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EDITORIAL

"Research is creating new knowledge"

Neil Armstrong

Research in the knowledge era recognises that individuals have knowledge, skills and capabilities that they can contribute significantly to research. Diversity in ideologies, ambiguity, multiple roles, uncertainty, contradictions and creativity are the characteristics of research in the knowledge era. Research in this intangible era identifies a move beyond training to "capacity building" Moving to holistic activities that have more meaning and purpose, positive appreciative mindsets and approaches, creating balance and integration, with a seamless connection between data, review of related literature and analysis of data are indispensable to build capacity in oneself

*Researchers felt that the concept of **wisdom** was central to all aspects of research evolution. Wisdom includes knowledge about the limits of knowledge and the uncertainties. Wisdom is superior level of knowledge representing the amazing scope, depth and balance. Developing research wisdom includes four levels. The first level is data collection which includes facts and figures. The second level is gathering of information through data. The information organised is given a framework and this is the third level and the fourth level is the wisdom level. Wisdom is proper use of knowledge.*

*The proper use of knowledge is applied in a way that takes into account all its pertinent relationships and is connected with the universal laws. Here are a few researchers who have contributed research wisdom through data collection. **Dr. M. Manivannan and T.V.Vengkateswaran** in their study advocated that infrastructure facility, faculty appointment and development, good governance, parents involvement and innovative approaches in teaching learning process should be set in high standard to provide quality education. **Dr. A.R. Vasanthi** emphasises the importance of qualifying examinations and its relationship with attitude towards teaching profession. **S. Arockia Elizabeth Josephine and Dr. Rita Rani Mandal** found that there is significant difference in stress coping strategies owing to differences in gender, types of management and types of family and there is a significant association between stress coping strategies and emotional stability among high school students. **Dr. S.K. Pannerselvam** in his study claims that there is a significant relationship*

*between study habits and academic achievement. Finally **Beulah Johns** findings revealed that there is significant relation between scientific attitude and awareness of environmental sustainability in urban teacher education programme.*

To all the contributors to this issue we express our sincere gratitude. We welcome Research articles on Philosophy of education, learning theory and technology and the recent trends in teacher education. Quality articles based on firsthand experience, reflection and reading will be considered for publication.

Dr. A. Alma Juliet Pamela

Associate Editor.

Research Article

Attitude of Teachers towards Application of Principles of Total Quality Management in Higher Secondary Schools

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ABSTRACT

Total Quality Management (TQM) takes the main role to establish the quality in educational system. It was found that most of the higher secondary schools in Namakkal District, Tamil Nadu, India did not have any concrete mechanism to assess and ensure their quality. The quality of schools was determined through examination results only i.e., outcome based assessment. Of 963 Teachers of the schools as population of the study, 96 teachers from Government, Government-aided and Self-financing schools were selected as sample through "Random Sampling" technique. The tool Teacher's Institutional Attitude Scale" (TIAS) was constructed and standardised. Survey method was followed. To analyse the data, the statistical techniques such as mean, standard deviation and t- test were used. The result showed that there was significant difference between teachers of male and female; rural and urban; govt aided and self-financing schools; govt and self-financing schools; and 0-5 years and >10 years' experience on TQM. There was no significant difference between teachers of govt and govt-aided schools; 0-5 years and 6-10 years' experience; and 6-10 years >10 years' experience with regard to attitude on TQM. The present study recommends that teachers be used for planning and administration in schools; internal quality assurance cell be formed in schools; and national assessment and accreditation body be established. In this way, the present study got importance to analyse the application of principles of TQM in higher secondary schools at Namakkal district, Tamil Nadu.

Keywords: Total Quality Management (TQM), teacher attitudes, higher secondary schools, quality improvement, educational management, continuous improvement

INTRODUCTION

Education brings out desirable change in the life of human beings. It develops over-all personality of an individual to accommodate himself/herself in the environment. Education meets the ever changing needs of human, for example, human beings have to stand on Knowledge Society in this 21st Century. Education is also considered as panacea for all evils of the society. Such education_ is imparted through various levels from pre-primary to research level. Schools are under different management. School education is given the top most priority by any government. The Indian School Education System has reached somewhat satisfactory levels of achievements on access and enrolment. The quantitative expansion in terms of number of schools and strength of students has been witnessed whereas the quality is not ensured. In recent years, quality has been one of the major concerns of education across the globe at all levels of education. In India the National Curriculum Framework 2005, has reiterated the need for quality improvement of school education at all levels. The process of assessment and accreditation is initiated by some of the States. The Bharathidasan School of Linkage Project of Bharathidasan University, Tiruchirappalli in Tamil Nadu; Karnataka State Quality Assurance Organisation in Karnataka; Maharashtra School Quality Control Organisation in Maharashtra etc., are working on the quality assessment of schools based on their own norms. These norms are yet to be familiar and acceptable for large number of individuals and institutions.

Total Quality Management (TQM) in each school checks out the status and enhance of quality in education based on standardised norms. It was found that most of the higher secondary schools in Namakkal District, Tamil Nadu, India did not have any concrete mechanism to assess and ensure their quality. The quality of schools was determined through examination results only i.e., outcome based assessment. The processes of quality implementation were not very well checked in schools. In TQM, the process takes the main role to establish quality service. In this way, the present study gets importance to assess the application of principles of TQM in higher secondary schools of Namakkal district, Tamil Nadu.

OBJECTIVES OF THE STUDY

The following were the objectives of the study:

1. To study the application of principles of total quality management in higher secondary schools.
2. To investigate the interaction effect of variable - gender of teachers on total quality management.
3. To find out the interaction effect of variable - locality of school of teachers on total quality management.
4. To analyse the interaction effect of variables such as nature of schools, and year of experience of teachers of higher secondary schools on total quality management.

HYPOTHESES

1. Ho1: There is no significant difference between male and female teachers of schools with regard to their attitude on total quality management in higher secondary level.
2. Ho2: There is no significant difference between teachers of rural schools and urban schools with regard to their attitude on total quality management at higher secondary level.
3. Ho3: There is no significant difference between teachers of government schools and government-aided schools with regard to their attitude on total quality management at higher secondary level.
4. Ho4: There is no significant difference between teachers of government-aided schools and self-financing schools with regard to their attitude on total quality management at higher secondary level.
5. Ho5: There is no significant difference between teachers of government schools and self-financing schools with regard to their attitude on total quality management at higher secondary level.
6. Ho6: There is no significant difference between teachers of schools having 0-5 years of experience and 6-10 years of experience with regard to their attitude on total quality management at higher secondary level.

7. Ho1: There is no significant difference between teachers of schools having 6-10 years of experience and >10 years of experience with regard to their attitude on total quality management at higher secondary school.
8. Ho8: There is no significant difference between teachers of schools having 0-5 years of experience and >10 years of experience with regard to their attitude on total quality management at higher secondary school.

POPULATION AND SAMPLE

A total of 963 Teachers of the schools were the population of the study. Out of 963, 96 teachers from Government, Government-aided and Self-financing schools were selected as sample through "Random Sampling" technique.

