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CONTENTS

A STUDY ON SCIENCE INTEREST AND LEARNING ENVIRONMENT AMONG HIGHER SECONDARY STUDENTS

[1] Dr. S. Anuruba

Abstract

The present study is an attempt to find out the Science Interest and Learning Environment among higher secondary students in Pondicherry region. Simple random sampling technique has been used in the selection of the sample. As many as 600 higher secondary students were selected for this purpose and Science Interest test and Learning Environment scale were distributed to them and their responses were collected and computed according to the objectives framed. Results found that majority of the higher secondary students showed positive and significant relationship of Science Interest and Learning Environment and the same trend has been seen in respect of the sub-samples too.

Keywords: *Science Interest, Learning Environment, higher secondary students.*

Introduction

Interest is a tendency to become absorbed in an experience and to continue it. Downie defines interest as motivators of learning. Science Interest is necessary for pupils to pursue Science Education. Like-wise without good Science Interest an individual does not achieve much in Science. A congenial and favourable Learning Environment not only shapes personality, but also facilitates or inhibits various aptitudes, interests of an individual. Dwivedi, R.D.(2005) defines Learning Environment, "students from schools of enriched environment has better academic achievement".

Objectives of the Study

1. To find out the significant relationship between Science Interest and Learning Environment among Higher Secondary Students.
2. To find out the significant difference between Science Interest and Learning Environment among Higher Secondary Students with respect to their sub-samples.

Hypotheses of the Study

1. There is no significant difference between Science Interest and Learning Environment among Higher Secondary Students.
2. There is no significant difference between Science Interest andLearning Environment among Higher Secondary Students with respect to their sub-samples.

Methodology

In the present study Normative Survey Method has been used, since it deals with present condition.

Sampling Technique used in this Study

Simple Random Sampling Technique has been used in this study. Among the various regions in the Union Territory of Pondicherry, only Pondicherry region has been fixed as the field for this study.

Tool

1. Science Interest test by L. N. Dubey & Archana Dubey (2005).
2. Learning Environment Scale by S. Rajasekar.

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Statistical Techniques used in this Study

In the present study Correlation Analysis has been used.

Data Analysis and Findings

Table 1 Correlation Co - efficient between the scores of Science Interest and Learning Environment of Higher Secondary Students

Variables	N	Correlation Co-efficient ('r')	Level of Significance
Science Interest	600	0.137**	Significant
Learning Environment	600		

The correlation coefficient is 0.137 found between Science Interest and Learning Environment among Higher Secondary students, which is significant at 0.05 level for 599 df. It is concluded that there is a positive and significant relationship between Science Interest and Learning Environment among Higher Secondary students.

Table 2 Coefficient of Correlation between Science Interest and Learning Environment of Students with Regard to Sub - Samples

S.No	Sub Sample	Number	r	Table value	Level of significance
1	**Gender**				
	Male	291	0.130	12.99	Significant at 0.05 level
	Female	309	0.137	0.33	Significant at 0.05 level
2	**Type of Management**				
	Government	301	0.133	18.48	Significant at 0.01 level
	Private	299	0.185	2.29	Significant at 0.01 level
3	**Nature of school**				
	Boys School	90	0.055	20.89	Significant at 0.01 level
	Girls School	90	0.209	9.99	Significant at 0.01 level
	Co-Education School	420	0.100	1.10	Not Significant at 0.05 level
4	**Location of School**				
	Urban	302	0.149	11.99	Significant at 0.01 level
	Rural	298	0.120	1.98	Significant at 0.05 level
5	**Type of Family**				
	Nuclear	335	0.096	14.29	Significant at 0.01 level
	Joint	265	0.143	18.39	Significant at 0.01 level
6	**Father's Education**				
	Illiterate	215	0.091	13.71	Not Significant at 0.05 level
	Matriculate	216	0.138	25.1956	Significant at 0.01 level
	Degree	118	0.252	0.69	Significant at 0.01 level
	Professional Degree	51	0.123	0.68	Not Significant at 0.05 level
7	**Mother's Education**				
	Illiterate	285	0.132	13.19	Significant at 0.01 level
	Matriculate	212	0.132	16.19	Significant at 0.01 level
	Degree	82	0.162	0.06	Significant at 0.01 level
	Professional Degree	21	0.184	0.00	Not Significant at 0.05 level
8	**Community**				
	FC	59	0.069	14.49	Significant at 0.01 level
	BC	205	0.145	12.19	Significant at 0.01 level
	MBC	210	0.122	14.19	Significant at 0.01 level

	SC	108	0.142	0.49	Significant at 0.01 level
	ST	18	0.181	0.00	Not Significant at 0.05 level
9	**Religion**				
	Hindu	519	0.118	2.39	Significant at 0.01 level
	Muslim	44	0.294	9.19	Significant at 0.01 level
	Christian	37	0.292	0.05	Significant at 0.01 level

By using the Spearman Brown Prophecy formula, the Zero order Correlation has been computed and the values are given in Table No. 2. It may be inferred from the above table No. 2 that there is a positive significant relationship between Science Interest and Learning Environment among Higher Secondary students. It is also observed from the obtained results that the following sub samples Gender (Male/Female), Type of management (Government/Private), Nature of school (Boys/Girls), Location of the school (Urban/Rural), Type of Family (Nuclear/ Joint), Father's Education (Matriculate/ Degree), Mother's Education (Illiterate/ Matriculate/Degree), Community (FC/BC/MBC/SC), Religion (Hindu/Muslim/ Christian) are significantly correlated. But the sub samples: Nature of school (Co-Education School), Father's Educational Qualification (Illiterate /Professional Degree), Mother's Educational Qualification (Professional Degree), Community (ST) are not significantly correlated.

Conclusion

From the above analysis, it is concluded that there is a positive and significant relationship between Science Interest and Learning Environment among Higher Secondary students and the same trend has been seen in respect of the sub-samples too.

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A STUDY ON UTILIZATION OF ONLINE RESOURCES FOR TEACHING SCIENCE ON HIGH SCHOOL TEACHERS IN MADURAI DISTRICT

[1] D. Esther Regina
[2] C. Meenambal

"Teaching in the Internet age means we must teach tomorrow's skills today."
— Dr. Jennifer Fleming

Abstract

This study aims to exploring the utilization of online resources for teaching science among the high school teachers, to check whether there are any significant differences between the gender, qualification and marital status of the teachers among various schools at Madurai. This study involved male and female learners among the B. Ed students of various B. Ed colleges at Madurai. A total of 300 teachers were asked to complete the questionnaire, used to identify teachers perceptual with respect to online teaching preferences and also to identify teachers teaching achievements. In addition, an achievement test was held to determine the students' level, and then correlate results with the learning style preferences, language achievements and the academic achievement.

Introduction

Online learning in academia has gone from an experimental novelty to a nearly ubiquitous teaching tool. Given the growth of online learning, it is likely that both current and future faculty will be engaged in some form of online learning at some point in their career. Although the overall impact of online learning on the academy has yet to be assessed, it is increasingly apparent that this impact is transformative. Given the current economics of higher education, it is likely that higher education institutions (and students) will continue to take advantage of the many benefits of studying online. From an institutional standpoint, online learning is an affordable way to increase student enrollment and revenues without having to make corresponding investments in infrastructure. In addition, by removing the need for physical presence in the classroom, online learning has the potential to make education accessible to a much larger population, while accommodating the demands of a fast-paced and global society.

Need and Importance of the Study

The purpose of this study is to begin to develop a holistic view of online secondary science education by developing an understanding of what it is to teach in that space. This understanding will provide a more indepth insight than that obtained from self-report surveys. To provide data to help understand how online secondary science teachers perceive teaching and student learning in that space, the data from this study was used to answer the following research questions:

1. How do online secondary science teachers experience their teaching while teaching their courses online?
2. How do online secondary science teachers experience their students' learning while teaching their courses online?

It is believed that this understanding can provide the beginning framework for steps that may need to be taken in areas such as teacher education and professional development, online secondary science student support, online secondary science teaching and learning standards, and online secondary science program evaluation.

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[2] *Assistant Professor, Mangayarkarasi College of Education for Women, Madurai*

The following objectives were formulated for the study, **To identify the level of utilization of online resources for teaching science on high school teachers.**

- in relation to their gender.
- in relation to their qualification.
- in relation to their marital status.
- in relation to their school location.
- in relation to their nature of the school.
- in relation to their school type.

