knowledge and skill efficiently. ICT provides access to resources so that teachers can apply new knowledge and skills they have learnt. Communication technology will be able to develop the capacity of teacher and teacher educator and at same time, strengthen the capacity of teacher educator, which is the fundamental requirement of effective transactional strategy. This study was carried out to find out impact of information and communication technology (ICT) on teaching of teacher educators with respect to gender. A descriptive survey method was adopted by the investigator to conduct this study. The investigator used the simple random sampling technique for selecting the sample. The sample is 140 teacher educators who are working in the colleges of education and teacher training institutions in Tirunelveli district. Information and communication technology (ICT) was prepared and validated by Dr.V.Kasirajan. The investigator found the level of impact of ICT, and its dimension on teaching of teacher educators is average. ii) The level of impact of ICT and its dimension on teaching of teacher educators with respect to gender. Iii) There is significant difference between male and female teacher educators in the dimension of impact of ICT - preparation and planning but there is no significant difference between male and female teacher educators in the dimensions of impact of ICT - motivation, communication, ICT as a tool and impact of ICT on teaching in total.*

### INTRODUCTION

Information and communication technologies (ICTS) are a major factor in shaping the new global economy and producing rapid changes in society. Within the past decade, the new ICT tools have fundamentally changed the way people communicate and do business. They have produced significant transformations in industry, agriculture, medicine, business, engineering and other fields. They also have the potential to transform the nature of education-where and how learning takes place and the roles of students and teachers in the learning process. Teacher education institutions may either assume a leadership role in the transformation of education or be left behind in the swirl of rapid technological change. For education to reap the full benefits of ICTS in learning, it is essential that pre-service and in-service teachers have basic ICT skills and competencies.

Teacher education institutions and programmes must provide the leadership for pre-service and in-service teachers and model the new pedagogies and tools for learning. They must also provide leadership in determining how the new technologies can best be used in the context of the culture, needs, and economic conditions within their country. To accomplish these goals, teacher education institutions must work closely and effectively with k-12 teachers and administrators, national or state educational agencies, teacher unions, business and community organizations, politicians and other important stakeholders in the educational system.

Teacher education institutions also need to develop strategies and plans to enhance the teaching-learning process within teacher education programmes and to assure that all future teachers are well prepared to use the new tools for learning.

### **Significance of the Study**

Since ICT develops rapidly, we do not know and use all its opportunities yet. Moreover, these opportunities are still changing. Accordingly, teachers should be equipped with competences that prepare them for these constant changes; 'How does a teacher explore the opportunities and subsequently use them in his class room teaching?'

Because of the rapidly changing learning environments, teachers should be conscious of the fact that the skills they have acquired, in their own training, reflect the current state of affairs. Therefore, they are expected to be responsible and act to be up to date their entire lifetime (life-long learning). The teacher is a part of an entire school organisation. Even if these teacher training institutes are well-equipped and students are educated properly, we cannot expect young and just starting teachers to act as 'change agents'. They have to adjust to the situations (the typical school organisation) they encounter, and have to familiarise themselves with new concepts and new applications. This is not a simple task.

To enlarge the role of the teacher training institutes in the process of implementing ICT, it is suggested to stimulate a collective approach (teachers, schools, teacher training institutes and teachers in training) of solving problems in concrete teaching and learning situations. So there is need of setting rich ICT-designed learning situations for the training of future teachers and also the curriculum in the colleges of education should be incorporated with ICT components. So this is the right time to know the impact of the ICT on teaching among teacher educators in the teacher training institutions. So the investigator has selected the following topic for his investigation.

### **General Objective**

1. To find out the level of impact of ICT, and its dimension on teaching of teacher educators.
2. To find out the level of impact of ICT and its dimension on teaching of teacher educators with respect to gender
3. To find out whether there is any significant difference between male and female teacher educators in the impact of ICT and its dimension on their teaching of teacher educators

### **Hypotheses of the Study**

1. The level of impact of ICTs, and its dimension on teaching of teacher educators is average
2. The level of impact of ICT and its dimension on teaching of teacher educators with respect to gender
3. There is no significant difference between male and female teacher educators in the impact of ICT and its dimension on their teaching of teacher educators

### **Research Methodology and Sample**

Since the population of teacher educators in Tirunelveli district is limited, the investigator has selected all the teacher educators, the sample of 140 teacher educators who are working in the colleges of education and teacher training institutions in Tirunelveli district. So here the sample is the total population.

### **Tool Used**

As the investigator aims at the impact of ICT on teaching among teacher educators, the investigator has used impact of Information Communication Technology on Teaching Scale (IICTTS) to find out the impact of ICT on teaching among teacher educators. The tool was prepared and validated by Dr.V.KASIRAJAN.

## Analysis

1. The level of impact of ICT, and its dimension on teaching of teacher educators is average

**Table 1.1 The Level of Impact of ICT and its Dimension on Teaching of Teacher Educators**

Dimensions	Low		Moderate		High	
	N	%	N	%	N	%
Preparation and planning	29	20.7	91	65.0	20	14.3
Motivation	28	20.0	91	65.0	21	15.0
Communication	22	15.7	108	77.7	10	7.1
ICT as a tool	29	20.7	98	70.0	13	9.3
Impact of ICT on Teaching	21	15.0	102	72.9	17	12.1

It is inferred from the above table that 20.7% of teacher educators have low level, 65.0% of them have moderate level and 14.3% of teacher educators have high level preparation and planning of using ICT, in their teaching.

The above table reveals that 20.0% of teacher educators have low level, 65.0% of them have moderate level, and 15.0% of them have high level motivation of using ICT in their teaching.

It is observed from the table that 15.7% of teacher educators have low level, 77.7% of them have moderate level and 7.1% of teacher educators have high level of communication using ICT in their teaching.

The table reveals that 20.7% of teacher educators have low level, 70.0% of them have moderate level, and 9.3% of them have high level of using ICT as a tool in their teaching.

The table reveals that 15.0% of teacher educators have low level, 72.9% of them have moderate level, and 12.1% of them have high level impact of ICT in their teaching.

2. The level of impact of ICT and its dimension on teaching of teacher educators with respect to gender

**Table 1.2 Level of Impact of ICT and Its Dimension on Teaching of Teacher Educators With Respect to Gender**

Dimensions	Male N=35						Female N=105					
	Low		Moderate		High		Low		Moderate		High	
	N	%	N	%	N	%	N	%	N	%	N	%
Preparation and planning	2	5.7	25	71.4	8	22.9	27	25.7	66	62.9	12	11.4
Motivation	9	25.7	18	51.4	8	22.9	19	18.1	73	69.5	13	12.4
Communication	6	17.1	26	74.3	3	8.6	16	15.2	82	78.1	7	6.7
ICT as a tool	6	17.1	27	77.1	2	5.7	23	21.9	71	67.6	11	10.5
Impact of ICT on Teaching	3	8.6	25	71.4	7	20.0	18	17.1	77	73.3	10	9.5

It is inferred from the above table that 5.7% of male teacher educators have low level, 71.4% of them have moderate level and 22.9% of them have high level preparation and planning of using ICT in their teaching.

Regarding female teacher educators, 25.7% of them have low level, 62.9% of them have moderate level, and 11.4% of teacher educators have high level preparation and planning of using ICT in their teaching.

It is observed from the table that 25.7% of teacher educators have low level, 51.4% of them have moderate level and 22.9% of teacher educators have high level motivation of using ICT in their teaching.

Regarding female teacher educators, 18.1% of them have low level, 69.5% of them have moderate level, and 12.4% of them have high level motivation in using ICT in their teaching.

The table reveals that 17.1% of male teacher educators have low level, 74.3% of them have moderate level, and 8.6% of them have high level of communication using ICT in their teaching.

Regarding female teacher educators, 15.2% of them have low level, 78.1% of them have moderate level, and 6.7% of them have high level of communication using ICT in their teaching.

The above table reveals that 17.1% of male teacher educators have low level, 77.1% of them have moderate level, and 5.7% of them have high level of using ICT as a tool in their teaching.