VARIABLES AND RESEARCH DESIGN

In the present study, the investigators used gender, locality of school, nature of school and experience as the independent variable.

An exploratory research approach similar to that of a survey was followed for the present study.

TOOL AND DATA COLLECTION

The investigators constructed and standardised the tool "Teacher's Institutional Attitude Scale" (TIAS) including 30 statements. Reliability was found through Test-Retest and Split-half Methods having correlation co-efficient of 0.897 and 0.815 respectively which showed the tool was highly reliable.

The investigators visited in-person higher secondary schools taken for the study in Namakkal district and collected the data from the Teachers of schools by applying the tool namely, "Teacher's Institutional Attitude Scale" (TIAS).

ANALYSES OF THE DATA

Based on the variables, the data were analysed by using statistics such as mean, SD and 't' test. The analyses of the data were tabulated.

Variable	Number of Teachers	Mean	Standard Deviation	't' value	Result
Male	48	128	3.21	7.53	Significance at 0.01 level
Female	48	121	5.6		
Rural	48	106	6.7	6.78	Significance at 0.01 level
Urban	48	114	4.65		
Govt.	32	127	3.5	2.08	No Significance at 0.01 level
Govt.Aided	32	125	4.23		
Govt.Aided	32	125	4.23	8.1	Significance at 0.01 level
Govt.	32	116	4.65		
Self-financing	32	127	3.5	10.7	Significance at 0.01 level
Self- financing	32	116	4.65		
0-5 yrs	32	128	5.16	1.85	No Significance at 0.01 level
6-10 yrs	32	130	3.26		
6-10 yrs	32	130	3.26	2.5	No Significance at 0.01 level
>10 yrs	32	132	3.15		
0-5 yrs	32	128	5.16	6.5	Significance at 0.01 level
>10 yrs	32	135	3.15		

INTERPRETATION OF RESULTS

The results of the above table were interpreted as follows:

1. Regarding gender comparison, since the calculated 't' value 7.53 is greater than the table value 2.58 at 0.01 level, it is interpreted that there is significant difference between the mean scores of male and female on Total Quality Management (TQM). Therefore, the hypothesis Ho1 is rejected. The result reveals that mean score of male teachers is comparatively higher than that of female teachers with regard to their attitude towards TQM.

2. Regarding locality comparison, since the calculated 't' value 6.78 is greater than the table value 2.58 at 0.01 level, it is interpreted that there is significant difference between the mean scores of rural and urban teachers on TQM. Therefore, the hypothesis Ho2 is rejected. The result reveals that mean score of teachers of urban area is comparatively higher than that of teachers of rural area with regard to their attitude towards TQM.
3. Regarding nature of schools comparison, since the calculated 't' value 2.08 is lesser than the table value at 0.01 level, it is interpreted that there is no significant difference between the mean scores of teachers of government and government-aided schools on TQM. Therefore, the hypothesis Ho3 is tenable. The result reveals that mean score of teachers of government schools is comparatively higher than that of teachers of government-aided schools with regard to their attitude towards TQM.
4. Regarding nature of schools comparison, since the calculated 't' value 8.1 is greater than the table value at 0.01 level, it is interpreted that there is significant difference between the mean scores of teachers of government-aided and self-financing schools on TQM. Therefore, the hypothesis Ho4 is rejected. The result reveals that mean score of teachers of government-aided schools is comparatively higher than that of teachers of self-financing schools with regard to their attitude towards TQM.
5. Regarding nature of schools comparison, since the calculated 't' value 10.7 is greater than the table value at 0.01 level, it is interpreted that there is significant difference between the mean scores of teachers of government schools and self-financing schools on TQM. Therefore, the hypothesis Ho5 is rejected. The result reveals that mean score of teachers of government schools is comparatively higher than that of teachers of self-financing schools with regard to their attitude towards TQM.
6. Regarding experience comparison, since the calculated 't' value 1.85 is lesser than the table value at 0.01 level, it is interpreted that there is no significant difference between the mean scores of teachers having 0-5 years of experience and 6-10 years of experience on TQM. Therefore, the hypothesis Ho6 is tenable. The result reveals that mean score of teachers having 6-10 years of experience is comparatively higher than that of teachers of 0-5 years of experience with regard to their attitude towards TQM.
7. Regarding experience comparison, since the calculated 't' value 2.5 is lesser than the table value at 0.01 level, it is interpreted that there is no significant difference between

the mean scores of teachers having 6-10 years of experience and >10 years of experience on TQM. Therefore, the hypothesis Ho1 is tenable. The result reveals that mean score of teachers having >10 years of experience is comparatively higher than that of teachers of 6-10 years of experience with regard to their attitude towards TQM.

8. Regarding experience comparison, since the calculated 't' value 6.5 is greater than the table value at 0.01 level, it is interpreted that there is significant difference between the mean scores of teachers having 0-5 years of experience and >10 years of experience on TQM. Therefore, the hypothesis Ho8 is rejected. The result reveals that mean score of teachers having >10 years of experience is comparatively higher than that of teachers of 0-5 years of experience with regard to their attitude towards TQM.

RECOMMENDATIONS

The following are some of the main recommendations of the present study:

1. All teachers should be involved in planning and administration of academic works and infrastructure development.
2. Vacancies of teachers should be filled up as soon as the vacancy arises. They should be appointed on merit basis.
3. Teachers are to be given in-service training for incorporating latest technologies in teaching-learning process.
4. All schools should have internal quality assurance cell.
5. All schools should be subjected to involve in periodical assessment and accreditation by National assessment bodies like ISO.
6. Innovative teaching strategies are to be evolved for the best practice at schools.
7. Infrastructure facilities are to be improved and set at the national/international standard.

CONCLUSION

Total quality management in higher secondary schools should be given priority to maintain and develop standard of education. Teachers play a vital role in bringing out students in a better way in education which will help them to become contributing citizens. The present study strongly advocates that infrastructure, faculty appointment and development, good governance, parents' involvement and innovative approaches in teaching-learning process

should be set in high standard to provide quality education. Similar studies of this nature are to be encouraged by the researchers for fulfilling the objectives of school education.

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Research Article

**Attitude of B.Ed Trainees towards TET Examination and Its Relationship
with Attitude towards Teaching Profession
And Academic Achievement**

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ABSTRACT

The present study focused on attitude of B.Ed. trainees towards TET examination and its relationship with attitude towards teaching profession and academic achievement. The investigator used the Descriptive survey method for the study. The sample consisted of 400 B.Ed. trainees of various B.Ed. institutions in Tamil Nadu especially Chennai and Kanchipuram District. Institutions which are affiliated to TNTEU. Simple random sampling techniques were used for the selection of sample. The investigator adopted the tool namely; attitude towards TET examination, constructed and validated by the investigator, for attitude towards teaching profession the researcher adopted a standardized tool was constructed and standardized by V.V. Katti and C.S. Bannur (1977), for academic achievement researcher collect the B.Ed. trainees half yearly examination marks (first semester marks for autonomous students) are taken into account. The scores are converted to the percentage in order to do statistical calculation. To assess the B.Ed. trainees attitude towards TET examinations, attitude towards teaching profession and academic achievement, the collected data were analysed by applying descriptive and inferential statistical techniques. The major findings of the study revealed there is significant difference between the mean scores of B.Ed. trainees of autonomous and non-autonomous colleges in the attitude towards TET examination.