Hypotheses formulated for the Study

There is significant difference between **the level of utilization of online resources for teaching science on high school teachers** among their genders, their qualification, their marital status, their locality of the working place, their nature of the working environment and their school type

Methodology

The methodology adopted was to find the utilization of online resources for teaching Science on high school teachers in Madurai district on different criteria. The following are the actual methods adopted :

- problem
- objectives
- hypotheses
- sample and design
- instrumentation
- statistical techniques

It was found that there were variations in identification and implementation in applying critical thinking with respect to age, gender, status, locality, their nature of learning environment and medium of instructions. It was observed that factors like, Age, Gender, previous knowledge, technical skills, exposure to computer and internet, academic achievement, infrastructure facilities, cultural background and personal values significantly affect the perceptions and readiness of teachers in utilizing the online resources for overall academic success.

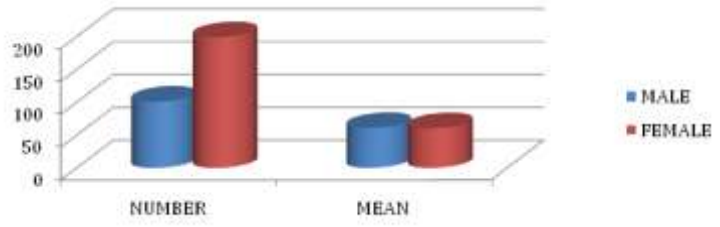
Hypothesis 1

There is significant difference in their utilization of online resources for teaching science on high school teachers in terms of gender.

The details of statistical measures and results of test of significance of difference between mean scores of advantages obtained by the high school teachers in terms of gender given in table 1

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Gender	Male	102	60.8	4.26	0.70	Not Significant
	Female	198	60.42	4.86		

Figure 1: Graph Shows the Statistical Measures and Results of the Tests of No Significance of Difference Between the Mean Scores of Utilization of Online Resources for Teaching Science On High School Teachers in Terms Of Gender



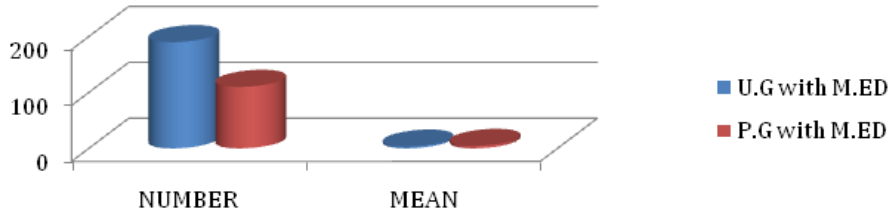
Hypothesis 2

There is significant difference in their utilization of online resources for teaching science on high school teachers in terms of their academic qualification.

The details of statistical measures and results of test of significance of difference between mean scores of advantages obtained by the high school teachers in terms of academic qualification are given in Table 2

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Academic Qualification	U.G with M.Ed	190	3.168	0.324	4.01	Significant
	P.G with M.Ed	110	2.37	0.437		

Figure 2: Graph Shows the Statistical Measures and Results of the Tests of No Significance of Difference Between the Mean Scores of Utilization of Online Resources for Teaching Science On High School Teachers in Terms of Academic Qualification



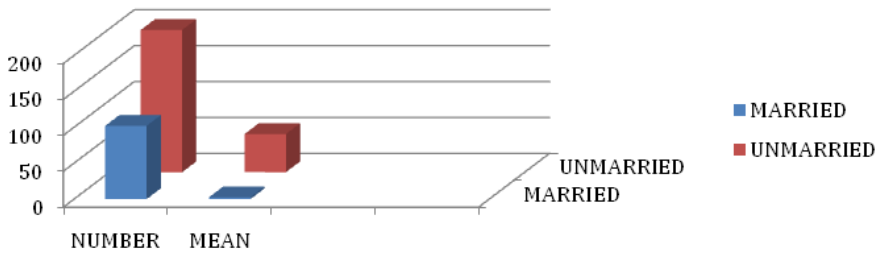
Hypothesis 3

There is significant difference in their access of utilization of online resources for teaching science on high school teachers in terms of marital status.

The details of statistical measures and results of test of significance of difference between mean scores of advantages obtained by the high school teachers in terms of marital status are given in table 3

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Marital Status	Married	102	48.09	12.10	2.77	Significant
	Unmarried	198	53.02	11.61		

Figure 3: Graph Shows the Statistical Measures and Results of the Tests of no Significance of Differences Between the Mean Scores of Utilization of Online Resources for Teaching Science On High School Teachers in Terms of Marital Status



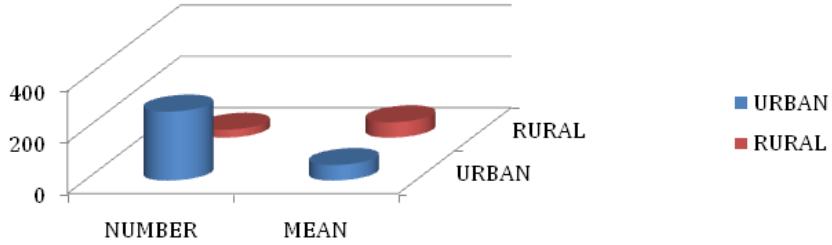
Hypothesis 4

There is significant difference in their utilization of online resources for teaching science on high school teachers in terms of their locality of the school.

The details of statistical measures and results of test of significance of difference between mean scores of advantages obtained by the high school teachers in terms of their school locality are given in Table 4

Variable	sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Locality of the School	URBAN	269	60.64	4.70	1.01	Not Significant
	RURAL	31	59.81	4.29		

Figure 4: Graph Shows the Statistical Measures and Results of the Tests of No Significance of Difference Between the Mean Scores of Utilization of Online Resources for Teaching Science On High School Teachers in Terms of Locality of the School



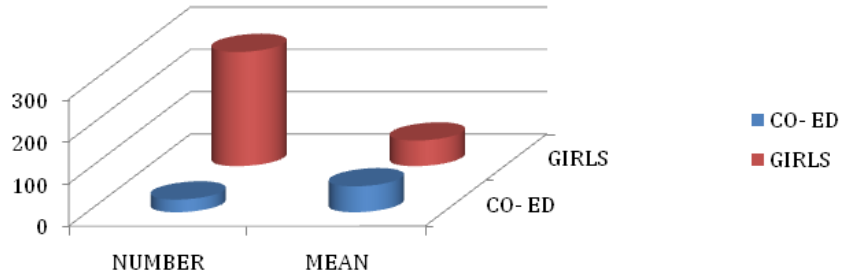
Hypothesis 5

There is significant difference in utilization of online resources for teaching science on high school teachers in terms of their nature of the school.

The details of statistical measures and results of test of significance of difference between mean scores of advantages obtained by the high school teachers in terms of their nature of the school are given in Table 5

Variable	Sub Variables	N	Mean	SD	't' VALUE	Significance at 0.05 Level
Nature of The School	CO – ED	30	61.20	5.08	0.75	Not Significant
	GIRLS	270	60.48	4.62		

Figure 5 : Graph Shows the Statistical Measures and Results of the Tests of no Significance of Differences Between the Mean Scores of Utilization of Online Resources for Teaching Science on High School Teachers in Terms of Nature of the School



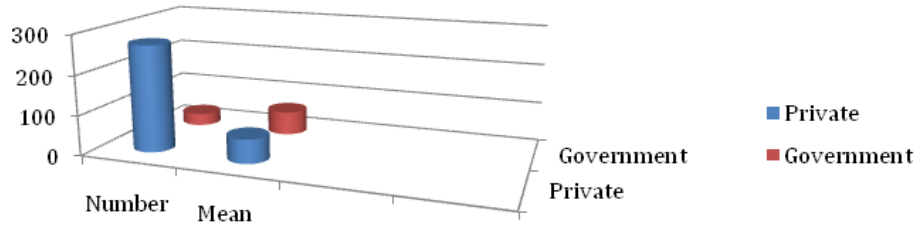
Hypothesis 6

There is significant difference in utilization of online resources for teaching science on high school teachers in terms of their type of the school.

The details of statistical measures and results of test of significance of difference between mean scores of advantages obtained by the high school teachers in terms of their type of the school are given in Table 6

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Type of The School	PRIVATE	269	60.64	4.70	1.01	Not Significant
	GOVERNMENT	31	59.81	4.29		

Figure 6: Graph Shows the Statistical Measures and Results of the Tests of No Significance of Difference Between the Mean Scores of Utilization of Online Resources for Teaching Science On High School Teachers in Terms of Type of the School



Findings of the Study

- There is no significant difference in their utilization of online resources for teaching science on high school teachers in terms of Gender. Hence the hypothesis is rejected.
- There is significant difference in their utilization of online resources for teaching science on high school teachers in terms of marital status. The married teachers have more utilization of online resources than the unmarried teachers. Hence the hypothesis is accepted.
- There is significant difference in their utilization of online resources for teaching science on high school teachers in terms of academic qualification. Hence the hypothesis is accepted. Those who are having P.G with M.Ed having more utilization of online resources than the U.G with M.Ed teachers. Hence the hypothesis is accepted.
- There is no significant difference in their utilization of online resources for teaching science on high school teachers in terms of locality of the school. Hence the hypothesis is rejected.
- There is no significant difference in their utilization of online resources for teaching science on high school teachers in terms of nature of the school. Hence the hypothesis is rejected.
- There is no significant difference in their utilization of online resources for teaching science on high school teachers in terms of type of the school. Hence the hypothesis is rejected.