Regarding female teacher educators, 21.9% of them have low level, 67.6% of them have moderate level, and 10.5% of them have high level of using ICT as a tool in their teaching.

The above table reveals that 8.6% of male teacher educators have low level, 71.4% of them have moderate level, and 20.0% of them have high level impact of using ICT in their teaching.

Regarding female teacher educators, 17.1% of them have low level, 73.3% of them have moderate level, and 9.5% of them have high level impact of ICT in their teaching.

2. There is no significant difference between male and female teacher educators in the impact of ICT and its dimension on their teaching of teacher educators

**Table 1.3 Difference between Male and Female Teacher Educators in the Impact of ICT and Its Dimension on their Teaching of Teacher Educators**

Dimensions	Male N=35		Female N=105		Calculated 't' value	Remarks at 5% level
	Mean	S.D	Mean	S.D		
Preparation and Planning	9.97	2.80	8.28	3.44	2.92	S
Motivation	11.37	3.45	11.09	3.28	0.43	NS
Communication	12.23	3.69	12.22	3.74	0.01	NS
ICT as a tool	12.11	3.50	12.52	3.49	0.60	NS
Impact of ICT on Teaching	45.57	9.76	43.92	10.84	0.84	NS

It is inferred from the above table that there is significant difference between male and female teacher educators in the dimension of impact of ICT - preparation and planning. But there is no significant difference between male and female teacher educators in the dimensions of impact of ICT - motivation, communication, ICT as a tool and impact of ICT on teaching in total.

### Findings

- 1
  - a. 14.3% of the teacher educators have high level preparation and planning of using ICT.
  - b. 15.0% of the teacher educators have high level motivation of using ICT.
  - c. 7.1% of the teacher educators have high level communication using ICT.
  - d. 9.3% of the teacher educators have high level of using ICT as a tool.
  - e. 12.1% of the teacher educators have high level impact of ICT on their teaching.
- 2
  - a. 22.9% of male and 11.4% of female teacher educators have high level preparation and planning of using ICT.
  - b. 22.9% of male and 12.4% of female teacher educators have high level motivation of using ICT.
  - c. 8.6% of male and 6.7% of female teacher educators have high level communication using ICT.
  - d. 5.7% of male and 10.5% of female teacher educators have high level of using ICT as a tool.
  - e. 20.0% of male and 9.5% of female teacher educators have high level impact of ICT on their teaching.
3. There is significant difference between male and female teacher educators in the dimension of impact of ICT - preparation and planning. But there is no significant difference between male and female teacher educators in the dimensions of impact of ICT - motivation, communication, ICT as a tool and impact of ICT on teaching in total.

### Interpretation

The 't' test reveals that the male teacher educators are better than the female teacher educators in their preparation and planning of using ICT for their class room teaching. This may be due to the fact that the male teacher educators may get the exposure of using ICT for their class room teaching. More than that, Mr. I. Dineshkumar and Dr. V.KASIRAJAN (2011) found that male teachers had better attitude in using ICT for their teaching. Female teacher educators do not have the opportunity of using ICT like male teacher educators. They may be engaged with house hold works and may not get time to prepare for their classroom teaching.

### Recommendation

1. There should be well designed ICT learning situations for the training of future teacher educators to create future teachers.
2. The curriculum in the colleges of education should incorporate ICT components. So that the teacher educators will be able to teach all topics using ICT components
3. Teachers could learn from each other. The rapid development of ICT require a communication network. The colleges of education can establish the learning networks. These networks will be helpful for the Educators and the Alumni.
4. Schools and the colleges of education experience a comparable process. Schools and the colleges of education can learn from each other's experiences and expertise as well. So the Mailing Lists, New Groups and UseNet can be used by the teacher educators.
5. EDUSAT programme can be shown to the teachers in the colleges of education.
6. More ICT training programmes are needed to make that concrete which help to motivate the teacher educators in a right way of using ICT for their class room teaching.
7. Virtual Learning environment can be provided in the colleges of education.

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## ADMINISTRATIVE BEHAVIOUR AND LEADERSHIP QUALITIES AMONG HEADS OF HIGHER SECONDARY SCHOOLS IN TAMIL NADU

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### Abstract

The most important responsibilities and central role is played by headmaster, who is related to administration and management. The creation of great educational environment is the result of many components in which educational planning, implementation aspect, remedial aspect etc. are included. It means in the creation of great educational environment, if a headmaster uses management technology to get fixed educational norms then a systematic educational environment will be display. In this creation, a headmaster should have knowledge about social science, human science, psychology, technology. Leadership Qualities have played a vital role in the affairs of human beings since earliest recorded history. Historians have emphasized heroes in battle and the importance of their deeds for the future course of history. In modern society, organizational functions are being carried out by individuals characterized differently in different situations and time, and their contributions are praised.

**Design :** Descriptive, **Method :** Normative, **Technique :** Survey

**Sample :** A random sample of 200 higher secondary school heads' from Madurai, Theni, Dindigul and Virudhunagar districts of State of Tamil Nadu in India with due representation to the variables, viz. Gender, Age, Educational Qualifications, School management and School locality.

The major conclusions emerged out of the study are presented below:

1. Administrative behavior of heads of higher secondary schools is high.
2. Administrative behavior of heads of higher secondary schools is dependent upon – Gender and Age.
3. Administrative behavior of heads of higher secondary schools is independent upon – Educational qualifications, School management and School locality.
4. Leadership qualities of heads of higher secondary schools are high.
5. Leadership qualities of heads of higher secondary schools are dependent upon School management only.
6. Leadership qualities of heads of higher secondary schools are independent upon – Gender, Age, Educational qualifications and School locality.
7. There is a positive relationship between administrative behavior and leadership qualities among heads of higher secondary schools.

**Keywords:** Administrative Behaviour, Leadership Qualities

### Need for the Study

The headmaster plays a dominate role in the school, all the activities taking place in the institution revolves round him, so it is expected that the headmaster should convince his colleagues of significance of innovative practices and win the confidence of the students as a leader of school of education. The headmaster must have some qualities such as knowledge of group psychology, academic efficiency, sense of responsibility etc. Therefore, the headmaster of a school must provide a skillful leadership, so that interaction may take place in the minimum stress & strain. In this way we can say that in the conduction of any educational institute and in the powerfulness of educational environment, there is a main role of headmaster as a head of educational institute family,

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He consign proper work load to every member according to their ability, capacity and cooperate in development of discipline, study habits etc. Generally whereas he is responsible for the management committee, education departs, teacher, students on the other hands his subordinate teachers, employers are responsible to headmaster for their duties and works. The expert headmaster propriety decentralization to whole his responsibilities to make a great educational environment and conduct the educational and co-curricular activities of the school in the role of a coordinator, teacher, supervisor and a self vigilant. The effect of his manner and personality is reflected on the whole school environment. The effect of his personality and behaviour reflects in whole educational environment. So famous educationist Dr. Bhanu Prasad writes that “the needless and importance of great educational environment is well known and self proved because any educational environment and educational propaganda is depend on the quality level of headmaster. So continuous and entire educational environment will depend on the level of headmaster and their deep vision and their behavioural vision with external and internal components of the institute”. The most important responsibilities and central role is played by headmaster, who is related to administration and management. The creation of great educational environment is the result of many components in which educational planning, implementation aspect, remedial aspect etc. are included. It means in the creation of great educational environment, if a headmaster uses management technology to get fixed educational norms then a systematic educational environment will be display. In this creation, a headmaster should have knowledge about social science, human science, psychology, technology. Leadership Qualities have played a vital role in the affairs of human beings since earliest recorded history. Historians have emphasized heroes in battle and the importance of their deeds for the future course of history. In modern society, organizational functions are being carried out by individuals characterized differently in different situations and time, and their contributions are praised. Some individuals contribute more of their energies or skills than others and they vary in their extent to which they exert influence over each other. Higher secondary school heads must have leadership qualities for upgrading institution in terms of academic, administration etc. No study has been undertaken so far with heads of higher secondary schools in Tamil Nadu on their administrative behaviour and leadership qualities. So the investigator selected the research title **“Administrative Behaviour and Leadership Qualities among Heads of Higher Secondary Schools in Tamil Nadu”**.