Keywords: TET examination, teaching profession attitude, academic achievement, teacher education, professional competency, and educational assessment

INTRODUCTION

In accordance with the provisions of sub-section (1) of section 23 of the RTE Act, the National Council for Teacher Education (NCTE) had vide Notification dated 23 August 2010 and 29 July 2011 laid down the minimum qualification for a person to be eligible for appointment as a teacher in classes I to VIII. It had been inter alia provided that one of the essential qualifications for a person to be eligible for appointment as a teacher in any of the schools referred to in clause (n) of section 2 of the RTE Act is that he/she should pass the Teacher Eligibility Test (TET) which will be conducted by the appropriate Government in accordance with the Guidelines framed by the NCTE. The examination is tough with qualification rates of 1% to 14% in the exams held so far. CTET 2014. Approximately 8.26 lac applicants wrote test. The rationale for including the TET as a minimum qualification for a person to be eligible for appointment as a teacher is as under. It would bring national standards and benchmark of teacher quality in the recruitment process.

NEED AND PURPOSE OF THE STUDY

The effectiveness of education depends upon quantity and quality of teachers working in an institution. The quality of teacher's in turn depends upon the quality of training received by them in different training institutions. Thus the study shows that the teacher training programs should not only aim at improving the knowledge and teaching competency of a teacher but also to inculcate in them desirable teacher like qualities. We know the teaching profession is one of the most important art of guiding students through a variety of selected teaching methods and methodologies, it should therefore, attract the brightest minds, finest personality and most committed young people.

Teaching is the process of changing the behaviour and developing desirable skills in learner for his all-round development. The process of teaching to be conducted effectively depends upon effective teachers. In present time, in India perspective there are numerous teachers training institutions. But on the quality parameter, it is need of time that the status of teacher trainees should be studied in the perspective of certain role playing parameters. So presently this research paper is focused on the study of attitude of B.Ed. trainees towards TET examination and its relationship with attitude towards teaching profession and academic achievement.

OBJECTIVES OF THE STUDY

Main focus of this study is to examine the of B.Ed. trainees towards TET examination.. Then it is intended to study the relationship among the attitude towards TET examination, the attitude towards teaching profession and academic achievement of B.Ed. trainees.

1. To find the difference between the various subgroups of the sample in their attitude towards TET examination.
2. To find the difference between the various subgroups of the sample in their attitude towards teaching profession.
3. To find the difference between the various subgroups of the sample in their academic achievement.

HYPOTHESES

H5: There is no significant difference among the mean scores of various subgroups of the sample with respect to the independent variable attitude of B.Ed. trainees towards TET examination.

H6: There is no significant difference among the mean scores of various subgroups of the sample with respect to the dependent variable attitude of B.Ed. trainees towards teaching profession.

H7: There is no significant difference among the mean scores of various subgroups of the sample with respect to the dependent variable academic achievement.

LIMITATIONS

This study is carried out in B.Ed. colleges situated in Chennai and Kanchipuram districts only.

It is concerned only with the variables attitude towards TET exam, attitude towards teaching profession and academic achievement.

It is conducted to the sample size 400 only.

It limited its boundaries by the exam TET- Paper- only.

METHODOLOGY ADOPTED

Descriptive survey method is employed in this study.

STATISTICAL TECHNIQUES USED

In this study, following statistical techniques were used to arrive the result.

Descriptive analysis

Inferential analysis

- t-test
- One way ANOVA

ANALYSIS OF THE DATA

Table-1

**Over View Of Mean Scores Of B.Ed Trainees In Attitude Towards TET Examination
With Respect To The Sub-groups**

S.No.	Background Variables	Sub group	N	Mean	SD	t	Remark
1.	Gender	Male	143	68.13	8.09	0.6	NS
		Female	257	67.67	6.95		
2.	Age	Below 25 years	310	67.81	7.40	0.12	NS
		Above 25 years	90	67.92	7.30		
3	Educational Qualification	Under graduate	272	67.36	7.39	1.82	NS
		Post graduate	128	68.80	7.28		
4.	Status of the Institution	Autonomous	178	69.65	7.74	4.5**	S
		Non-Autonomous	222	66.37	6.73		

From the above table - 1 the mean scores obtained by the B.Ed. trainees of autonomous college performed the highest level in the attitude towards TET examination scale. The students of autonomous college are meritorious and they got into the B.Ed. courses through the single window system which is purely on the basis of merit.

Table-1
Over View Of Mean Scores Of B.Ed Trainees In Attitude Towards TET Examination
With Respect To The Sub-groups

S.No.	Background Variables	Sub group	N	F Value	Remark
1	Types of Institution	Government	97	13.18**	S
		Govt. Aided	82		
		Private	221		
2	Types of Institution	Co-Education	280	13.44**	S
		Men only	60		
		Women only	60		
3	Father's Educational Qualification	College level	61	0.1352	NS
		School level	308		
		Illiterate	31		
4	Mother's Educational Qualification	School level	30	1.41	NS
		College level	313		
		Illiterate	59		

The "F" value of the various sub-groups shows that they are significant for not only for government. Government aided and private college but also for co-education, only men's and only women's college. Further, it is not significant with respect to birth order, father's educational qualification and mother's educational qualification.

It is crystal clear that the B.Ed. trainees who are undergoing training in government colleges are definitely have the high attitude on TET Exams rather than government aided and private college B.Ed. trainees. The students hailed from the meritorious background have the attention their future to go through the exams. This makes the large variance in the attitude towards TET exam both in the case of government, government aided and private 8:nd co-education, only men's and only women's college B.Ed. trainees.

FINDINGS

- ❖ There is significant difference between the mean scores of B.Ed. trainees of autonomous and non-autonomous colleges in the attitude towards TET examination.

- ❖ The students of autonomous college are meritorious and they got into the B.Ed. course through the single window system which is purely on the basis of merit.

EDUCATIONAL IMPLICATIONS

- ❖ Teaching is the profession to serve the nation. So graduates with very good subject knowledge and teaching interest should be encouraged to opt teaching as the career.
- ❖ Integrated course can be providing to the aspirants in order to enrich the training.
- ❖ As TET is an eligible exam, it should be modified with the criteria of testing the teaching competency in real classroom situation.
- ❖ Model TET exams in university level also can be conducted.
- ❖ In B.Ed. curriculum only the methodology is being taught. So one year duration of the course forms the gap in subjects. It can be avoided by testing the subject knowledge of the trainees.
- ❖ The students should be motivated to aspire in teaching profession form the school stage itself.