Conclusions

Good utilization of online resources for teaching science on high school teachers are the basic need of academics success of teachers, and professional success of life. Teacher communicates more instructions not orally in classroom to students now a days. Teacher with poor access of utilizing online resources may cause failure of students to learn and promote their academics. Student need to understand that what is right, and what is wrong while it totally depend upon the access of e-learning resources of teachers which he adopt in class-room (Sherwyn P. Morreale, Michael M. Osborn Judy c. Pearson, 2000). Good e-learning resources and communications minimize the potential of unkind feeling during the process of teaching. For learning the learner must be attentive toward their teacher during the lecture. Loss (2000), recommended that teacher communicate in clear and understandable manner while using of proper e-learning resources. The investigator concluded that in Madurai the high school teachers have to improve their utilization of online resources for teaching science as per the speed of the student's ability

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A STUDY ON HEALTH STATUS AND SELF-ESTEEM OF HIGH SCHOOL STUDENTS

[1] E. Jeya Pratha
[2] S. Muthurani

Abstract

The present study aims to find out the relationship between health status and self-esteem of high school students. Two hundred high school students were randomly selected as sample. Survey method was adopted for the study. The data was collected using a test on health status and self-esteem of high school students. The t-test chi-square test and person's product moment correlation were applied to the hypothesis. Interpretation was drawn based on the finding. Health status of high school students was found to be an average and there was a high positive correlation between self-esteem of high school students.

Introduction

Health status is a survey study in nature to find out problems in self-esteem of high school students. Various aspects of self–esteem are highlights in this study. Importance of health status and self-esteem of high school students, further the present study differs from the studies discussed below in terms of population, area and sample. So the investigator has conducted a study on the health status and self–esteem of high school students. The finding and conclusion drawn from the data are recorded in this study report.

Needs and Importance of the Study

The investigator understands the difficulties faces by the health status of high school students' level. Education to be complete must have five principle aspects relating to the five principle activities of the human beings: the physical, the mental, the social, the emotional, and the spiritual. In any pursuit of education health is one of the key factors in determining the academic achievement of an individual. Physical health and mental health have special relation or they are inter linked as it is rightly said where there is sound body sound mind resides. Healthy body and healthy mind are necessary pre-requisites for education. Health is generally recognized as a major objective of education. A physically healthy person may be incapable in all respects due to his mental sickness, so in the present complex development of human civilization, mental health is as important as physical health.

Objective of the Study

1. To find out the level of health status and self-esteem among high school students with respect to sex.
2. To find out the level of health status and self-esteem among high school students with respect to medium of instruction.
3. To find out the level of health status and self-esteem among high school students with respect to locality of school.

Hypothesis Formulation for the Study

Further the data was subjected to appropriate statistical test for testing hypothesis. The acceptance or rejections of each null hypothesis would be stated on the basis of the results shown in the corresponding tables, obtained by the application of proper statistical techniques.

[1] *M.Ed Scholar, Mangayarkarasi College of Education for Women, Madurai*
[2] *Assistant Professor, Mangayarkarasi College of Education for Women, Madurai*

Hypothesis. No. 1

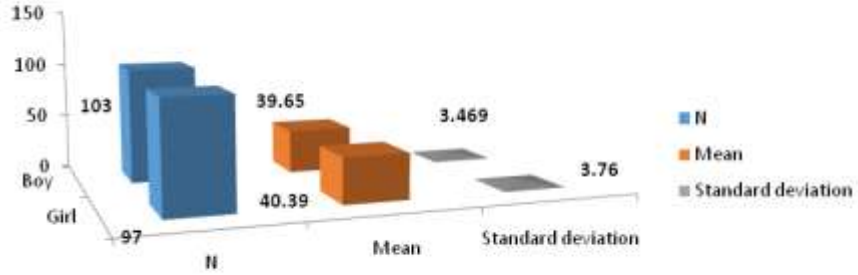
There is no significant difference towards Self Esteem between Sex among high school students.

Table 1 'T' Values towards Self Esteem Between Sex Among High School Students.

Sex	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Boy	103	39.65	3.469	1.450	1.96	Not Significant
Girl	97	40.39	3.760			

The table shows that the computed 't' value 1.450 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference towards Self Esteem between sex among high school students. When we compare the mean scores, Girls are better than the Boys in Self Esteem.

Figure 1: Bar Diagram Shows the Difference Towards Self Esteem Between Sex Among High School Students



Hypothesis No. 2

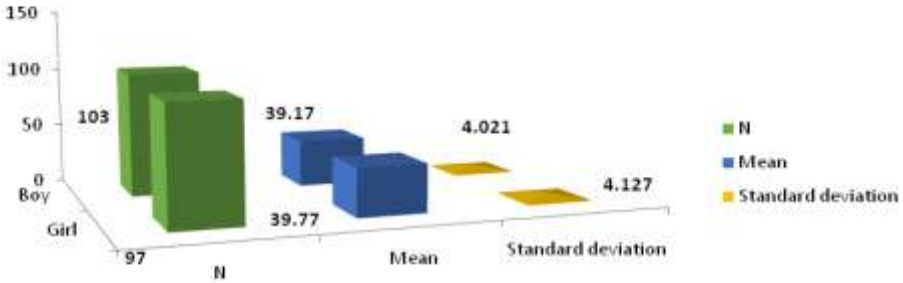
There is no significant difference towards Health Status between Sex among high school students.

Table 2 'T' Values Towards Health Status Between Sex Among High School Students.

Sex	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Boy	103	39.17	4.021	1.039	1.96	Not Significant
Girl	97	39.77	4.127			

The table shows that the computed 't' value 1.039is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference towards Health Status between sex among high school students. When we compare the mean scores, Girls are better than the Boys in Health Status.

Figure 2: Bar Diagram Shows the Difference Towards Health Status Between Sex Among High School Students



Findings of the Study

The present study focuses on the health status and self-esteem of high school students. This study is the best and the need of the hour to bring out the desirable change in the minds of the parents and students. The mental health varies on the background dwelling in rural or urban, socio-economic status, educational status influences the academic aspect of the children. The present study is unique to explore how far the health status and self-esteem has its impact in the academic achievement of high school students. Therefore, the significance of the study is to find out the relationship between health status and self-esteem of high school students.

Conclusion

The investigator feels that far reaching conclusions could not be arrived at. As discussed earlier the present study has attempted to find out the self-esteem and health status towards high school students of Paramakudi District. It has also aimed to find out the difference in the school students in terms of personal variables namely sex, medium of instruction, locality of school, type of family, nature of school, type of school, fathers education, mothers education, fathers occupation and mothers occupation.

Education Implifications

The study shows that the govt. school students in High school level have more self-esteem than private school students. So programs should be conducted for inculcating esteem among private school students also. Various community programs like interschool debates, interschool seminars and state seminars are to be implemented in private schools and encourage the students to participate in these.

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A STUDY ON CONSTRUCTION AND EFFECTIVENESS OF ENGLISH WRITING COMPETENCY AMONG HIGHER SECONTARY SCHOOL STUDENT IN MADURAI DISTRICT

[1] R.M. Kavitha
[2] K. Murugeswari

Abstract

This study aims of assessing the effectiveness of writing competency development programmer among the higher secondary student. It is to discuss how one can write effectively. Writing as a skill of language is crucial not only to the academic but also to other people in various professions. Because of the importance of the written medium as a means of communication. The need therefore Aries for teaching the various ways and strategies by which writing can be effectively actualized. Writing is one of the central pillars of language learning and should be of major interest and concern to teachers, students, and researchers. Recent studies suggest that several aspects of modern tutorial device could make the subject matter intrinsically worth some other studying indicate the motivation to learn particular subjects can be increased by using programmed.

Introduction

The practice of English language teaching is markedly different from that of other subjects. While the teaching of these other subjects is content_based.the teaching of English is skill based. In fact, the four basic language skills_Listening, seeking, Reading and writing should be imparted to the learners and practiced often for a proficient grasp of the English language, native or foreign. It is a common experience, including mine as a teacher that many students of English language can read understand English, but they cannot write English to satisfactory level. Due to poor understanding some students particularly the average and slow learners find difficulties in understanding /writing the structural usage in English language. The English grammar is one area which challenges to average and slow learners. It is therefore essential that practice and training in writing skill should be provided to learners to facilitate the teaching _learning process.