### **Review of Literature**

Strategic Leadership, Resource Management and Effective School Reform.’ by **Caldwell, Brian J.(1999)** examines school reform's effects on principals' professional leadership culture, drawing on research findings from 1993 to 1998, and highlighting possible future reforms in Victoria, Australia. Principals are more satisfied with present, than past, work arrangements. Leadership is more strategic and empowering than heroic or hands-on.

**Blase, Joseph; Blase, Jo (2000)** conducted a study on, ‘Effective Instructional Leadership: Teachers' Perspectives on How Principals Promote Teaching and Learning in Schools’. Over 800 American teachers responded to an open-ended questionnaire by identifying and describing characteristics of principals that enhanced their classroom instruction and what influences these characteristics had on them. The data revealed 11 strategies and 2 effective-leadership themes: talking with teachers to promote reflection and promoting professional growth.

**Leithwood, Kenneth; Jantzi,(2001)** conducted a study on the Principal and Teacher Leadership Effects: A Replication explores teacher and principal leadership influences on student engagement with school. The study used survey data from an achieved sample of 1,818 elementary teachers and 6,490 students in a large Canadian school district. Principal-leadership effects were weak but significant; teacher-leadership effects proved insignificant.

**Krishnan (2001)** argued that Indian culture is conducive to emergence of transformational leaders, as the fundamental beliefs that are unique to the Indian worldview—concept of Maya, preference

for action, potential divinity, and goal of freedom—facilitate the emergence of transformational leadership.

**Kejriwal and Krishnan (2004)** found that Sattva Guna (awareness) and Vedic worldview separately enhance transformational leadership whereas Tamas Guna (inertness) reduces it. The purpose of the present research is to extend understanding of change heralding leadership in India. The results of this study will help us map a behavioral profile of transformational leaders in Indian context. Similarly, studies on leadership with Indian samples have found that successful leaders in India possessed the qualities of transformational leaders.

### Terms and Definitions

**Administrative Behaviour** - refer to comprising of system of attitudes, approaches, perceptions, and values that guide the way, they deal with organizational problems.

**Leadership Qualities**- refer to the ability of an individual to influence, motivate and enable a person and others to contribute effectively in daily works of school life and society.

**Heads of Higher Secondary Schools** - refers to those who are working as heads of higher secondary schools in Madurai, Theni, Dindigul and Virudhunagar districts of Tamil Nadu, India.

### Variables of the Study

#### Dependent Variable -

- i. Administrative Behaviour
- ii. Leadership Qualities

#### Independent Variable

- |                               |                                    |
|-------------------------------|------------------------------------|
| 1. Gender                     | : Male / Female                    |
| 2. Age                        | : Upto 45 years / 45 & above years |
| 3. Educational Qualifications | : Required / Higher                |
| 4. School Management          | : Government / Aided               |
| 5. School Locality            | : Rural / Urban                    |

### Objectives of the Study

The specific objectives of the study are listed below:

1. To measure the administrative behavior among heads of higher secondary schools.
2. To find out whether there is significant difference administrative behavior among heads of higher secondary schools in terms of select independent variables.
3. To measure the leadership qualities among heads of higher secondary schools.
4. To find out whether there is significant difference leadership qualities among heads of higher secondary schools in terms of select independent variables.
5. To find out the relationship between administrative behavior and leadership qualities among heads of higher secondary schools.

### Hypotheses of the Study

The following hypotheses have been formulated for verification in this study.

1. Gender exerts a significant influence on administrative behaviour among heads of higher secondary schools.
2. Age exerts a significant influence on administrative behaviour among heads of higher secondary schools.
3. Educational qualifications exert a significant influence on administrative behaviour among heads of higher secondary schools.
4. School management exerts a significant influence on administrative behaviour among heads of higher secondary schools.

5. School locality exerts a significant influence on administrative behaviour among heads of higher secondary schools.
6. Gender exerts a significant influence on leadership qualities among heads of higher secondary schools.
7. Age exerts a significant influence on leadership qualities among heads of higher secondary schools.
8. Educational qualifications exert a significant influence on leadership qualities among heads of higher secondary schools.
9. School management exerts a significant influence on leadership qualities among heads of higher secondary schools.
10. School locality exerts a significant influence on administrative behaviour among heads of higher secondary schools.
11. There is a positive relationship between administrative behavior and leadership qualities among heads of higher secondary schools.

### Methodology in Brief

**Design:** Descriptive, **Method:** Normative, **Technique:** Survey

**Sample:** A random sample of 200 higher secondary school heads' from Madurai, Theni, Dindigul and Virudhunagar districts of State of Tamil Nadu in India with due representation to the variables, viz. Gender, Age, Educational Qualifications, School management and School locality.

### Tools Used

1. General Information Sheet structured by the Investigator.
2. Administrative Behaviour Scale Constructed and Standardized by Halpin (1966).
3. Leadership Qualities Inventory Constructed and Standardized by Ramakrishnan, G. (2015).

### Statistical Treatments

1. 't'-test for significance of difference between the means of large independent samples.
2. Pearson's product moment correlation 'r'.

### Results and Discussions

#### Administrative Behaviour of Heads of Higher Secondary Schools

The **empirical average** of administrative behaviour of heads of higher secondary schools is found to be 42.86, while the **theoretical average** is 40 only. This shows that administrative behaviour of heads of higher secondary schools is found below the average level.

**Table 1: Results of test of significance of difference between the mean scores of administrative behaviour of heads of higher secondary schools: Population Variables – Wise.**

Sl. No.	Variable	Sub-Variables	N	M	S.D.	't'-value	Significance at 0.05 level
1.	Gender	Male	125	42.35	5.36	-1.988	significant
		Female	75	43.73	4.03		
2.	Age	Upto 45 years	48	44.02	3.61	2.718	significant
		45 & above years	152	42.16	5.45		
3.	Educational Qualifications	Required	74	42.14	5.73	-0.942	Not significant
		Higher	126	42.88	4.81		
4.	School Management	Government	93	42.88	4.50	0.717	Not significant
		Aided	107	42.36	5.69		
5.	School Locality	Rural	105	43.17	4.52	1.619	Not significant
		Urban	95	41.99	5.75		

## Hypotheses Verification

### Hypothesis 1

**Gender exerts a significant influence on administrative behaviour among heads of higher secondary schools.**

The calculated 't' value (-1.988) is greater than the table value (1.96) at 0.05 level of significance. This shows that there is a significant difference between male and female heads of higher secondary schools in terms of administrative behavior. Hence the hypothesis is accepted.

### Hypothesis 2

**Age exerts a significant influence on administrative behaviour among heads of higher secondary schools.**

The calculated 't' value (2.718) is greater than the table value (1.96) at 0.05 level of significance. This shows that there is a significant difference between upto 45 years old and 45 & above years old heads of higher secondary schools in terms of administrative behaviour. Hence the hypothesis is accepted.

### Hypothesis 3

**Educational qualifications exert a significant influence on administrative behaviour among heads of higher secondary schools.**

The calculated 't' value (-0.942) is lower than the table value (1.96) at 0.05 level of significance. This shows that there is no significant difference required and higher educational qualifications of heads of higher secondary schools in terms of administrative behaviour. Hence the hypothesis is rejected.

### Hypothesis 4

**School management exerts a significant influence on administrative behaviour among heads of higher secondary schools.**

The calculated 't' value (0.717) is lower than the table value (1.96) at 0.05 level of significance. This shows that there is no significant difference between government and aided schools of heads of higher secondary schools in terms of administrative behaviour. Hence the hypothesis is rejected.

### Hypothesis 5

**School locality exerts a significant influence on administrative behaviour among heads of higher secondary schools.**

The calculated 't' value (1.619) is lower than the table value (1.96) at 0.05 level of significance. This shows that there is no significant difference between rural and urban school locality of heads of higher secondary schools in terms of administrative behaviour. Hence the hypothesis is rejected.