CONCLUSION

This study emphasise the importance of the qualifying examinations and the criteria of the teaching profession. What the teacher is is more important than what he teaches. So the characteristics of a teacher leave the impression in the society for the next generations. Such a powerful field should be carried by quality teachers to light the nation. Thus the qualifying exams like TET should be enriched so that the fruitful outcomes takeover the pillars of the teaching field.

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Research Article

A Study on Stress Coping Strategies and Emotional Stability among High School Students

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ABSTRACT

Stress is a typical physical response to events that make us to feel threatened or upset our balance in some way. Managing stress is all about taking charge: taking charge of our thoughts, emotions, environment, and the way we deal with problems. We can reduce stress in life by nurturing our life. The present study is a study on stress coping strategies and emotional stability among high school students of Chennai District. The research was of survey type, which consists of purposive sampling of 200 high school students of Chennai City. The researcher used self-made questionnaire for Stress coping strategies and the standardized tool for Emotional stability (Goldberg, 1999) were administered to the sample selected. The interpretation of data was done with the statistical methods mean, standard deviation, t- test and Chi- Square. It was founded that, there is significant association between Stress Coping Strategies and emotional stability among high school students.

Keywords: stress coping strategies, emotional stability, high school students, mental health, academic performance, adolescent behaviour, and student wellbeing

INTRODUCTION

Every person encounters stress, understood as the nonspecific response of the body to a demand made upon it. The variance in the ability to handle stress can be attributed to stress tolerance. Stress tolerance can be affected by a number of things, including genetics, life style habits, and coping strategies.

The method of coping with stressful events depends on the circumstances, childhood experiences, history of learning and personality dispositions (Bolger, 1990; Suls, 1999). Stress coping strategies refer to the behaviours and the ways of thinking that people deal with stressful

events, which most of them associated with negative emotions. In fact, coping behaviour is one of the major determinates of individual differences in psychological stress responses (Lazarus & Folkman, 1984, and Aldwin, 1994) .Coping responses are effortful attempts to manage stress. The act of coping can exhaust psychological recourses needed for effective coping.

STRESS COPING STRATEGIES

Stress is the tension or pressure we feel in our bodies as we respond to everyday events or events that make us feel uncomfortable. Stress is a natural part of living. It can be positive and motivating. But it can also produce an uneasy feeling. We have problems when we have too much stress (we feel tense) or too little (we feel bored and unmotivated).

When strong feelings come up, we all have ways we try to cope with them. Some of our approaches, or strategies, are successful; others are not.

Have the following terms:

- **Positive coping strategy:** This is a strategy that enables to restore emotional balance; feel better about our self; is respectful of others, and property; and helps to solve the problem.
- **Negative coping strategy.** This is a strategy that does not restore emotional balance; may be harmful to our self, others, or property; does not solve the problem, and may create additional problems.
- **Neutral coping strategy.** This is a strategy that is neither positive nor negative, but used to excess, could be harmful.
- **Time-out strategy.** This is a strategy that helps you to calm down and restore emotional balance. It is only temporary and must be used with another positive strategy in order to solve the problem.

Adolescent school students would not have enough experiences to deal with stressful events. Educational and social status may influence their reactions to stressors. Transferring from childhood to adulthood can press young people and make them anxious, depressed or aggressive. Childhood experiences and life events determine and lead our coping behaviours in adulthood. Hence the increased level of perceived stress is associated with accumulative stress; Coping might be a solution to overcome increased perceived stress.

IMPORTANCE OF COPING SKILLS

- All students should be taught coping skills and they should regularly be modelled for all students.
- When a student frequently has melt downs, falls apart, cries, experiences anxiety, has issues with friends.
- When students seem to have trouble handling criticism, failure, disappointment, conflict, decision-making, etc
- When students have trouble appropriately expressing emotions, like sadness, disappointment, frustration, happiness, excitement, etc
- When we have to frequently stop to console, encourage, or settle children down.
- Improves self-confidence and self-esteem
- Improves students' independence
- Helps students to be more assertive
- Decreases the time it takes to deal with students' crises, issues, meltdowns, etc
- Provides students a good life long skills
- Helps to empower students
- Improves student problem solving behaviours

EMOTIONAL STABILITY

Emotional Stability refers to one's ability to adapt to stressful situations or crises. More stable people are able to "roll with the punches" and adapt to adversity without lasting difficulties; less stable people have a harder time with stress and life changes, both major and minor. It's been found that those who deal with minor stresses more easily can also manage major crises with greater ease, so resilience emotional stability has its benefits for daily life as well as for the rare major catastrophe.

NEED FOR THE STUDY

Rates among young people have been increasing to such an extent that they are now the group at highest risk in a third of countries. Suicide ranks as the second cause of death worldwide among 15-19 year olds, with at least one lakh adolescents dying by suicide every year. And also, emotionally unstable, impulsive adolescents relied more on emotion-focus_coping tactics such as venting, avoidance or distraction, and they showed more frequent signs of aggression. In such condition empowering with coping skills can help adolescents to learn and

practice problem- solving skills and develop social skills. Help them understand that they can cope in different ways and develop ways to see problems and situations in a different light. Help them learn and practice skills that will allow them to participate in and enjoy new activities.

REVIEW OF RELATED LITERATURE

Khan et al. (2005) conducted a study on coping strategies among male and female teachers with high and low job strain. The results of the present study indicate that both male and female teachers used the same strategies to cope with job strain. Significant difference was not found to exist between the male and female teachers on different types of coping strategies except use of humour. Teachers have adopted a range of coping strategies most tend to be functional or active and some are dysfunctional or passive (i.e. self-distraction and use of humour).

Nasir Mohammad Bhati (2014), conducted a study on Emotional Stability and Depression in Orphan Secondary School Students. The aim of the present study was to find out the mental health status among orphan secondary school students in comparison with non orphan secondary school students of Kashmir valley. The sample of the present study consists of 210 secondary school students (131 Orphan) and (79 Non orphan) taken from different schools and orphanages. The age of the sample group ranges from 3 to 17 years with mean age of 15 years. Purposive sampling

technique was used for research purpose. For assessment of Emotional stability among orphan and non-orphan adolescents, mental health scale developed by Alpana Sen Gupta and Arnn Kumar Singh (1983) was used and; for depression Becks Depression Inventory was used. For studying the difference between the group's t-test was used. For assessing levels of Emotional security and Depression in sample groups, quartiles were used. Result findings suggest significant differences in Emotional stability and Depressive levels between the two groups. Orphans were found at the lower side of Emotional stability and higher levels of depression as compared to their counterpart non-orphan secondary school students.

Osborne. et.al, (2009) conducted a study on examination of personality, emotional intelligence, coping, gender and subjective well-being with perceived stress (trait and state) in undergraduate students. This multivariate study aimed to further understand student stress. Associations between personality, emotional intelligence, coping and subjective well-being with perceived stress (trait and state) were examined in 238 undergraduate students, using self-

report measures. Gender differences in these variables were also investigated. The results showed that students low in emotional stability, extraversion, emotional intelligence, subjective well-being and those with a tendency to use emotion-focused coping are at risk of greater perceived stress. Higher-order emotional intelligence/coping associations were identified, which in turn had an influence on perceived stress.