Need and Significance of the Study

The research mainly concerned for guided writing to improve writing skill. The result of the study definitely expected to gain importance both theoretically and practically to the higher secondary school student. Theoretically the result of this result will be beneficial as verification of applying of theory pursuant to problems faced namely improving writing skill and using guided writing to the higher secondary school student. practically, the findings of presents study are meant to provide educational beneficial to English teacher, the finding of the present study are meant to provide educational feedback. This study also expected to give information on teaching and learning process especially to the teacher in the teaching descriptive paragraph to encourage the students to make and perform their ability in English writing. The result of present study can be used to basic to increase and develop their knowledge about writing by applying writing as one of the effective way. This study is expected that the students will be more motivated to increase their motivation, describe and interesting learning and writing and improve their English writing skill in mastering descriptive paragraph. Thus the students will enjoy learning language and develop the positive attitude to learning writing resulting in the improvement of writing mastery.

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Objectives of the Study

1. To find out the level of construction and effectiveness of English writing competency among higher secondary students with respect to gender.
2. To find out the level of construction and effectiveness of English writing competency among higher secondary students with respect to age.
3. To find out the level of construction and effectiveness of English writing competency among higher secondary students with respect to medium of instruction.

Hypothesis Formulated of the Study

- There is no significant difference between construction and effectiveness of English writing competency among higher secondary students in terms of Gender
- There is no significant difference between construction and effectiveness of English writing competency among higher secondary students in terms of Age
- There is no significant difference between construction and effectiveness of English writing competency among higher secondary students in terms of Medium of Instruction

Method Adopted for the Study

The investigator has adopted survey method of research to find out the "a study on construction and effectiveness of English writing competency among Higher secondary school student in Madurai district".

Survey Method

Survey method is mostly devoted to the study characteristics of the populations under investigations. This type of research has the advantage of greater scope in the sense that a large volume of information can be collected from a very large population.

Samples for the Study

The investigators have randomly selected for the present study, the investigator has stratified used only selected 200 higher secondary school students from 10 schools in Madurai district area through stratified random sampling technique.

Tools Used for the Present Study

The investigator used the tool for study is "*A Study on Construction and Effectiveness of English Writing Competency among Higher Secontary School Student in Madurai District*" by Marquette University (2021)

Hypothesis 1

There is no significant difference between construction and effectiveness of English writing competency among higher secondary students in terms of Gender

Table 1: Difference between construction and effectiveness of English writing competency among higher secondary students in terms of Gender

Gender	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Female	125	75.31	11.325	0.55	1.96	Not Significant
Male	75	76.11	6.532			

The table shows that the computed 't' value 0.55 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference between construction and effectiveness of English writing competency among higher secondary students in terms of Gender When we compare the mean scores, Male students are better than the Female students

Hypothesis No 2

There is no significant difference between construction and effectiveness of English writing competency among higher secondary students in terms of Age.

Table 2 : Difference between construction and effectiveness of English writing competency among higher secondary students in terms of Age

Age	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
17 Years	46	75.57	5.920	0.035	1.96	Not Significant
16 Years	154	75.62	10.699			

The table shows that the computed 't' value 0.035 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference between construction and effectiveness of English writing competency among higher secondary students in terms of Age. When we compare the mean scores, Above 18 year's students are better than the Below 17 year's students.

Hypothesis No.3

There is no significant difference between construction and effectiveness of English writing competency among higher secondary students in terms of Medium of instruction

Table 3: **Difference between construction and effectiveness of English writing competency among higher secondary students in terms of Medium of instruction**

Medium of Instruction	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Tamil	169	75.91	10.325	0.966	1.96	Not Significant
English	31	74.00	6.011			

The table shows that the computed 't' value 0.966 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference between construction and effectiveness of English writing competency among higher secondary students in terms of Medium of instruction When we compare the mean scores, English medium students are better than the Tamil medium students.

Conclusions

The present findings are derived from the empirical data collected by the Investigator. Based on the findings of the related studies and the findings of the present study. The investigator feels that far reaching conclusions could not be arrived at. As discussed earlier the present study has attempted to find out the effectiveness of English writing competency of school students of Madurai District. It has also aimed to find out the difference in the school students in terms of personal variables namely age, gender, area of living, type of school, nature of school, father education, mother education and the medium of instruction

Finding of the Study

After processing the data, the investigator found out the following as findings of the study

1. There is no significant difference between scientific attitudes among high school students in terms of Gender. Hence hypothesis is accepted.
2. There is no significant difference between scientific attitudes among high school students in terms of locality. Hence hypothesis is accepted

3. There is no significant difference between scientific attitudes among high school students in terms of school location. Hence hypothesis is accepted

Educational Implications of the Study

It has been found that school students are having more attitude effectiveness of English writing competency in schools. The study has got an educational implication that attitude plays a vital role of school students in their learning methodologies.

The study has shown that there were differences among school students in their attitude in terms of medium of instruction

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A STUDY ON EMOTIONAL COMPETENCE AMONG HIGH SCHOOL TEACHERS IN MADURAI DISTRICT

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Abstract

In this research article, an attempt was made to identify significant correlates and critical predictors of emotional competence. A large number of researches were examined. The significant correlates and predictors of emotional competence emerged as mental health, social behaviour, maladjustment, forgiveness, happiness, adolescent risky behavior, well-being, emotional abilities, self- efficacy, empathy, life satisfaction, social support, resilience, psychopathology, risk behaivours and self-esteem. Though, age, gender, type of school, working & non-working conditions and residential locality from demographic perspective emerged as significant correlates and predictors.. The results compiled in the article will help the research professionals to visualize significant correlates and predictors in summative form.

Keywords: *emotional competence, mental health, social behaviour, resilience, well being.*

Introduction

In psychology, emotion is a generic term to subjective and conscious experience. It includes a wide range of observable behaviors expressed feelings and changes in the body state. For most of us, emotions are very personal states, which are unconscious to use. It is often the driving force behind the motivation; positive or negative. The word _Emotion' includes broad repertoire of perceptions, expressions of feeling and bodily changes.

Need and Importance of the Study

Studies show that emotion is part of human individual as well as social life. It emerges along with the development of human life. It is one of the major aspects of human existence. Psychologist like Morgan emphasises that emotions are basic, primeval forces of great power and influence designed by nature to enable the organism to cope with circumstances which demand the utmost effort for survival or success or to add colour and spice to our living (Chauhan, 2010). It is obvious that Emotion enhances creativity and beauty in human activities of everyday life

Objectives of the Study

- To find out conduct descriptive analysis of data with respect to various variables viz. emotional competence of the present study.
- Level of Emotional competence among high school teachers in Madurai district is High
- To find out the significant difference among High school teachers in their Emotional competence in terms of Gender

Hypothesis Formulated for the Study

- There is no significant conduct descriptive analysis of data with respect to various variables viz. emotional competence of the present study.
- Level of Emotional competence among high school teachers in Madurai district is High
- There is no significant difference among High school teachers in their Emotional competence in terms of Gender

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Terms and Definitions

Emotional competency: refers to "a person's ability to express or release his/her feelings (emotions).

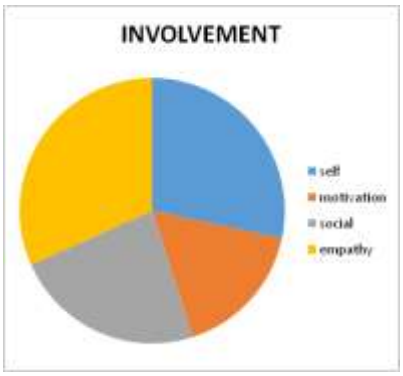
High School teacher: High School teacher according to 9th and 10th standard.

Hypothesis 1

There is no significant conduct descriptive analysis of data with respect to various variables viz. emotional competence of the present study.