## Leadership Qualities of Heads of Higher Secondary Schools

The **empirical average** of leadership qualities of heads of higher secondary schools is found to be 48.49, while the **theoretical average** is 40 only. This shows that leadership qualities of heads of higher secondary schools are found below the average level.

**Table 2 : Results of test of significance of difference between the mean scores of leadership qualities of heads of higher secondary schools: Population Variables – Wise.**

Sl. No.	Variable	Sub-Variables	N	M	S.D.	't'-value	Significance at 0.05 level
1.	Gender	Male	125	48.87	5.25	1.050	Not significant
		Female	75	47.86	5.22		
2.	Age	Upto 45 years	48	47.52	5.12	-1.789	Not significant
		45 & above years	152	49.05	5.25		
3.	Educational Qualifications	Required	74	48.41	4.83	-0.585	Not significant
		Higher	126	48.84	5.49		
4.	School Management	Government	93	48.54	5.32	-2.356	significant
		Aided	107	48.80	5.21		
5.	School Locality	Rural	105	48.71	5.25	0.070	Not significant
		Urban	95	48.65	5.27		

## Hypotheses Verification

### Hypothesis 6

**Gender exerts a significant influence on leadership qualities among heads of higher secondary schools.**

The calculated 't' value (1.050) is lower than the table value (1.96) at 0.05 level of significance. This shows that there is no significant difference between male and female heads of higher secondary schools in terms of leadership qualities. Hence the hypothesis is rejected.

### Hypothesis 7

**Age exerts a significant influence on leadership qualities among heads of higher secondary schools.**

The calculated 't' value (-1.789) is lower than the table value (1.96) at 0.05 level of significance. This shows that there is no significant difference between upto 45 years old and 45 & above years old heads of higher secondary schools in terms of leadership qualities. Hence the hypothesis is rejected.

### Hypothesis 8

**Educational qualifications exert a significant influence on leadership qualities among heads of higher secondary schools.**

The calculated 't' value (-0.585) is lower than the table value (1.96) at 0.05 level of significance. This shows that there is no significant difference required and higher educational qualifications of heads of higher secondary schools in terms of leadership qualities. Hence the hypothesis is rejected.

### Hypothesis 9

**School management exerts a significant influence on leadership qualities among heads of higher secondary schools.**

The calculated 't' value (-2.356) is higher than the table value (1.96) at 0.05 level of significance. This shows that there is a significant difference between government and aided schools of heads of higher secondary schools in terms of **leadership qualities**. Hence the hypothesis is accepted.

### Hypothesis 10

**School locality exerts a significant influence on leadership qualities among heads of higher secondary schools.**

The calculated 't' value (0.070) is lower than the table value (1.96) at 0.05 level of significance. This shows that there is no significant difference between rural and urban school locality of heads of higher secondary schools in terms of leadership qualities. Hence the hypothesis is rejected.

### Hypothesis 11

**There is a positive relationship between administrative behavior and leadership qualities among heads of higher secondary schools.**

The 'r' between administrative behaviour and leadership qualities is found to be 0.623. This is found to be higher than that of the critical value at 0.01 level 0.139. It is concluded that "There is a positive relationship between administrative behavior and leadership qualities among heads of higher secondary schools".

## Conclusions

The major conclusions emerged out of the study are presented below:

1. Administrative behavior of heads of higher secondary schools is high.
2. Administrative behavior of heads of higher secondary schools is dependent upon – Gender and Age.
3. Administrative behavior of heads of higher secondary schools is independent upon – Educational qualifications, School management and School locality.
4. Leadership qualities of heads of higher secondary schools are high.
5. Leadership qualities of heads of higher secondary schools are dependent upon School management only.

6. Leadership qualities of heads of higher secondary schools are independent upon – Gender, Age, Educational qualifications and School locality.
7. There is a positive relationship between administrative behavior and leadership qualities among heads of higher secondary schools.

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## CONSTRUCTION OF A TOOL TO MEASURE CREATIVE THINKING OF HIGHER SECONDARY STUDENTS

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### Abstract

*In the present study creative thinking scale has been constructed and standardized for the higher secondary students. This scale consists of 22 statements. The simple random sampling technique was used for this study. The sample consists of 100 higher secondary students, randomly selected from the Kanchieepuram District. The 't' value was used to standardized the tool and finally 17 statements were retained for the final study.*

**Key words:** Creative thinking, Higher secondary students

### Introduction

The objective of the present investigation is to develop a tool to measure the creative thinking of higher secondary students. As there is no suitable tool available for the purpose, the investigator has constructed and validated one in order to realize the objectives.

### Creative thinking Definition

**Divya Jindal (2009)**, A new way of carrying out tasks, solving problems and meet challenges. Creative thinkers bring a fresh and sometimes unorthodox perspective to the work.

**Chris Collier (2013)**, Specific thought process which improve the ability to be creative. Being in an optimal state of mind for generating new ideas. To think deliberately in ways that improve the likelihood of new thoughts occurring. To maximize the ability of the brain to think of new ideas. The ability to think of original, diverse and elaborate ideas.

### Pilot study

This scale of 22 items intended for the pilot study was administered to the sample, 100 higher secondary students studying in the Kanchieepuram district. Then their responses have been scored carefully and the marks secured by all the students have been arranged in the descending order from the highest score to lowest score. Then, they were subjected to item analysis.

### Item analysis

The next step in the standardization of creative thinking scale after pilot study is to find out the 't' value of each statement which forms the basis for item selection in order to build up the final scale.

The scale calls for a graded response to each question on a two point scale ranging from correct answer and wrong answer. The different questions on the scale are assigned arbitrary weights, for example (1) mark for correct answer and (0) mark for wrong answer. The scale has the items belonging to two dimensions,

- (i) Verbal thinking (totally 36 items)
- (ii) Non verbal thinking (totally 30 items).

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The scoring key given in below table-1

**Table 1 Scoring key of the scale according to the nature of items**

S.No	Nature of Items	Seeing Problem Test	Unusual Uses Test	Consequences Test
1	<b>Verbal thinking:</b> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36.	1-12 items Scoring: 1 mark- correct answer. 0 mark- wrong answer.	13-24 items Scoring: 1 mark- correct answer. 0 mark- wrong answer.	25-36 items Scoring: 1 mark- correct answer. 0 mark- wrong answer.

### Verbal Scale

- Seeing problem test:** has (i) two wheelers (uses/problems) 6 points and (ii) Cell phone (uses/problems) 6 points each carries one mark as a score. Therefore the score is 12 marks.
- Unusual uses test:** has (i) piece of paper (uses) 6 points and (ii) Ice cream sticks (uses) 6 points each carries one mark as a score. Therefore the score is 12 marks,
- Consequences test:** has (i) If all the peoples start having fast food (consequences) 6 points and (ii) If all papers become rupees (consequences) 6 points each carries one mark as a score. Therefore the score is 12 marks,

This indicates, the total score of verbal scale is 36 marks.

**Table 2 Scoring key of the scale according to the nature of items**

S.No	Nature of items	Numerical Test	Pictorial Test	Puzzles Test
2	<b>Non verbal thinking:</b> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11-question has 20 items	1-2 items Scoring: 1 mark- correct answer. 0 mark- wrong answer.	3-10 items Scoring: 1 mark- correct answer. 0 mark- wrong answer.	11 items Scoring: 1 mark- correct answer. 0 mark- wrong answer.

### Non-Verbal Scale

- Numerical test:** has two items, each items carries 1mark as a score. Therefore the score is 2 marks,
  - Pictorial test :** has eight items, each items carries 1 mark as a score .Therefore the score is 8 marks,
  - Puzzles test:** has 20 items, each item carries 1 mark as a score. Therefore the score is 20 marks,
- These indicate, the total score of non-verbal scale is 30 marks.