OBJECTIVES

- ❖ To explore the difference if any in Stress Coping Strategies of high school students with respect to some selected personal variables.
- ❖ To study the association if any between Stress Coping Strategies and emotional stability and with respect to the selected personal variables.

HYPOTHESIS:

- ❖ There is no significant difference in Stress Coping Strategies of high school students owing to differences in terms of the variables viz., gender, Type of management and Type of family.
- ❖ There is no significant association between Stress Coping Strategies and emotional stability among high school students.

METHODOLOGY

The identified problem is studied by following the survey method of research.

POPULATION & SAMPLE

The sample constituted 200 High school students in the schools of Chennai District in Tamilnadu were taken with due representation given to the variables viz., gender, Type of management and Type of family.

TOOLS USED

For the present study the following tool was employed to collect the data.

- i. **Stress coping strategies** : Constructed by Investigator
- ii. **Emotional stability** : Emotional Stability (Goldberg, 1999)

STATISTICAL TECHNIQUES

In this study the collected data were computing and analyzed by using appropriate statistical technique such as Mean, standard Deviation, 't' - test and Chi-square test.

ANALYSIS OF DATA AND INTERPRETATION

Hypothesis 1: There is no significant difference in Stress Coping Strategies of high school students owing to differences in terms of the variables viz., gender, Type of management and Type of family.

Table: 1

T - Ratios for Difference in Stress Coping Strategies owing to Differences in Gender, Type of management and Type of family

Variables	Sub category	N	Mean	SD	DF	tValue	Level of Sig.
Gender	Male	76	47.32	7.805	198	1.19	NS
	Female	124	48.52	6.28			
Type of management	Government	40	47.70	8.086	198	0.36	NS
	Private	160	48.15	6.878			
Type of family	Joint	60	46.83	5.895	198	1.65	NS
	Nuclear	140	48.59	7.251			

It is clearly seen from the Table 1 that the 't' values, 1.19, 0.36 and 1.65 are not significant at 0.05 level. It is understood from the results that there is no significant difference in Stress Coping Strategies of high school students owing to differences in terms of the variables viz., gender, Type of management and Type of family. Hence, the framed null hypothesis is accepted.

Hypothesis 2: There is no significant association between Stress Coping Strategies and emotional stability among high school students

Table: 2

Chi- Square Analysis for Stress Coping Strategies and emotional stability among high school students

Variables	Sub category		Stress Coping Strategies			DF	Chi-Square	Level of significance
			Low	Average	High			
Emotional Stability	Low	Fo	019	024	007	4	21.11	8
		Fo	12.0	22.5	15.5			
	Average	Fo	024	5.72	027			
		Fo	22.6	42.3	028			
	High	Fo	005	023	007			
		Fo	13.4	25.2	17.4			

It is clearly seen from the Table 2 that the Chi-square value 21.11 is significant at 0.01 levels. It is understood from the results that there is significant association between Stress Coping Strategies and emotional stability among high school students. Thus the null hypothesis is rejected.

MAJOR FINDINGS

- ❖ There is no significant difference in Stress Coping Strategies of high school students owing to differences in terms of the variables viz., gender, Type of management and Type of family.
- ❖ There is significant association between Stress Coping Strategies and emotional stability among high school students.

DISCUSSION

The purpose of this study was to find out if there is any association between Stress Coping Strategies and emotional stability among high school students. The first finding reveals that there is no significant difference in Stress Coping Strategies of high school students owing to differences in terms of the variables viz., gender, Type of management and Type of family. This finding is in conformity with **Khan et al. (2005)** who reported that significant difference was not found to exist between the male and female teachers on different types of coping strategies except use of humour.

The second findings reveal that there is significant association between Stress Coping Strategies and emotional stability among high school students. This finding is in conformity with **Osborne, et.al, (2009)** who reported that Higher-order emotional intelligence/coping associations were identified, which in turn had an influence on perceived stress. Hence there exists a relationship between Stress Coping Strategies and emotional stability among high school students.

EDUCATIONAL IMPLICATIONS

Education is the process of human enlightenment and empowerment for achievement of a better and quality of life. A key aspect of human development as important to basic survival as intellect is the acquisition of socio-cognitive and emotional coping skills. If the individual doesn't have emotional stability in, chances are that the child him/herself won't be emotionally stable. Then the child will grow up and become emotionally unstable. People who are emotionally stable have the tools for coping with difficult situations and maintaining a positive outlook. This approach, builds skills in these particular areas to strengthen a young' protective factors, promote the competencies necessary to make a healthy transition to adulthood, and promote his or her adoption of positive behaviours.

Effective programs focus skills to issues relevant to a young's developmental tasks and social context, such as personal development, understanding peer relations, or managing emotions by helping the students to select appropriate extracurricular activities and limit over scheduling, Encouraging physical activity, good nutrition, and rest, Encouraging the expression of feelings, teaching and model good emotional responses, encouraging healthy and diverse friendships, Monitor television programs that could worry your child and pay attention to the use of computer games, movies, and the Internet, Teaching students to problem solve, Remind students of his or her ability to get through tough times, particularly with the love and support of family and friends and Seek the assistance of a physician, school psychologist, school counsellor, or school social worker if stress continues to be a concern.

CONCLUSION

Stress is a very familiar condition faced by the students when they are unable to bear the risks involved in education. The main sources of stress are academic and time concerns,

fear of failure, classroom interactions, and economic issues. Apart from this, the parental system also affects a lot to these students. The parents have unlimited expectation from their children and therefore they impose their own desires on them. The impact of these influences results in a number of students reporting emotional problems, anxiety, stress, and other neurotic problems. They are often found in frightening, abusive, depressing, threatening, competitive, unpredictable, and confusing situations. The percentage of suicides is more among the students compared to the other ones and these suicides are mostly associated with academic failure or under achievement.

Due to the inability to cope up with the mounting Stress some students develop illness, physiological disorders and psychological problems. There have been instances of students leaving the course at this juncture due to the inability to manage the Stress and even students committed suicide.

Empowering the students with coping skills refers to efforts to overcome, diminish or endure the demands resulting from Stress. In other words coping refers to individual's reaction to a Stressor. Coping Strategies vary in their adaptive value and could range from being helpful, adaptive and solution oriented to being maladaptive, harmful and destructive. Coping Strategies are actions that people take to master, tolerate, reduce or minimize the effects of Stressors. It is not a permanently fixed individual trait or disposition but a transactional process which is continually modified by experience.

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Relation between Study Habits and Academic Achievement of Higher Secondary Arts and Science Students: A Study

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ABSTRACT

The present study examined the impact of study habits of students in Trichy city, Tamil Nadu in relation to Academic achievement, Gender and Faculty. The main objectives were to analyze the study habits of Higher Secondary School students and to compare it in relation to Academic- Achievement, Gender and Faculty. The research design is quantitative. The sample was selected randomly out of 180 students- 90 were boys and 90 were girls. Out of these 180 students- 60 were from Arts faculty, 60 from Science and 60 from Commerce Faculty. The questionnaire was administered for collecting data from the students and t-test and Pearson Correlation statistical methods was used for analysis of data. It was found that there is no significant difference in Mean study habit in relation to gender, and faculties such as Arts, Science and Commerce but there is a significant relationship between study habits and academic achievement of Higher Secondary School students.