Table 1 Variables of Emotional Competence

S.NO	Variables	Involvement
1	Self-regulation	**85**
2	Motivation	**50**
3	Empathy	**70**
4	Social skills	**95**

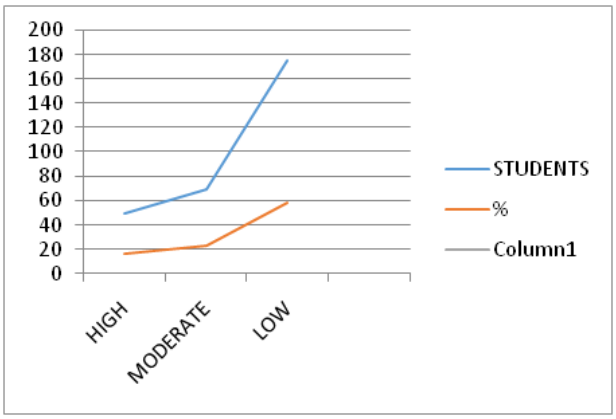


Hypothesis No:2

Level of Emotional competence among high school teachers in Madurai district is High

Table 2 Levels of Emotional Competence

S.No	Level	Student	%
1	High	50	16.6
2	Moderate	70	23.3
3	Low	175	58.3
		300	100

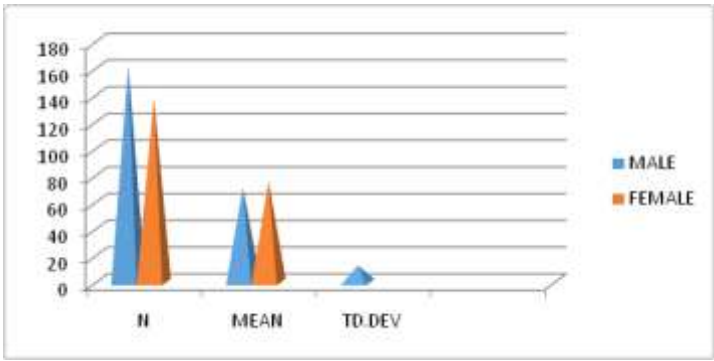


Hypothesis No:3

There is no significant difference among High school teachers in their Emotional competence in terms of Gender

Table 3: Mean, S.D and 'T' Value for the Significant Difference Emotional Competence in Gender

Gender	N	Mean	Standard deviation	Calculated 't' value	Table value at 5% level	Remarks
male	162	70.765	12.4887	3.445	1.96	significant
female	138	75.898	13.3001			



Educational Implications

Research efforts would become meaningful if its educational implications are specified clearly. On the basis of findings of the present study, following educational implications.

Conclusion

The present findings are derived from the empirical data collected for the present study. Based on the attempts made by the investigator and the review of the related studies, the investigator feels that far reaching conclusions could not be arrived at. As discussed earlier, the present study attempted to find out "**A Study on Emotional Competence among High School Teachers in Madurai District".**

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A STUDY ON ROLE OF TEACHER AND ACADEMIC ACHIEVEMENT AMONG HIGHER SECONDARY SCHOOL STUDENTS IN MADURAI

[1] M. Sangeetha Vani
[2] C. Meenambal

Abstract

The present study aims to find out the relationship between problems face in teaching science among high school student in matric school. Three hundred high secondary students were randomly selected as sample . Survey method was adopted for the study .The data was collected using a test on the role of teacher and their motivation towards higher secondary children .The t- test chi- square test and person's product moment correlation were applied to test hypothesis . Interpretation were drawn based on the finding.

Introduction

Education is a person's judgment about being able to perform a particular activity . It is a student's "I can " 0r " I cannot" belief .Unlike self –esteem , which reflects how students feel about their worth or value . Education reflects how confident students are about performing specific tasks. High Education in one area may not coincide with high Education in another area. Just as high confidence snow ski-nag many not be matched with high confidence in baseball, high Education in mathematics does not necessarily accompany high Education in spelling . Education is specific to the take being attempted . However , having high motivation in mathematics does not necessarily accompany high motivation in spelling. Motivation is specific to the task being attempted . However having high motivation does not necessarily mean that students believe they will be successful. While motivation indicates how strongly students believe they have the skills to do well, they may believe other factors will keep them from succeeding.

Need and Importance of the Study

Students Education is associated with positive behaviours and it is to successful outcome .Successful education can only be assured through students who have acquired necessary knowledge is indispensable and skills. Students Education or belief in their capacity to study efficiency is a significant factor determination successful education.

Student have to be very active, alert, energetic, enthusiastic and dynamic They must possess deep understanding reasoning power, power of discrimination, originality, imagination, memory, tract fullness, and emotional stability.

Motivation is very essential to attain and realize the above mentioned responsibility by the students.

Objectives of the Study

1. To find out the level of Education among School students.
2. To find out the differences in the level of Education among School students in terms of gender, location of residences location of the college , nature of the institution , parents qualification and parents monthly income.

Hypothese Formulated for the Study

1. There is a positive significant relationship between motivation and academic achievement among higher secondary students.
2. Higher secondary students have average level of motivation and academic achievement.

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[2] *Assistant Professor, Mangayarkarasi College of Education for Women, Madurai*

3. There is a significant influence on motivation and Academic achievement among higher secondary student in term of Gender.
4. There is significant influence on motivation and academic achievement among the higher secondary students in term of Religion.
5. There is significant influence on motivation and academic achievement among the higher secondary students in term of Father's Education

Terms and Definitions

The investigator views of the key terms in the present study are as: Education

It refers to the belief about one's ability to achieve goals and to overcome obstacles in daily living.

Hypothesis -1

(Ho): There is no significant difference in the level of role teacher between the male and female students of school.

Table 1 Difference in the level of role of teacher between the Male and Female students in School

Sex	N	Mean	S.D	t- Value	Level of significant
Male	14	104.93	16.193	2.134	Significant
Female	286	114.44	16.286		

Hypothesis -2

(Ho): There is no significant difference in the level of role of teacher education between the rural and urban residence of school.

Table 2 Difference in the Level of Rule of Teacher Education between the Rural and Urban Residence of School

Location of residence	N	Mean	S.D	t- Value	Level of significant
Rural	133	112.70	15.840	1.137	Not significant
Urban	167	114.95	16.780		

Findings of the Study

1. It can be interpreted that the majority of teacher at high school in Madurai district are facing high level of problem in teaching in matric schools. Hence the hypothesis 1 is rejected .
2. It is interpreted that there is no significant difference in the problems face in teaching science among high school students in matric school with respect to gender . Hence the hypothesis 2 is accepted.

Conclusion

It Madurai Matric high school teachers are facing problem in teaching science in moderate level . Based up the teaching's interest in teaching science and their qualification the problem the facing level are varied.

Education Implications

Role of teacher essential for achievement.

Step should be taken by the education institution and it should strive to develop a strong sense of role of teacher in the students.

1. The institution should create a conductive climate for mastery experiences by giving challenging tasks according to their ages and ability level.
2. Guest lectures by eminent successful personalities in different walks of life can be arranged and thus provide opportunity for social modeling.
3. The school have counseling centers so that students can get individual personal counseling.
4. Seminars and talks on role of teacher should be frequently arranged.
5. Parents may be given education on motivating their wards.
6. In order to improve the role of teacher of the students group activities, tour, seminar, group discussions and sports should be regularly arranged.
7. Encourage the students to participate in both intra and inter school competitions.
8. Leadership training programme, stress management, training programme may be given to be students to face adverse situations.
9. Various psychological test could be conducted and help the students to grow.
10. School should provide with quality and effective education.

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A CRITICAL ANALYSIS OF THE TEACHERS ATTITUDE TOWARDS TEACHING ENGLISH AMONG B.ED STUDENT-TEACHERS IN MADURAI

[1] G. Manonmani
[2] Dr. M. Arockia Pricilla

Abstract

The survey is all about teachers attitude towards students while teaching the English language it says all the positive and negative attitudes felt by the students during their English classes.

Introduction

The present study is a survey in nature to find out "Teachers attitude towards teaching English among B.ED student teachers." The investigator in order to find out the attitude of the teachers among student teachers. The tool was administered to the sample selected for the study. A teacher's part involves further than simply standing in front of a classroom and lecturing. In fact, indeed though a teacher spends the maturity of the day in the . classroom, the factual tutoring element is only part of the job. An effective teacher understands that tutoring involves wearing multiple headdresses to insure that the academy day runs easily and all scholars admit a quality education

Need for the Study

We live in the world of educational world where morality is seen as a necessary, positive personal character teaching English with good grammar is not at all an easy task for teachers it is a everyday task to handle all sort of students in equal way. On that case attitude of the teacher plays a major role positive attitude towards students will make the students to acquire correct knowledge about language.

As a teacher of English the investigator has observed numerous occasions the discomfort experienced by the students who are attempting to acquire and produce a foreign language. On that case how a teacher should handle herself during her teaching should be mainly focused. The investigator's personal observation have been supported in this study.

Objectives of the Study

The study has formulated the following objectives:

- To find out significant difference of teacher's attitude towards teaching English to B.Ed First year Student-Teachers on teaching the English in terms of Gender.
- To find out significant difference of teacher's attitude towards teaching English to B.Ed First year Student- Teachers in terms of Residence.
- To find out significant difference of teacher's attitude towards teaching English to B.Ed First year Student -Teachers in terms of Location.
- To find out significant difference of teacher's attitude towards teaching English to B.Ed First year Student-Teachers in terms of type of college.