### Items Selection

To select the items to form the final draft of the creative thinking, the difficulty index of the each item was analyzed. According to Edwards (1957), the value of 't' is a measure of the extent to which a given item differentiates between the high and low groups. If the 't' value is equal to or greater than 1.96, it indicates that the average response of the high and low groups to a statement differs significantly, provided there are 25 or more subjects in the high group and also in the low group.

**Table 3 List of items selected for the final draft of the creative thinking scale based on their 't' value between upper and lower group**

Item No.	't' value	Remarks	Item No. in the final Draft of CTS
1	3.16	Selected	1
2	4.72	Selected	2
3	3.83	Selected	3
4	3.86	Selected	4
5	6.98	Selected	5

6	3.30	Selected	6
7	5.73	Selected	7
<b>8</b>	<b>1.24</b>	<b>Not selected</b>	-
9	4.49	Selected	8
<b>10</b>	<b>1.58</b>	<b>Not selected</b>	-
<b>11</b>	<b>0.59</b>	<b>Not selected</b>	-
12	2.36	Selected	9
13	7.94	Selected	10
<b>14</b>	<b>0.98</b>	<b>Not selected</b>	-
<b>15</b>	<b>1.67</b>	<b>Not selected</b>	-
16	3.10	Selected	11
17	4.61	Selected	12
18	5.95	Selected	13
19	2.82	Selected	14
20	7.02	Selected	15
21	5.70	Selected	16
22	5.98	Selected	17

### Reliability

In order to establish the reliability of creative thinking scale, the odd-even method was used. The reliability of creative thinking scale was found to be 0.822. Hence, the creative thinking scale was considered as reliable.

### Validity

The index of validity which is the square root of the reliability was found to be 0.904. Hence, creative thinking scale selected for the study was considered to be highly valid.

### Conclusion

The investigation is hopeful that this scale would be helpful to measure the level of creative thinking among higher secondary students. Hence this tool will be very useful for the investigator to measure to what extent the level of creative thinking among higher secondary students.

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## FRIENDSHIP AND HELPING TENDENCY OF B.ED., TRAINEES IN VIRUDHUNAGAR DISTRICT

K. Senthilkumar

### Abstract

*This current research aims to study friendship and helping tendency of B.ed trainees. Teacher education refers to the policies and procedures designed to equip teachers with the knowledge, attitudes, behaviors and skills they require to perform their tasks effectively in the classroom. The concept of teacher education is undergoing a rapid change throughout the world. The present investigation analyses the friendship and helping tendency of Bed trainees. The main objective is to find out the level of friendship of B.Ed, trainees and its dimensions with respect to gender and find out the level of helping tendency of B.Ed, trainees and its dimensions with respect to gender. Finally the results show that female students are better than male student friendship and helping tendency of B.ed trainees behavior.*

### Introduction

An important of education throughout the world today is the promotion of international superstitious beliefs and develops a scientific outlook on life. The prosperity of a nation depends very much upon the educational system of that country as it prepares the future citizens of the country.

Education means the process the process by which the individual is helped to develop his innate potentials to the full so that he is well equipped for a gracious and harmonious life in the world. Thus education helps man to make a deliberate and concrete effort to live comfortably and happily in his physical and social environment.

### Need and Significance of the Study

Friendship is distinctively personal relationship that is grounded in a concern in the part of each friend for the welfare of the others sake and that involves same degree of intimacy. As such friendship is undoubted central to our loves; in part because the special concern we have for our friends must have a place within broader set of concern in moral concerns that we are as persons. Attitude towards helping others is normally seen in all people irrespective of their age. Here, helping means sharing the happiness to others is called helping tendency of an individual. Everybody should have this type of attitude of helping others. This attitude will certainly give some sort of happiness to the helpers as well as help seekers. B.Ed., trainees are very active in doing any task. Further, they want to do adventures things for getting friendship and helping tendency. Most of the students who get above first class in undergraduate do not have many friends. Some students are very happy when they are mingling with their friends or family members. So the investigator has chosen eight dimensions such as enjoyment, acceptance, trust, respect, mutual assistance, confiding, understanding and spontaneity. Student friendship and helping tendency are greatly influenced by several factors such as parent's social economic status, location of the school, educational qualification of parents etc. So the investigator has chosen the above problem.

### Operational Definitions

#### A. Friendship scale

In the present study it has the following dimensions Enjoyment, Acceptance, Trust, Respect, Mutual Assistance, Confiding, Understanding, and Spontaneity. Friendship is a distinctively personal relationship that is grounded in a concern in the part of each friend for the welfare of the others sake and that involves some degree of intimacy

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### B. Helping tendency

It means the nature or attitude of adolescents regarding the helping tendency.

### C. B.Ed., trainees

It means the trainees studying B.Ed College of education in Virudhunagar District.

## General Objectives

- To find out the level of friendship of B.Ed., trainees with respect to background variables.
- To find out the level of helping tendency of B.Ed., trainees with respect to background variables.
- To find out the relationship between the friendship and helping tendency of B.Ed., trainees.

## Null Hypotheses

1. There is no significant difference in friendship of B.Ed., trainees and its dimensions with respect to gender.
2. There is no significant difference in friendship of B.Ed., trainees and its dimensions with respect to medium of instruction.
3. There is no significant difference in friendship of B.Ed., trainees and its dimensions with respect to location of the college.

## Methodology

In the present study the investigator were used the normative survey method

## Tools used in the present study

1. Friendship scale was prepared by Sunandachandna and Chadha.N.K (1986).
2. Helping tendency scale developed by Ponrani.R and Vengo Regis.X (2012).

## Population for the Study

Koul (1984) says "A population refers to any collection of specific group of human being or non – human being such as objects, educational instruction, time units, geographical areas salaries drawn by individuals, some statisticians it universe cell". The population of the study consists of B.Ed., students who are studying in B.Ed., colleges in Virudhunagar district.

## Sample for the study

John W. Best says, "A sample is a small proportion selected for observation and analysis". For the present study, the investigator has randomly selected 320 B.Ed., trainees from 8 B.Ed., colleges in Virudhunagar district.

## Statistical techniques used

According to Aggarwal, Y.P. (2000), "Statistics is the scientific study of handling quantitative information. It embodies a methodology of collection classification, description and interpretation of data obtained through the conduct of surveys and experiments.

## Hypothesis Testing

### Hypothesis 1

There is no significant difference in friendship of B.Ed., trainees with respect to gender.

**Table 1 Mean and SD Scores of Friendship of Male and Female Trainees and Calculated 'T' Values**

Friendship and its dimensions	Male (N=89)		Female(N=231)		Calculated 't' values	Remarks
	Mean	S.D	Mean	S.D		
Enjoyment	10.82	1.144	10.96	0.856	1.19	NS
Acceptance	9.69	1.311	10.22	1.226	3.43	S
Trust	8.67	1.304	9.20	1.002	3.84	S
Respect	8.63	1.112	9.13	0.956	4.00	S

Mutual assistance	8.93	1.185	9.34	0.865	3.40	S
Confiding	8.19	1.296	8.16	1.119	0.18	NS
Understanding	6.34	0.999	6.75	0.927	3.48	S
Spontaneity	6.98	1.033	7.11	0.877	1.17	NS
Total	68.25	5.631	70.8	4.514	4.35	S

(At 5% level of significance, the table value of 't' is 1.96)

### Hypothesis 2

There is no significant difference in friendship of B.Ed., trainees with respect to medium of instruction.

**Table – 2 Mean and SD Scores of Friendship of Tamil and English Trainees and Calculated 't' Values**

Friendship and its dimensions	Tamil (N = 257)		English(N=63)		Calculated 't' values	Remarks
	Mean	S.D	Mean	S.D		
Enjoyment	10.88	0.963	11.10	.856	1.62	NS
Acceptance	10.06	1.285	10.11	1.220	0.27	NS
Trust	9.05	1.124	9.08	1.097	0.20	NS
Respect	8.97	1.032	9.06	0.998	0.62	NS
Mutual assistance	9.20	1.009	9.35	0.845	1.09	NS
Confiding	8.20	1.174	8.06	1.148	0.82	NS
Understanding	6.62	0.953	6.68	1.013	0.44	NS
Spontaneity	7.06	0.954	7.13	0.793	0.49	NS
Total	70.04	4.968	70.57	5.063	0.75	NS

(At 5% level of significance, the table value of 't' is 1.96)

### Hypothesis 3

There is no significant difference in helping tendency of B.Ed., trainees with respect to gender.