Keywords: study habits, academic achievement, higher secondary students, arts students, science students, learning strategies, and student performance

INTRODUCTION

Study habits are a well-planned and deliberate pattern of study which has attained a form of consistency on the part of the students toward understanding academic subjects and passing at examination. Study habits determine the academic achievement of students to a great extent. Both study habits and academic achievement are interrelated and dependent on each other. There are students who come from different environment, localities etc. and have different levels of academic achievement i.e., high and low. They also differ in the pattern of study habits. Some students have better study habits while the others have poor. Better the study habits, better is the academic achievement. Academic achievement means how much

knowledge the individual has acquired from the school. Academic achievement of the students is determined by their study habits. Study habits and academic achievement are very essential for research worker and educationists to know that every child whether he is gifted, backward etc. should be educated in their own way. But if children possess good study habits they can show performance in academics and in every situation and if children's do not possess good study habits they cannot excel in life. It is the study habits which help the learner in obtaining Meaningful and desirable knowledge. Good study habits act as a strong weapon for the students to excel in life.

NEED OF THE STUDY

Study habits play a very important role in bringing about the better academic achievement. The study could bring to light the importance of study habits which are the major contributors of academic achievement. The primary aim of this study was to examine the effect of study habit on students' academic achievement. This general aim is expressed in the following specific objectives which are to: Assess the study habit of students in students; Compare the academic achievement of students who have developed a study habit and those who do not have study habit; Examine factors influencing students study habit; Investigate the effect of study habit on student's academic achievement.

OBJECTIVES OF THE STUDY

- ❖ To study the difference in study habits of arts and science students.
- ❖ To study the difference in study habits of science and commerce students.
- ❖ To study the difference in study habits of arts and commerce students.
- ❖ To study the difference in study habits of male and female students.
- ❖ To study the difference in academic achievement of male and female students.
- ❖ To study the difference in academic achievement of arts and science students.
- ❖ To study the difference in academic achievement of arts and commerce students.
- ❖ To study the difference in academic achievement of science and commerce students.
- ❖ To study the correlation between study habits and academic achievement of students.

HYPOTHESIS OF THE STUDY

- ❖ There is no significant difference in study habits of arts and science students.
- ❖ There is no significant difference in study habits of science and commerce students.

- ❖ There is no significant difference in study habits of arts and commerce students.
- ❖ There is no significant difference in study habits of male and female students.
- ❖ There is no significant difference in academic achievement of male and female students.
- ❖ There is no significant difference in academic achievement of arts and science students.
- ❖ There is no significant difference in academic achievement of arts and commerce students.
- ❖ There is no significant difference in academic achievement of science and commerce Students.
- ❖ There is no significant correlation between study habits and academic achievement of Students.

VARIABLES OF THE STUDY

The variables considered are study habits, academic achievement, Gender and Faculty (Science, Commerce and Arts).

SAMPLING TECHNIQUE

For the present study Simple Random Sampling technique was used to select 180 Higher Secondary School students from different colleges in Trichy City, Tamil Nadu. Out of the Sample of 180 students, 90 were Male and 90 were Female and also maintained the equal stream Ratio of students from Arts 60, Science 60 and Commerce 60 students.

TOOLS

Following tools were used:

- Study habit inventory developed by M Mukhopadhyay and D.N Sansanwal (1963)
- For academic achievement investigator collected in First year Higher secondary school examination marks.

STATISTICAL TECHNIQUES

In pursuance of objectives of the study and in order to test the research hypothesis set up, the 't'- test and Pearson Correlation was used.

ANALYSIS INTERPRETATION OF DATA

The Objectives and Hypothesis wise analysis was done.

Objective-1 To study the difference in study habits of Arts and Science students.

Hypothesis-1 "There is no significant difference in study habits of Arts and Science students".

Table I: Shows Mean, SD, and 't' value of Study Habits of Arts and Science students

Group	Sample	Mean	SD	t-value	Significant at 0.05 level
Arts students' study habits	60	64.66	7.1	.031	Not significant
Science students' study habits	60	68.64	7.4		

The above table reveals that the obtained 't'-value 0.031 which is less than the theoretical value 1.98. The obtained value of 't' is not significant at 0.05 level. Hence the Null Hypothesis is accepted and it is concluded that, "There is no significant difference in study habits of arts and science students."

Objective-2. To study the difference in Study Habits of Science and Commerce students.

Hypothesis-2 "There is no significant difference in Study habits of Science and Commerce Students."

Table 2: Shows Mean, SD, and 't' value of Study Habits of Science and commerce students

Group	Sample	Mean	SD	t-value	Significant at 0.05 level
Science students' Study habits	60	68.64	7.4	0.40	Not significant
Commerce students' study habits	60	64.2	6.9		

The above table reveals that the obtained 't'-value 0.40 which is less than the theoretical value 1.98. The obtained value of 't' is not significant at 0.05 level. Hence the Null Hypothesis is accepted and it is concluded that, "There is no significant difference in study habits of science and commerce students."

Objective-3 To study the difference in study habits of Arts and Commerce students.

Hypothesis-3 "There is no significant difference in study habits of Arts and Commerce Students."

Table 3: Shows Mean, SD, and 't' value of Study Habits of Arts and commerce students

Group	Sample	Mean	SD	t-value	Significant at 0.05 level
Arts students' Study habits	60	64.66	7.1	0.32	Not significant
Commerce students' study habits	60	64.2	6.9		

The above table reveals that the obtained 't'-value .032 which is less than the theoretical value 1.97. The obtained value of 't' is not significant at 0.05 level. Hence the Null Hypothesis is accepted and it is concluded that, "There is no significant difference in study habits of Arts and Commerce students".

Objective-4 To study the difference in study habits of Male and Female students.

Hypothesis-4 "There is no significant difference in study habits of Male and Female students".

Table 4: Shows Mean, SD, and 't' value of Study Habits of Male and Female students

Group	Sample	Mean	SD	t-value	Significant at 0.05 level
Male students' Study habits	90	67.8	8.1	1.79	Not significant
Female students' study habits	90	66.2	7.6		

The above table reveals that the obtained 't'-value 1.79 which is less than the theoretical value 1.97. The obtained value of 't' is not significant at 0.05 level. Hence the Null Hypothesis is accepted and it is concluded that, "There is no significant difference in study habits of male and female students".

Objective-5 To study the difference in academic achievement of Male and Female students.

Hypothesis-5 "There is no significant difference in academic achievement of Male and Female students".