Hypotheses Formulated for the Study

The study has formulated the following hypotheses

- There is significant difference of teacher's attitude towards teaching English to B.Ed First year Student-Teachers on teaching the English in terms of Gender.
- There is significant difference of teacher's attitude towards teaching English to B.Ed First year Student- Teachers in terms of Residence

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[2] *Principal , Mangayarkarasi College of Education for Women, Madurai*

- There is significant difference of teacher's attitude towards teaching English to B.Ed First year Student -Teachers in terms of Location.
- There is significant difference of teacher's attitude towards teaching English to B.Ed First year Student-Teachers in terms of type of college

Methodology Overview

The present study is a survey in nature to find out "Teachers attitude towards teaching English among B.ED student teachers." The investigator in order to find out the attitude of the teachers among student teachers. The sample of 150 B.Ed first year students has been collected through random sampling technique.

Standardized tool has been utilized this piece of work was done by survey method. In present study the simple survey method has been used it collects the data from the particular person related to the research.

Hypotheses No:1

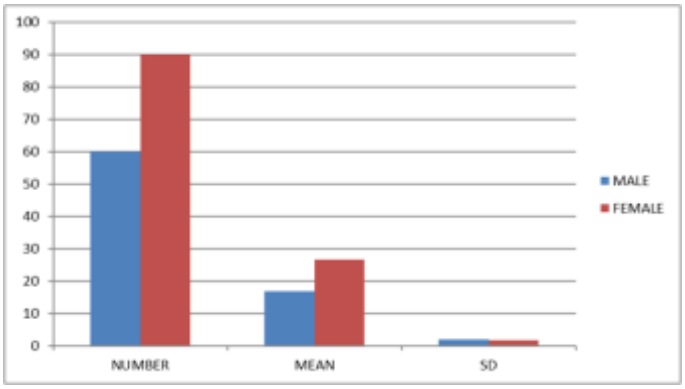
There is significant difference of teacher's attitude towards teaching English to B.Ed First year Student-Teacher son teaching the English in terms of Gender.

Table 1: Difference of teacher's attitude towards teaching English to B.Ed First year Student-Teacher son teaching the English in terms of Gender.

Gender	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Male	**60**	16.81	2.07	**0.069**	**1.96**	Not significant
Female	**90**	26.75	1.90			

The obtained 't' value is 0.069 for male and female gender among B.ED student-teachers. **Hence hypotheses is accepted.**

Figure 1 Shows the Significant Difference among Teaching English in Gender



Hypotheses No:2

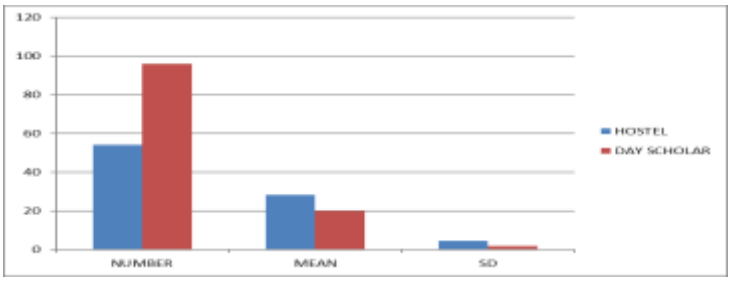
There is significant difference of teacher's attitude towards teaching English to B.Ed First year Student- Teachers in terms of Residence

Table 2: difference of teacher's attitude towards teaching English to B.Ed First year Student-Teachers in terms of Residence

Residence	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Hostel	**54**	28.35	4.39	**1.15**	**1.96**	Not significant
Day scholar	**96**	19.84	3.65			

The obtained 't' value is 1.15 for Hostel and Day scholar Student-teachers. **Hence hypotheses is accepted.**

Figure 2 Shows the Significant Difference among Teaching English Terms of Residence



Hypotheses No:3

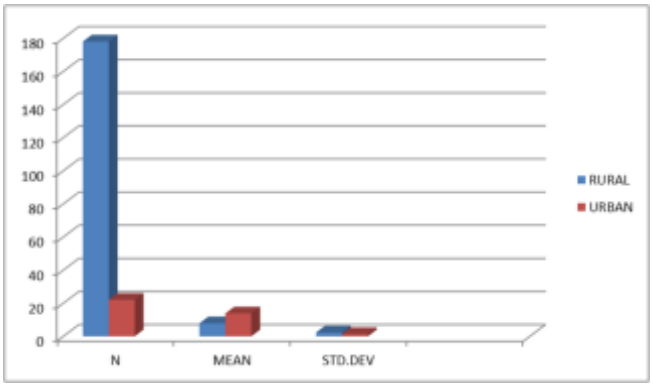
There is significant difference of teacher's attitude towards teaching English to B.Ed First year Student - Teachers in terms of Locality.

Table 3: Difference of teacher's attitude towards teaching English to B.Ed First year Student - Teachers in terms of Locality

locality	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Rural	**59**	26.15	4.11	**1.05**	**1.96**	Notsignificant
Urban	**91**	20.36	3.025			

The obtained 't' value is 1.05 for the students who comes from Rural and urban area. **Hence hypotheses is accepted.**

Figure 3 Shows the Significant Difference Attitude among Teaching English Terms of Locality



Hypotheses No:4

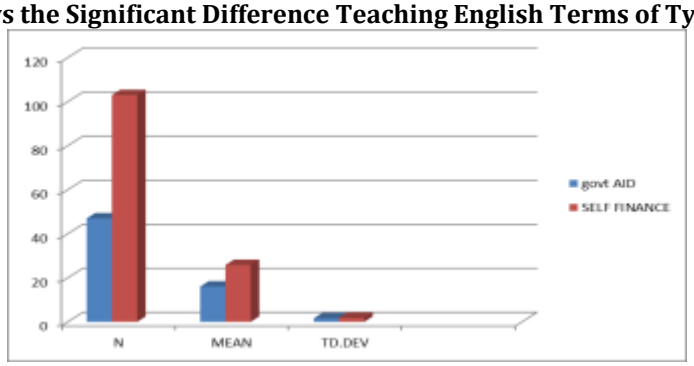
There is significant difference of teacher's attitude towards teaching English to B.Ed First year Student-Teachers in terms of type of college.

Table 4: Difference of teacher's attitude towards teaching English to B.Ed First year Student-Teachers in terms of type of college

Types of college	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Govt aided	47	16.04	1.601	2.30	1.96	Significant
Self finance	103	25.84	2.984			

The obtained 't' value is 2.30 This shows that there is significant difference of teacher's attitude towards teaching English in types of college. **Hence hypotheses is rejected.**

Figure 4 Shows the Significant Difference Teaching English Terms of Types of College



Hypotheses Verification

- There is Non -significant difference of teacher's attitude towards teaching English to B. Ed First year Student-Teachers on teaching the English in terms of Gender hence it is accepted.
- There is Non- significant difference of teacher's attitude towards teaching English to B.Ed First year Student- Teachers in terms of Residence hence it is accepted.
- There is Non-significant difference of teacher's attitude towards teaching English to B.Ed First year Student -Teachers in terms of Location hence it is accepted.
- There is significant difference of teacher's attitude towards teaching English to B.Ed First year Student-Teachers in terms of type of college hence it is rejected.

Conclusion

The present study are derived from the empirical data collected for the present study. Based on the attempts made by the investigator and the review of the related studies, the investigator feels that far reaching conclusions could not be arrived at. As discussed earlier, the present study attempted to find out attitude of the teachers attitude among B.ED students while teaching English language.

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A STUDY ON TROUBLESOME IN ONLINE EXAMINATIONS AMONG HIGHER EDUCATION STUDENTS

[1] A. Subitha
[2] L. Ayyammal

Abstract

The present study is a survey on Troublesome in online examination among higher education students in Madurai district. The investigator has collected related studies from surveys of researches in education and Education Resources Information center website. They have been reviewed and presented here.

Introduction

This study will propose all features and procedures to develop the system. This study particularly containing details about objectives, scope limitation, process model, primary requirements, team development, possible project risks, project schedule, and finally monitoring and reporting mechanisms. Then we will introduce some characteristics of our system and troublesome of Online Examination and in chapter 3 And in chapter 4 we will present the key technology that applied in our system. At last we make a summary on our system and make a brief prospect on the future of the examination system.

Need and Importance of the Study

Nowadays, there is a development of technology in the education system. The education is teaching through online, mobiles, computer, laptop without any direction of the teacher. But in some colleges there is no availability of computers, mobiles, laptop, online even the students are without mobile phones. So, the students are facing difficulties in Online Examination. There is a language problem for the students who came from the poor background in colleges. They cannot understand the language obviously. So it is difficult to attend the online examination. The above mentioned facts motivates the investigator to find out the troublesome in online examination among higher education students. Hence the need for the present study.