**Table – 3 Mean and SD Scores of Helping Tendency of Male and Female Trainees and Calculated 'T' Value**

Variable	Male (N=89)		Female(N=231)		Calculated 't' value	Remark
	Mean	S.D	Mean	S.D		
Helping tendency	90.67	8.574	91.45	7.729	0.78	NS

(At 5% level of significance, the table value of 't' is 1.96)

### Findings

- There is no significant difference in the dimensions of enjoyment and confiding, spontaneity with respect to gender. But there is significant difference in the dimensions of acceptance, trust, respect, mutual assistance, understanding, and in total with respect to gender.
- There is no significant difference in the dimensions of enjoyment, acceptance, trust, respect, mutual assistance, confiding, understanding, spontaneity and in total with respect to medium of instruction.
- There is no significant difference in helping tendency of B.Ed., trainees with respect to gender.

### Recommendations

1. Ice-breaking sessions can be conducted to develop friendship of the trainees.
2. The parents should talk with their child and find out what's happening in their life. Be honest and open with them.

3. The parents should not burden the adolescents with the problems. But, the children about the family goals and discuss difficulties in a friendly manner.
  4. Self booster programmes can be conducted for students.
  5. Management should select those prospective teachers so as to have better level of friendship and academic record.
  6. The education department should frame a new syllabus related to human values, morality, culture etc., and should be introduced from the secondary level. This will certainly increase the helping tendency of the students at their secondary level.
  7. The teachers should clearly instruct their students with regard to the helping tendency and its impact over the social relationship.
- I. SUGGESTIONS FOR FURTHER RESEARCH
1. This study is limited to Virudhunagar District. It can be extended to some other region.
  2. This study is limited in B.Ed., trainees only. It can be extended to some other professional courses also.
  3. The present study has only two variables friendship and helping tendency. A similar study could be conducted by taking other variables such as level of aspirations and adjustments etc.,
  4. This study may be extended to a large sample taking some more variables.
  5. A case study may be conducted in any social service organization regarding their supportive factors.

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## IMPACT OF CLASSROOM ENVIRONMENT ON ACADEMIC ACHIEVEMENT OF HIGHER SECONDARY STUDENTS

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Dr. N. Subramanian

### Abstract

*An educator, Richard Reginald Green, supports the preceding concept when he said, "The future of the nation is on the shoulders of teachers and how they teach kids; the future of the world is in the classroom where the teachers are. And if we have any chance to guarantee a positive bridge to the 21st century, it is how we educate the children in the classroom today." Teachers are the catalysts of change; they are the torch bearers always lighting the path towards progress of the world in all its facets. The classroom still remains to be the main learning environment in the schools although learning can take place in other venues. On this premise, it is imperative that educators strive to make the classroom the best venue for students to attain their full potential in academic performance. The goal of this study is to see if students' perceptions of their classroom environment are related to their academic achievement. It is hypothesized that there is a relationship between the classroom environment and academic achievement of higher secondary students. The sample was 150 higher secondary students selected through stratified random technique from Tenkasi Educational District. The instrument used to measure the level of classroom climate as perceived by the students was an adaptation of the downloaded classroom climate questionnaire. For measuring academic achievement of higher secondary students, the investigator used the scores of them in all the subjects in quarterly examination. Pearson's  $r$  set at 0.05 level of significance was used for inferential statistics. With the  $p$ -value=.000 which is lesser than 0.05 level of significance, academic performance is significantly correlated to classroom climate. Classroom climate to a certain extent has some influence on academic performance of students.*

### Introduction

An educator, Richard Reginald Green, supports the preceding concept when he said, "The future of the nation is on the shoulders of teachers and how they teach kids; the future of the world is in the classroom where the teachers are. And if we have any chance to guarantee a positive bridge to the 21st century, it is how we educate the children in the classroom today." Teachers are the catalysts of change; they are the torch bearers always lighting the path towards progress of the world in all its facets. The classroom still remains to be the main learning environment in the schools although learning can take place in other venues. On this premise, it is imperative that educators strive to make the classroom the best venue for students to attain their full potential in academic performance. According to Andy Hargreaves and Michael Fullon, "It is what teachers think, what teachers do and what teachers are at the level of the classroom that ultimately shapes the kind of learning that young people get."

### Classroom Environment

#### Classroom

A classroom or schoolroom is a room dedicated primarily to teaching or learning activities. Classroom is found in educational institutions of all kinds, including public and private schools, home schools, corporations, and religious and humanitarian organizations. The classroom attempts to provide a safe space where learning can take place uninterrupted by other distractions.

**Environment**

Built environment, constructed surroundings that provide the setting for human activity, ranging from the large-scale civic surroundings to the personal places. Environment (biophysical), the physical and biological factors along with their chemical interactions that affect an organism.

**Classroom Environment**

Throughout the world, most teaching takes place in classrooms. These classrooms are typically inhabited by 20 or more students and a single adult, the teacher (Anderson, et. Al, 1989). The ratio of one teacher to 20 or more students results in natural imbalance between teaching and learning. When teacher teaches in classrooms, they must by necessity, direct a great deal of their teaching to groups of students. Even when they work with individual students, they must be aware of what other students in the group or class are going. What students learn from this predominantly group-oriented teaching, on the other hand depends to a large extent on the unique characteristics brought to classrooms by the individual students. The best predictor of what students know and can do at the end of some period of schooling is the knowledge and skills with which they entered that period of schooling. Classroom environment encompasses a broad range of educational concepts, including the physical setting, the psychological environment created through social contexts, and numerous instructional components related to teacher characteristics and behaviors.

**Academic Achievement**

Good's dictionary defines it as "Achievement test is a test designed to measure a persons knowledge, skills, understandings, etc., in a given field taught in school" According to Collin's Dictionary "A test designed to measure the effects that learning and teaching have on individuals is called an achievement test". Academic achievement may also refer to a person's strong performance in a given academic arena. Academic achievement is nothing but educational attainment, which refers to the gains, got by the pupils as a result of education.

**Population of the Study**

The populations of the present study are all the students studying in standard XI and XII in the higher secondary Schools in Tenkasi Educational District.

**Sample of the Study**

The investigator has selected 150 higher secondary students from 10 higher secondary schools from the population. For selecting the students, the investigation used random sampling method.

**Instrument and Statistical Tools**

The instrument used to measure the level of classroom climate as perceived by the students was an adaptation of the downloaded classroom climate questionnaire. For measuring academic achievement of higher secondary students, the investigator used the scores of them in all the subjects in quarterly examination. Pearson's r set at 0.05 level of significance was used for inferential statistics.

**Hypothesis**

There is no significant relationship between classroom environment and academic achievement of higher secondary students.

**Significance of the Study**

Education in India is recognized as an important investment in human capital. It contributes to socioeconomic development by providing people with skills, knowledge, capability and attitudes for productive work. As a result, a substantial proportion of the country's resources has been allocated to education. Since the benefits of education are perceived as pervasive, it is understandable why people talk

about education and not about classrooms because they expect that conditions can be arranged at the school level and that the effects of these can spread out through the whole system, the school and classes. Education is provided in the classroom. The classroom is the nucleus where other factors influencing the students' learning and their educational outcomes are found like classmates, teachers and textbooks. In fact, all the factors that contribute to educational outcomes exist in one way or another in the classroom. Classrooms can be viewed as places in which teachers, students and subject matters interact. It is intuitively plausible that the teacher is a key figure in the kinds of relationships that prevail in his or her classroom. It is also likely that the teacher's attitudes resulting from his or her life experience will have a noticeable effect on the kind of relationships, which this teacher creates, in his or her classroom. The strength of an education system must largely depend upon the quality of its teachers because teachers are the point of contact between the educational system and students. Perhaps the students have benefited from the learning environment that is comfortable and safe. The nature of the classroom environment greatly influences students' character development and intellectual readiness to learn. Classroom is the place where students see as their "home" at school. Students' well being also depends on the classroom, classmates, teachers, and the activities in the classrooms. Classroom environment encompasses a broad range of educational concepts, including the physical setting, the psychological environment created through social contexts, and numerous instructional components related to teacher characteristics and behaviors. The physical environment in the classrooms has continued to appear in contemporary studies as an influence on behavioral and academic outcomes. Overcrowded facilities, too many students in certain classes, and lack of teachers' assistants are three major issues cited as potentially creating problems due to increased stress levels of students and increased teacher-reported incidences of behavioral problems. These increased stress levels and behavior problems found in larger classrooms are frequently accompanied by lower levels of academic achievement. In this connection, this study provides a valuable reference for other schools to reflect upon the classroom environment as it affect the academic performance of students in higher secondary school at higher secondary level.