Table 5: Shows Mean, SD, and 't' value of Academic Achievement of Male and Female students

Group	Sample	Mean	SD	t-value	Significant at 0.05 level
Male students' Academic Achievement	90	53.8	14.4	0.28	Not significant
Female students' Academic Achievement	90	55.2	14.6		

The above table reveals that the obtained 't'-value 0.28 which is less than the theoretical value 1.97. The obtained value of 't' is not significant at 0.05 level. Hence the Null Hypothesis is accepted and it is concluded that, "There is no significant difference in academic achievement of male and female students".

Objective- 6 To study the difference in academic achievement of Arts and Science students.

Hypothesis-6 "There is no significant difference in academic achievement of Arts and Science Students".

Table 6: Shows Mean, SD, and 't' value of Academic Achievement of Arts and Science students

Group	Sample	Mean	SD	t-value	Significant at 0.05 level
Arts students' Academic Achievement	60	47.8	13.4	3.21**	Not significant
Science students' Academic Achievement	60	54.2	11.6		

** Significant at 0.05 level

The above table reveals that the obtained 't'-value 3.21 is greater than the theoretical value of 1.98. The obtained value of 't' is significant at 0.05 level. Hence the Null Hypothesis is rejected and it is formulated that "There is a significant difference in academic achievement of arts and science students." It was also found that girls and boys differ significantly in their study habits and academic achievement. (Singh Y.G., 2011). It can be inferred that there may be good co-relation in Study habits and academic achievement.

Objective-7 To study the difference in academic achievement of Arts and Commerce students.

Hypothesis-7 "There is no significant difference in academic achievement of Arts and Commerce students".

Table 7: Shows Mean, SD, and 't' value of Academic Achievement of Arts and Commerce students

Group	Sample	Mean	SD	t-value	Significant at 0.05 level
Arts students' Academic Achievement	60	47.8	13.4	3.81**	significant
Commerce students' Academic Achievement	60	53.2	10.4		

** Significant at 0.05 level

The above table reveals that the obtained 't'-value 3.81 is greater than the theoretical value of 1.98. The obtained value of 't' is significant at 0.05 level. Hence the Null Hypothesis is rejected and it is formulated that "There is no significant difference in academic achievement of arts and commerce students." It was also found that girls and boys differ significantly in

their study habits and academic achievement. (Singh Y.G., 2011). It can be inferred that there may be good co-relation in Study habits and academic achievement.

Objective-8 To study the difference in academic achievement of Science and Commerce Students.

Hypothesis-8 "There is no significant difference in academic achievement of Science and Commerce students".

Table 8: Shows Mean, SD, and 't' value of Academic Achievement of Science and Commerce students

Group	Sample	Mean	SD	t-value	Significant at 0.05 level
Science students' Academic Achievement	60	54.2	11.6	1.81	significant
Commerce students' Academic Achievement	60	53.4	10.4		

The above table reveals that the obtained 't'-value 1.81 which is less than the theoretical value 1.98. The obtained value of 't' is not significant at 0.05 level. Hence the Null Hypothesis is accepted and it is concluded that, "There is no significant difference in academic achievement of science and commerce students".

Objective-9 To study the relationship between Study habits and Academic achievement of Graduation students.

Hypothesis-9 "There is no significant relationship between study habits and academic Achievement of students".

Table 9: Shows 'r' value of Study Habits and Academic Achievement of Higher Secondary School students

Group	Sample	Mean	SD	r-value	Significant at 0.05 level
Higher Secondary School students' Study Habits	180	65.2	9.6	3.42**	significant
Higher Secondary School students' Academic Achievement	180	54.4	13.4		

**Significant at 0.05 level

The above table shows that the obtained r-value 3.42 is greater than the theoretical value 0.138. The obtained value of 't' is significant at 0.05 level. Hence the Null Hypothesis is rejected and stated new hypothesis "There is a significant relationship between study habits and

academic achievement of Higher Secondary School students." There is a positive co-relation between study habits and academic achievement of students. It was also found that there exists relationship between Study Habits and Academic Achievement of Higher Secondary Students (Singh Y.G., 2011).

CONCLUSION

The present study has implication for the teacher and parents that they should encourage students particularly boys and girls with poor academic performance to have better study habits which is essential for their survival in this competitive world. They should take also special care for the development of the better study habit. This research indicated that students can acquire efficient studying skills by Means of Curriculum for Developing Efficient Studying Skills and they increase their academic achievements thanks to these studying habits. In this sense, if quality of education is desired to be increased, students with high level of academic achievements are intended and growing youth is expected to compete with the young population of other states with the effect of globalization, it is necessary to make students acquire efficient studying skills.

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Research Article

**Scientific Attitude and Awareness of Environmental
Sustainability of Women Secondary
Teacher Education Students**

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ABSTRACT

The study was undertaken to study the relationship between the scientific attitude and awareness of environmental sustainability of women secondary teacher education students. A stratified sample of 570 women secondary teacher education students were selected from ten colleges of education in Coimbatore district. The scientific attitude scale and awareness of environmental sustainability inventory were used for collection of data and it was validated by the investigator. The findings revealed that there is a significant relation between scientific attitude and awareness of environmental sustainability of urban secondary teacher education students.

Keywords: scientific attitude, environmental sustainability, women teacher education students, secondary education, awareness levels, attitude development

INTRODUCTION

A thirst for knowledge and an intellectual drive of an individual makes the society towards the setting of wellness. Scientific attitude is an expression of thought based on factual evidence. It includes tolerance to uncertainty, willingness to change opinions and open-mindedness. It is respecting facts. Environmental sustainability is the ability to maintain things or qualities that are valued in the physical environment. Sustainability is about continuity and development is about change. The parliament of Victoria, when it passed the commissioner for environmental sustainability Act, 2003 was using the word environment in the sense of physical environment rather than more universal meaning of the context for anything.

"Environmental sustainability as the maintenance of Natural Capital and as a concept apart from but connected to both social sustainability and economic sustainability" (John Morelli, 2011). Teachers are the nation builders. They should perform their functions in an effective way with scientific attitude and aware of environmental sustainability.

RATIONALE FOR THE STUDY

A person who possesses scientific attitude has the natural tendency to look for the basic cause which leads to development. An individual with scientific attitude does not remain stick on his views and ideas, but keep on revising them in accordance with the new findings. A person with scientific attitude remains stick to the path of truth. She may try to find out most satisfactory explanation for the physical environment in the world. Physical environments can be considered on all scales from the micro to the locale, global and even large scales. Human beings depend in countless way on the physical environment sustaining desired environmental conditions directly contributes to the sustaining of people.

Teachers have an ability to separate fundamental concepts from the irrelevant or unimportant things. They are the torch bearers of the society. They do everything in a careful analysis and also take their effort to the development of physical environment. Hence the investigator analysed the present study.

OBJECTIVES OF THE STUDY

To find out the level and the relation between the scientific attitude and awareness of environmental sustainability of women secondary teacher education students with regard to residence, age, degree and nature of institution.