Objectives of the Study

1. To find there is a significant difference in troublesome in online examination among higher education students in terms of Gender.
2. To find there is a significant difference in troublesome in online examination among higher education students in terms of nativity.
3. To find there is a substantial difference in troublesome in online examination among higher education students in terms of Residence

Hypothesis of the Study

1. There is a significant difference in troublesome in online examination among higher education students in terms of Gender.
2. There is a significant difference in problematic in online examination among higher education students in terms of nativity
3. There is a significant difference in troublesome in online examination among higher education students in terms of residence.

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Methodology: Overview

This chapter brings out the methodology of the study. It has five sections. The first section servers as an overview of this chapter. The second section gives an account of the problem, its objectives and the hypotheses to be tested. The third section deals with population, the sample and explains the sampling design of the study. The fourth section furnishes the information about the instrumentation. The fifth section provides the statistical methods used in this study.

Hypothesis Verification and Results

1. There is a significant difference in troublesome in online examination among higher education students in terms of Gender- Accepted
2. There is a significant distinction in troublesome in online examination among higher education students in terms of nativity - Accepted
3. There is a significant difference in troublesome in online examination among higher education students in terms of residence- Accepted

Hypothesis 1

Statistical Measures and Results of Test of Significance of Difference between the Means of Troublesome: Gender– Wise

Table1 : Significance of Difference between the Means of Troublesome: Gender– Wise

Variable	Sub-Variable	N	Mean	Std. Deviation	't'-Value	Significance at 0.05 level
Gender	Male	77	31.5143	8.01401	1.256	Not significant
	Female	173	32.6879	5.93430		

It is evident from the above table that the obtained 't' value 1.256 is greater than the table value 1.96 at 0.05 level of significance. This shows that there is a substantial difference in troublesome between male and female students. Hence the, hypothesis 1 is accepted.

Hypothesis 2

Statistical Measures and Results of Test of Significance of Difference Between the Means of Loyalty: Nativity– Wise

Table 2: Significance of Difference Between the Means of Loyalty: Nativity– Wise

Variable	Sub-Variable	N	Mean	Std. Deviation	't'-Value	Significance at 0.05 level
Nativity	Rural	159	32.1258	6.36221	0.727	Not significant
	Urban	91	32.7738	7.06144		

It is evident from the above table that the obtained 't' value 0.727 is lesser than the table value 1.96 at 0.05 level of significance. This shows that there is a significant difference in troublesome between the rural and urban students. Hence, hypothesis 2 is accepted.

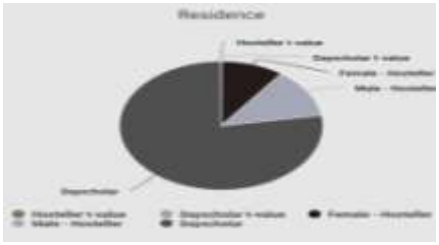
Hypothesis 3

Statistical Measures and Results of Test of Significance of Difference Between the Means of Troublesome: Residence– Wise

Table 3: Significance of Difference Between the Means of Troublesome: Residence– Wise

Variable	Sub-Variable	N	Mean	Std. Deviation	't'-Value	Significance at 0.05 level
Residence	Day scholar	194	32.3608	6.22661	0.052	Not significant
	Hosteller	56	32.3061	8.00314		

It is evident from the above table that the obtained 't' value 0.052 is lesser than the table value 1.96 at 0.05 level of significance. This shows that there is a significant difference in troublesome between the students those who are day scholars and hostellers. Hence, hypothesis 6 is accepted.



Conclusion

The present study has been undertaken to provides a report of Troublesome in online examination among higher education students with specific reference to the district 'Madurai'. The findings and conclusions of the study can be generalized to a greater extent.

Education Implecation

The present study has adequately dealt with troublesome in Online Examination among higher education students. The findings of the study are likely prone of importance to the higher education students. One of the implications of the present conclusion for teacher education and policy makers is that, Today, Online Examination System is considered a fast-developing examination method because of its accuracy and speed. It is also needed less workforce to handle the examination. Almost all organizations today, are managing their exams by online examination system, since it reduces student's time in studies. Institutions can also easily monitor the progress of the student that they give through an examination. Online examination system helps educational institutions to monitor their students and keep eyes on their progress. Even though certain independent variables, exerts a significant influence on Troublesome in Online Examination among Higher Education Students.

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A STUDY ON ENVIRONMENTAL ETHICS AND SCIENTIFIC ATTITUDE AMONG HIGH SCHOOL STUDENTS

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[2] K. Murugeswari

Abstract

The human beings of the express changing world need to develop a sense of ethics to preserve the environment as the world suffers from serious environmental threats. A study was manage on 200 high school students to find their environmental ethics. The result of the study disclose the average level of environmental ethics among the high school students. Further, a significant difference was found among them about Subject of Study, Management of School, and Type of Family, but no important difference was found with respect to Gender.

Scientific view is the most important outcome of science teaching and which enables us to think reasonable. It is the combination of many standard and virtues which is give back through the behavior and action of the person. The researcher has adopted survey method for the study. A sample of 200 high school students is selected by using simple random technique in Madurai district.

Introduction

The present study titled "**A Study on Environmental Ethics and Scientific Attitude among High School Students** is a descriptive and correlation study. The investigator made an attempt to find out the relationship and interaction between Environmental Ethics, Scientific Attitude towards high school students. Sustainability can be achieved through Education. Education and training are considered as the important keys towards sustainability.

Environment, society and economy are three components of Sustainable Development. The social and environmental fields are unavoidable and economic development is acceptable. Hence, the study considers thinking about a future balancing economic, societal and environmental sustainability in terms of development and improved quality of life.

Significance of the Study

Economic, social and environmental conditions play an essential role in Sustainable Development. Only if the proper ecosystem is maintained it is possible to maintain a better society and economic development for the future generation. The ultimate boundary for Sustainable Development is environmental dimension. Within the boundary of ecosystem the social dimension is to meet the basic needs of all the people.

Objectives of the Study

1. To find out the level of environmental ethics and scientific attitude among high school students concerning Gender.
2. To find out the level of environmental ethics and scientific attitude among high school students with respect to medium of instruction.
3. To find out the level of environmental ethics and scientific attitude among high school students concerning school location.

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Hypothesis Formulated for the Study

1. There is no significant difference between scientific attitude among high school students in terms of Gender
2. There is no significant difference between scientific attitude among high school students in terms of locality.
3. There is no significant difference between scientific attitude among high school students in terms of school location.
4. There is no significant difference between environmental ethics among high school students in terms of Gender
5. There is no significant difference between environmental ethics among high school students in terms of locality.
6. There is no significant difference between environmental ethics among high school students in terms of school location.

Method Adopted for the Study

The investigator has adopted a survey method of research to find out the "A Study on Environmental Ethics and Scientific Attitude Among High School Students".

Survey Method

Survey method is mostly devoted to the study characteristics of the populations under investigation. This type of research has the advantage of greater scope in the sense that a huge volume of details can be collected from a huge population.

Samples for the Study

The investigators have randomly selected for the present study, the investigator has stratified used only selected 200 school students from 6 schools in Madurai district area through stratified random sampling technique..

Tools Used for the Present Study

The investigator used the device for study is "***A Study on Environmental Ethics and Scientific Attitude Among High School Students*** " by Leonilla Menezes **(2018)**

Hypothesis No. 1

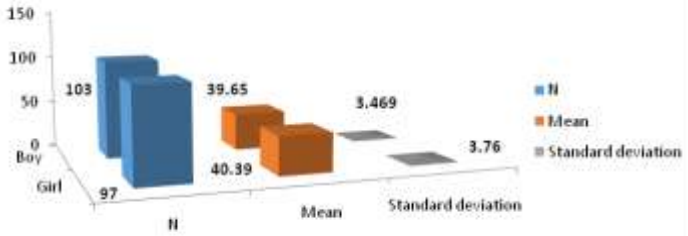
There is no significant difference towards Scientific **view** between gender among high school students.

Table 1 'T' Values Towards Scientific Attitude Between Gender Among High School Students

Gender	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Boy	103	39.65	3.469	1.450	1.96	Not Significant
Girl	97	40.39	3.760			

The table shows that the computed 't' value 1.450 is less than table value 1.96 at 0.05 level. Accordingly, the null hypothesis is to be **taken.** Hence it can be said that there is no significant difference towards Scientific Attitude between Sex among high school students. When we compare the mean scores, Girls are better than Boys in Scientific Attitude.

Figure 1 Bar Diagram Shows the Difference Towards Scientific Attitude Between Gender Among High School St



Hypothesis No. 2

There is no significant difference in Scientific **view** between Medium of Instruction among high school students.

Table 2 'T' Values Towards Scientific Attitude Between Medium of Instruction Among High School Students.