### Inferential Analysis

**H<sub>0</sub>: 1** There is no significant relationship between classroom environment and academic achievement of higher secondary students.

**Table – 1 Pearson Correlation Test Showing the Relationship between Classroom Environment and Academic Achievement of Higher Secondary Students**

Correlation	N	Calculated "r" value	Table "r" value	Remarks at 5% level of significance
Relationship between classroom environment and academic achievement of higher	150	0.19	0.17	S

(at 5% level of significant)

It is inferred from the above table that the calculated "r" value (0.19) is greater than the table value (0.17) for N (150) at 5% level of significance. Hence the null hypothesis is rejected. Thus there is significant relationship between classroom environment and academic achievement of higher secondary students.

### Interpretation

There is significant relationship between classroom environment and academic achievement of higher secondary students. Overcrowded facilities, too many students in certain classes, and lack of teachers' assistants are three major issues cited as potentially creating problems due to increased stress levels of students and increased teacher-reported incidences of behavioral problems. These increased stress levels and behavior problems found in larger classrooms are frequently accompanied by lower

levels of academic achievement. Beyond the physical arrangement of a classroom a psychological environment is also created, based on the interaction of key players in the classroom, namely students and teachers. Research in this area has varied greatly and proliferated during the early twenty-first century. Studies have been particularly concentrated on student class participation rates, teacher support, and communication of learning goals. Today all formal education takes place in the manmade environment of schools and classrooms. The buildings should thus be conducive to the teaching and learning process. Lack of proper infrastructure has been a major concern area for many years. Quality standards of schools in terms of infrastructure, often do not meet the parameters laid down in the Education Bill of the government.

## Conclusion

The research revealed that a significant positive correlation exists between classroom climate and academic achievement of higher secondary students. So the classroom environment plays a crucial role in keeping students engaged and allowing them to be successful within the classroom. Students experience the classroom as not just an intellectual space, but also as a social, emotional, and physical environment. Classrooms that subtly or indirectly exclude certain groups of students tend to be common from the students' perspectives. Instructors' attentiveness to the intellectual, social, emotional, and physical environments creates a classroom climate conducive to student engagement with the content and skills of the discipline. In terms of the intellectual environment, instructors provide content in an organized and engaging manner and give students motivating and challenging practice so that they are able to do authentic tasks in the discipline. From the emotional aspect of classroom climate, instructors create an encouraging atmosphere where students feel safe taking risks, receive support when events intrude on learning, and believe they can succeed if they put forth effort. And instructors foster approachable and supportive social interactions with students and among students so that learning is a collaborative and not competitive endeavor. With respect to the physical environment, instructors reduce and remove disruptions and barriers to learning so that all students can equally access course material.

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## RELATIONSHIP BETWEEN ADJUSTMENT AND EMOTIONAL MATURITY OF STUDENT TEACHERS

<sup>1</sup> Mr. A. Vences Cyril    <sup>2</sup> Dr. S. Prakash

### Abstract

*Adjustment and emotional maturity bare the two important traits that are required for a student teacher. The objective of the study was to find the relationship between home adjustment and emotional maturity of student teachers. The sample consists of 60 student teachers studying B. Ed. degree course in colleges of education, Dindigul district. Adjustment Inventory for college students (AICS) by Dr. A.K.P. Singh and Dr. R.P. Singh and Emotional Maturity Scale constructed and standardized by Yashvir Singh and Mahesh Bhargava (1990) were the tools used to collect the data. Mean, Standard deviation and t- test were used to analyze the data. The results revealed that there is a relationship between adjustment and emotional maturity of student teachers.*

**Key words:** Adjustment, Emotional maturity, Student teachers

### Introduction

Education plays a very important role in life of human beings. It provides them to develop and flourish their personality on various fields to life. By developing the personality they then are able to cope with every situation either pleasant or worse in life. In the process of education students hold central position. Mainly the responsibilities of social and national development lie on higher education by creating such stuff from its institution which provides their best services to the society and nation (Chauhan, 2002). Systematic emergence of the concept of "Adjustment" started with Darwin's theory of evolution (1859). In those days the concept was purely biological. In biology the term usually employed was adaptation. Man among the living beings has the highest capacities to adapt to new situation (Gupta & Singal, 1971).

### Significance of the Study

Every person is unique in his thinking, reasoning and responding to particular situation and attitude towards the worldly things. With the passage of time, the development in the area of science, technology and industry gave birth to a complex system of society. These developments have brought along with a number of problems in different dimensions of adjustment (Dandapani, 2000). The present trend in the educational practices emphasize the necessity of understanding each and every student. In order to understand the student at individual level, knowledge of their problems of adjustment is very important. The investigator feels that with the change in education system and to cope up with the demanding society, student teachers have to pass through various problems in relation to school, family, society and personal as well as achievement problems. Emotions do play a vital role in the life of an individual. To lead an effective life one is expected to have higher emotional maturity. It is also true that pupils' behavior is constantly influenced by the emotional maturity level that pupils possess. Especially, student teachers should have high emotional maturity in all their activities.

They must be emotionally adjusted, competent and sharp. So that they may understand the feelings of the learners. This adjustment and emotional maturity would create a congenial atmosphere among student teachers. Being a teacher this thought directs this researcher towards analyzing the relationship between adjustment and emotional maturity of student teachers.

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**Objectives**

1. To find out whether there is any significant difference in adjustment of student teachers with regard to type of family.
2. To find out whether there is any significant difference in adjustment of student teachers with regard to medium of instruction.
3. To find out whether there is any significant difference in emotional maturity of student teachers with regard to type of family.
4. To find out whether there is any significant difference in emotional maturity of student teachers with regard to medium of instruction.
5. To find out whether there is any significant relationship between adjustment and emotional maturity of student teachers.

**Hypothesis**

- H<sub>0</sub>1:** There is no significant difference between joint and nuclear family student teachers in their adjustment.
- H<sub>0</sub>2:** There is no significant difference between Tamil and English medium student teachers in their adjustment.
- H<sub>0</sub>3:** There is no significant difference between joint and nuclear family student teachers in their emotional maturity.
- H<sub>0</sub>4:** There is no significant difference between Tamil and English medium student teachers in their emotional maturity.
- H<sub>0</sub>5:** To find out whether there is any significant relationship between adjustment and emotional maturity of student teachers.

**Delimitations of the Study**

1. The study is limited to student teachers in Dindigul district only.
2. The investigator has proposed to choose only 60 student teachers as sample for the study.

**Background of the Study**

**Cyril & Antony (2015).** conducted a study on classroom management and emotional maturity of high school teachers. The study revealed that, there is significant difference between permanent and temporary of high school teachers in their emotional maturity and its dimensions, there is significant difference is found in their emotional stability and overall emotional maturity and there is significant relationship between classroom management and emotional maturity of high school teachers.

**Nehra, S. (2014).** conducted a study on relationship between adjustment and emotional maturity of IX class students. The study revealed that, the boys and girls studying in secondary classes were not significantly differing in their adjustment and emotional maturity, there was no significant correlation among adjustment and emotional maturity of students studying in secondary classes and there is no direct significant correlation among adjustment and emotional maturity of students studying in secondary classes. But independently both factors affect the academic performance.