NULL HYPOTHESES

1. There is no significant relation between scientific attitude of rural secondary teacher education women students and their awareness of environmental sustainability.
2. There is no significant relation between scientific attitude of urban secondary teacher education women students and their awareness of environmental sustainability.
3. There is no significant relation between scientific attitude of secondary teacher education women students belonging to the age group below 25 years and their awareness of environmental sustainability.

4. There is no significant relation between scientific attitude of secondary teacher education women students belonging to the age group 25 years & above and their awareness of environmental sustainability.
5. There is no significant relation between scientific attitude of secondary teacher education women students possessing arts degree and their awareness of environmental sustainability.
6. There is no significant relation between scientific attitude of secondary teacher education women students possessing science degree and their awareness of environmental sustainability.
7. There is no significant relation between scientific attitude of government secondary teacher education women students and their awareness of environmental sustainability.
8. There is no significant relation between scientific attitude of private secondary teacher education women students and their awareness of environmental sustainability.

METHOD FOR THE PRESENT STUDY

The investigator has adopted the survey method for this investigation. The present study is done by using a self-made tool Scientific Attitude Scale (SAS) and Awareness of Environmental Sustainability Inventory (AESI).

POPULATION AND SAMPLE FOR THE STUDY

The population for the present study is women secondary teacher education students in Coimbatore district. Random sampling technique is used for selecting the sample. The sample consists of 570 women secondary teacher education students.

STATISTICAL TECHNIQUES USED

Percentage analysis and Pearson's correlation co-efficient were used for analyzing the data.

Table 1: Level of Scientific Attitude of Secondary Teacher Education Women Students

VARIABLES	Low		Moderate		High	
	No.	%	No.	%	No.	%
Arts	60	10.53	133	23.33	54	9.47

Science	58	10.17	204	35.79	61	10.70
Rural	68	11.93	181	31.75	55	9.65
Urban	50	8.77	156	27.37	606	10.53

It is inferred from the above table that 10.53% of the arts secondary teacher education women students are showing low level, 23.33% of them are showing moderate level and 9.47% of them are showing high level of scientific attitude. It is also inferred from the above table that 10.17% of the science secondary teacher education women students are showing low level, 35.79% of them are showing moderate level and 10.70% of them are showing high level of scientific attitude.

While comparing the arts and science secondary teacher education women students, the science secondary teacher education women students are showing better high level of scientific attitude (10.70) than the arts secondary teacher education women students.

It is inferred from the above table that 11.93% of the rural secondary teacher education women students are showing low level, 31.75% of them are showing moderate level and 9.65% of them are showing high level of scientific attitude.

It is also inferred from the above table that 8.77% of the urban secondary teacher education women students are showing low level, 27.37% of them are showing moderate level and 10.53% of them are showing high level of scientific attitude.

While comparing the arts and science secondary teacher education women students, the science secondary teacher education women students are showing better high level of scientific attitude (10.70%) than the arts secondary teacher education women students.

Table 2: Level of Environmental Sustainability of Secondary Teacher Education Women Students

VARIABLES	Low		Moderate		High	
	No.	%	No.	%	No.	%
Arts	48	8.42	160	28.07	39	6.84

Science	57	10.00	215	37.72	51	8.95
Rural	68	9.47	181	36.67	55	7.19
Urban	50	8.95	156	29.12	60	8.60

It is inferred from the above table that 8.42% of the arts secondary teacher education women students are showing low level, 28.07% of them are showing moderate level and 6.84% of them are showing high level of awareness of environmental sustainability.

It is inferred from the above table that 10.00% of the science secondary teacher education women students are showing low level, 37.72% of them are showing moderate level and 8.95% of them are showing high level of awareness of environmental sustainability.

While comparing the arts and science secondary teacher education women students, the science secondary teacher education women students are showing better high level of awareness of environmental sustainability (8.95%) than the arts secondary teacher education women students.

It is inferred from the above table that 9.47% of the rural secondary teacher education women students are showing low level, 36.67% of them are showing moderate level and 7.19% of them are showing high level of awareness of environmental sustainability.

It is inferred from the above table that 8.95% of the urban secondary teacher education women students are showing low level, 29.12% of them are showing moderate level and 8.60% of them are showing high level of awareness of environmental sustainability.. While comparing the rural and urban secondary teacher education women students, the urban secondary teacher education women students are showing better high level of awareness of environmental sustainability (8.60%) than the arts secondary teacher education women students.

Table 3 :Relation Between Scientific Attitude of Secondary Teacher Education Women Students And Their Awareness of Environmental Sustainability

Variables	N	Calculated 'r' value	Table Value	Level of Significance	Remarks at 5% level
Rural	304	0.08348	0.088	0.05	NS
Urban	266	0.1661	0.088	0.05	S
Below 25 years	437	0.0136	0.088	0.05	NS
25 years & Above	133	0.11134	0.139	0.05	NS

Arts	247	0.05102	0.088	0.05	NS
Science	323	0.013134	0.088	0.05	NS
Government	120	0.08159	0.139	0.05	NS
Private	450	0.083	0.088	0.05	NS

It is inferred from the above table that there is no significant relation between scientific attitude of rural secondary teacher education women students and their awareness of environmental sustainability. But there is a significant relation between scientific attitude of urban secondary teacher education women students and their awareness of environmental sustainability.

It is inferred from the above table that there is no significant relation between scientific attitude of secondary teacher education women students possessing arts degree and their awareness of environmental sustainability. It is inferred from the above table that there is no significant relation between scientific attitude of secondary teacher education women students belonging to the age group below 25 years, 25 years & above and their awareness of environmental sustainability.

It is inferred from the above table that there is no significant relation between scientific attitude of secondary teacher education women students possessing arts, science degree and their awareness of environmental sustainability. It is inferred from the above table that there is no significant relation between scientific attitude of government, private secondary teacher education women students and their awareness of environmental sustainability.

FINDINGS

- There is no significant relation between scientific attitude of rural secondary teacher education women students and their awareness of environmental sustainability.
- There is a significant relation between scientific attitude of urban secondary teacher education women students and their awareness of environmental sustainability.
- There is no significant relation between scientific attitude of secondary teacher education women students belonging to the age group below 25 years and their awareness of environmental sustainability.
- There is no significant relation between scientific attitude of secondary teacher education women students belonging to the age group 25 years & above and their awareness of environmental sustainability.

- There is no significant relation between scientific attitude of secondary teacher education women students possessing arts degree in and their awareness of environmental sustainability.
- There is no significant relation between scientific attitude of secondary teacher education women students possessing science degree and their awareness of environmental sustainability.
- There is no significant scientific attitude of government secondary teacher education women students their awareness of environmental sustainability.
- There is no significant relation between scientific attitude of private secondary teacher education women students and their awareness of environmental sustainability.

CONCLUSION

Imparting accurate knowledge is the main duty of the teaching community. This investigation explores urban secondary teacher education women students have high level of scientific attitude and environmental sustainability. This may be due to the reason that they are desire to get sound and accurate knowledge through internet and magazines. So, encourage the women secondary teacher education students to develop a tendency to look for the basic cause which led to the sustainability of physical, social and biological environment that leads for our goodness in the world.

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