**Sharma, B. (2012).** conducted a study on adjustment and emotional maturity among first year college students. The study found significant differences in the adjustment processes of first and final year students as far as social, emotional and educational areas are concerned while no significant difference was observed in Home and Health areas and the difference between first year and final year students on emotional maturity. Results suggested that first year students are more emotionally immature on all the variables of emotional maturity.

**Alok, G., & Sweta, S. (2010).** founded that there are positive and significant correlation between Adjustment, sense of responsibility and scientific attitude among adolescence. The study also draws difference among adolescents in adjustment, sense of responsibility and scientific attitude with respect to gender, education institute and level of study.

### Method Used

The investigator has adopted survey method in this study for finding relationship between adjustment and emotional maturity of student teachers.

### Population and Sample

The population of the present study consists of student teachers, those who are studying in B.Ed., colleges of Dindigul district, Tamilnadu. The investigator has used simple random sampling technique for selecting the sample from the population. The sample consists of 60 student teachers. Among them 22 were male and 38 were female student teachers.

### Tools Used

This study aims to evaluate the relationship between adjustment and emotional maturity of student teachers. The investigator has used the standardized tools, Adjustment Inventory for college students (AICS) by Dr. A.K.P. Singh and Dr. R.P. Singh and Emotional Maturity Scale constructed and standardized by Yashvir Singh and Mahesh Bhargava (1990).

### Statistics Techniques Used

Mean, SD and 't' test was used in this study.

### Analysis of Data

**Table 1 Difference between Joint and Nuclear Family Student Teachers in their Adjustment**

Dimensions	Type of family	N	Mean	S.D	Calculated 't' value	Remarks
Home Adjustment	Nuclear	29	22.76	2.668	1.962	S
	Joint	31	22.03	3.157		
Health Adjustment	Nuclear	29	23.00	3.196	0.160	NS
	Joint	31	23.55	3.811		
Social Adjustment	Nuclear	29	25.79	2.583	2.001	S
	Joint	31	24.29	3.217		
Emotional Adjustment	Nuclear	29	41.83	3.837	0.119	NS
	Joint	31	41.81	4.615		
Educational Adjustment	Nuclear	29	30.03	3.681	1.994	S
	Joint	31	29.86	4.593		
Overall Adjustment	Nuclear	29	143.24	11.154	1.987	S
	Joint	31	141.71	13.617		

*(At 5% level of significance the table value of 't' is 1.67, S – Significant, NS-Not Significant)*

**Table 2 Difference between Tamil and English Medium Student Teachers in Their Adjustment**

Dimensions	Medium of Instruction	N	Mean	S.D	Calculated 't' value	Remarks
Home Adjustment	Tamil	40	22.22	2.904	.581	NS
	English	20	22.70	3.028		
Health Adjustment	Tamil	40	23.45	3.194	.475	NS
	English	20	22.95	4.136		
Social Adjustment	Tamil	40	24.85	2.992	.600	NS
	English	20	25.35	3.066		
Emotional Adjustment	Tamil	40	41.92	4.190	.275	NS
	English	20	41.60	4.382		
Educational Adjustment	Tamil	40	30.60	4.229	1.824	S
	English	20	28.65	3.731		
Overall Adjustment	Tamil	40	143.05	12.366	.522	NS
	English	20	141.25	12.719		

*(At 5% level of significance the table value of 't' is 1.67, S – Significant, NS-Not Significant)*

**Table 3 Difference between Joint and Nuclear Family Student Teachers in Their Emotional Maturity**

Dimensions	Type of family	N	Mean	S.D	Calculated 't' value	Remarks
Emotional Stability	Nuclear	29	40.83	7.112	.923	NS
	Joint	31	38.90	8.986		
Emotional Progression	Nuclear	29	31.28	7.634	1.71	S
	Joint	31	28.48	8.812		
Social Adjustment	Nuclear	29	35.55	5.248	1.96	S
	Joint	31	33.29	8.375		
Personality Integration	Nuclear	29	32.48	7.721	.876	NS
	Joint	31	30.61	8.804		
Independence	Nuclear	29	23.69	4.699	.707	NS
	Joint	31	24.55	4.703		
<b>Overall Emotional Maturity</b>	Nuclear	29	163.83	27.320	1.70	S
	Joint	31	155.84	34.378		

*(At 5% level of significance the table value of 't' is 1.67, S – Significant, NS-Not Significant)*

**Table 4 Difference between Tamil and English Medium Student Teachers in Their Emotional Maturity**

Dimensions	Medium of Instruction	N	Mean	S.D	Calculated 't' value	Remarks
Emotional Stability	Tamil	40	38.78	8.859	1.68	S
	English	20	41.95	6.065		
Emotional Progression	Tamil	40	29.60	8.246	.300	NS
	English	20	30.30	8.646		
Social Adjustment	Tamil	40	33.98	7.918	.726	NS
	English	20	35.20	5.064		
Personality Integration	Tamil	40	30.68	9.045	1.751	S
	English	20	33.20	6.371		
Independence	Tamil	40	24.30	5.065	0.422	NS
	English	20	23.80	3.901		
<b>Overall Emotional Maturity</b>	Tamil	40	157.32	34.152	0.932	NS
	English	20	164.45	24.219		

*(At 5% level of significance the table value of 't' is 1.67, S – Significant, NS-Not Significant)*

**Table 5 Relationship between Adjustment and Emotional Maturity of Student Teachers**

N	ΣX	ΣY	Σ X <sup>2</sup>	ΣY <sup>2</sup>	ΣXY	Calculated 'γ' value	Remarks
60	8548	9628	73068304	92698384	82300144	0.324	S

*(At 5% level of significance, for (58 df) table value of 'γ' is 0.273, S – Significant)*

### Results and Discussion

- The table 1 reveals that there is no significant difference between nuclear and joint family student teachers in their health adjustment and emotional adjustment. But there is significant difference found in their home adjustment, social adjustment, educational adjustment and overall adjustment. While comparing the mean scores, the nuclear family members are better than the joint family members. This may be due to the fact that the nuclear family student teachers as they live in isolated condition are able to cope up with different situations that they come across and possess such adjustment qualities.

- The table 2 reveals that there is no significant difference between Tamil and English medium student teachers in their health adjustment, home adjustment, social adjustment, emotional adjustment and overall adjustment. But there is significant difference found in their educational adjustment. While comparing the mean scores, the Tamil medium student teachers are better than the English medium student teachers. This may be due to the fact that the Tamil medium student teachers are open for learning and always feel that they have a scope for improvement especially in learning and speaking English language.
- The table 3 reveals that there is no significant difference between nuclear and joint family student teachers in their emotional stability, personality integration and independence. But there is significant difference found in their emotional progression, social adjustment and overall emotional maturity. While comparing the mean scores, the nuclear family members are better than the joint family members. This may be due to the fact that the nuclear family student teachers are independent from their direct relations and possess the strong ability of moving with new members of the society without any hindrance in their minds.
- The table 4 reveals that there is no significant difference between Tamil and English medium student teachers in their emotional progression, social adjustment, independence and overall emotional maturity. But there is significant difference found in their emotional stability and personality integration. While comparing the mean scores, the English medium student teachers are better than the Tamil medium student teachers. This may be due to the fact that the English medium student teachers are able to face others with confidence as they pose themselves good in English language proficiency.
- The table 5 reveals that there is significant relationship between adjustment and emotional maturity of student teachers. This may be due to the fact that the student teachers who have balanced emotions naturally will possess good adjustment qualities.

### Conclusion

Based on the analysis of the data it is clear that there is a positive relationship between emotional maturity and adjustment of student teachers. The enhancement in adjustment & emotional maturity of the student teachers can bring improvement in the teaching-learning process. It is pertinent to say that if teachers of the society want to enhance the teaching profession, then they should think to improve their adjustment & emotional maturity through various ways in and outside the school campus.

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