Medium of Instruction	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Tamil	79	39.42	3.761	1.88	1.96	Not Significant
English	121	40.40	3.492			

The table shows that the computed 't' value 1.88 is less than table value 1.96 at 0.05 level. Hence, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference towards Scientific Attitude between Medium of Instruction among high school students. When we compare the mean scores, English Students are better than the Tamil Students in Scientific Attitude.

Hypothesis No. 3

There is no significant difference towards Scientific Attitude between Locality of School among high school students.

Table 3 'T' Values Towards Scientific Attitude Between Locality of School Among High School Students

Locality of School	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Rural	93	39.72	3.760	1.054	1.96	Not Significant
Urban	107	40.26	3.498			

The table shows that the computed 't' value 1.054 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference towards Scientific Attitude between Locality of School among high school students. When we compare the mean scores, Urban Students are better than the Rural Students in Scientific Attitude.

Hypothesis No. 4

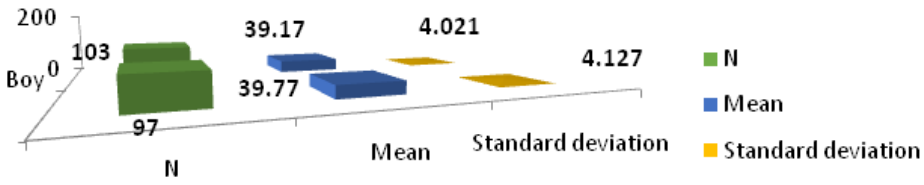
There is no significant difference towards Environmental Ethics between Gender among high school students.

Table 4 'T' Values Towards Environmental Ethics Between Gender Among High School Students

Gender	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Boy	103	39.17	4.021	1.039	1.96	Not Significant
Girl	97	39.77	4.127			

The table shows that the computed 't' value 1.039 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference towards Environmental Ethics between Sex among high school students. When we compare the mean scores, Girls are better than the Boys in Environmental Status.

Figure 4 Bar Diagram Shows the Difference Towards Environmental Ethics Between Gender Among High School Students



Hypothesis No. 5

There is no significant difference towards Environmental ethics between Medium of Instruction among high school students.

Table 5 'T' Values Towards Environmental ethics Between Medium of Instruction Among High School Students

Medium of Instruction	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Tamil	79	38.80	4.112	1.874	1.96	Not Significant
English	121	39.90	4.005			

The table shows that the computed 't' value 1.874 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference towards Environmental Ethics between Medium of Instruction among high school students. When we compare the mean scores, English Students are better than the Tamil Students in Environmental Status.

Hypothesis No. 6

There is no significant difference towards Environmental ethics between Locality of School among high school students.

Table 6 'T' Values towards Environmental ethics Between Locality of School Among High School Students

Locality of School	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Rural	93	38.94	3.980	1.722	1.96	Not Significant
Urban	107	39.93	4.116			

The table shows that the computed 't' value 1.722 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference towards Environmental Ethics between Locality of School among high school students. When we compare the mean scores, Urban Students are better than the Rural Students in Environmental Status

Conclusion of the Study

Different countries around the world considered the need for education to achieve sustainability. But only few programmes have been made at any level. The low progress may be due to a lack of vision for awareness or due to lack of policy or funding, which lead to lack of participations in solving environmental problems. In order to attain sustainable present and future, we have to create awareness and also enhance the participation of not only students but all the people living on the earth. For this the people should have a commitment and concern towards their environment.

Finding of the Study

After processing the data, the investigator found out the following as findings of the study

1. There is no significant difference between scientific attitude among high school students in terms of Gender. Hence hypothesis is accepted.
2. There is no significant difference between scientific attitude among high school students in terms of locality. Hence hypothesis is accepted
3. There is no significant difference between scientific attitude among high school students in terms of school location. Hence hypothesis is accepted
4. There is no significant difference between environmental ethics among high school students in terms of Gender. Hence hypothesis is accepted
5. There is no significant difference between environmental ethics among high school students in terms of locality. Hence hypothesis is accepted
6. There is no significant difference between environmental ethics among high school students in terms of school location. Hence hypothesis is accepted

Educational Implications of the Study

Environmental Ethics is desirable for the teachers to enable them in implementing the strategy and designing the curricular experiences to attain the stipulated goals of environmental education.

Scientific Attitude plays a major role in science education and in the lives of students pursuing science education. The basic education and curriculum in the country had undergone several changes primarily to address the issues on quality and relevance.

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A STUDY ON THE AWARENESS ABOUT LEARNING DISABILITY AMONG THE PRIMARY TEACHERS IN MADURAI CITY

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Abstract

The study attempts to investigate the knowledge and awareness about learning disability among primary teacher. The study has been conducted in Madurai city, Tamil nadu. Awareness about learning disability is very much needed among teachers. In this simple survey research 200 primary class teachers from 13 schools were surveyed based on simple random sampling. The study found an average level of knowledge and awareness about learning disability among teachers of primary schools.

Introduction

Teachers play an important role in any educational system. At the primary level the teachers should play a vital role in identifying children with LD. The right type of teacher with right type of knowledge and ability or capability can do better justice to the children with ld than teacher with general pedagogy background. These students may need arrangement in some classroom activities, and exams. Making the child aware of a disability is great service to the child. The right type of teacher with right type of knowledge and ability or competencies can do better justice to the children with Learning Disability than teacher with general pedagogy backgrounds.

Need and Importance of the Study

The movement towards more overall settings for children with disabilities is now gaining strength and it has become increasingly important to realize how general education teachers understand the academic issue of these children. The largest groups of children with disorder in special education programs are those with learning disabilities. But many students with LD are admitted in normal schools and they fail to succeed in their education and eventually quit school early. If these disabilities are not recognize, unnoticed, and ignored and such children's need are not met in regular classrooms or special education within the school, we cannot fulfill the aim of universalization of elementary education and correspondence of educational opportunity. Studies depicts that the level of awareness about learning disability among the primary school is low. A study to assess the level of awareness about learning disabilities among primary school teachers, to study the influential factors that determine the level of awareness, to suggest remedial measures to the teachers for handling children with learning disabilities is a need of the hour.

Objectives of the Study

1. To find the Percentage of awareness level about Learning Disability among primary teachers.
2. To find out the level of awareness about Learning Disability among the primary teachers of Government and private schools.
3. To find out the significant differences on the level of awareness about Learning Disability among the primary teachers in terms of gender.
4. To find out the significant differences on the level of awareness about Learning Disability among the primary teachers in terms of the education program done.

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[2] *Assistant Professor, Mangayarkarasi College of Education for Women, Madurai*

Hypotheses Formulated for the Study

1. The percentage of awareness level about Learning Disability among primary teachers is average.
2. There is no significant difference on the level of awareness about Learning Disability among the primary teachers of Government, and Private schools.
3. There is no significant differences on the level of awareness about Learning Disability among the primary teachers in terms of gender.
4. There is no significant differences on the level of awareness about Learning Disability among the primary teachers in terms of the education program done.

Methodology

The investigator has gathered data from 200 primary class teachers from Government and private schools in Madurai District by simple random sampling method. The researcher developed a questionnaire to assess the level of awareness and about learning disabilities among teachers of primary classes.

Findings

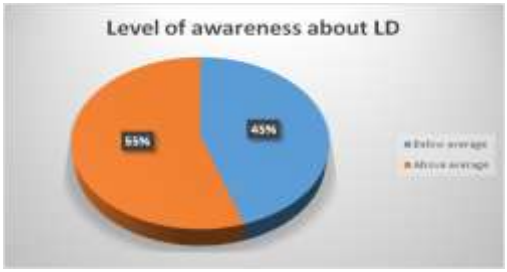
Hypothesis 1

The percentage of awareness level about Learning Disability among primary teachers is average.

Table 1: Awareness level about Learning Disability among primary teachers is average

S.No.	Level of awareness	Responses	Percentage
1.	Below Average	90	45%
2.	Above Average	110	55%

The study shows an average level of knowledge and awareness about learning disability among teachers of primary schools.



Hypothesis 2

There is no significant difference on the level of awareness about Learning Disability among the primary TEACHERS of Government, and Private schools.

Table 2: Difference on the level of awareness about Learning Disability among the primary Teachers of Government, and Private schools.

No.	Sub Variables	N	Mean	SD	't'	Level of Significance
1.	Government	74	61.86	4.983	2.879	Significant
2.	Private	126	59.61	5.547		

There is a difference between the government school and private schools primary teachers regarding awareness about learning disability.

Hypothesis 3

There is no significant differences on the level of awareness about Learning Disability among the primary teachers in terms of gender.

Table 3: **Differences on the level of awareness about Learning Disability among the primary teachers in terms of gender**

No.	Sub Variables	N	Mean	SD	't'	Level of Significance
1.	Male	74	61.86	4.983	2.879	Significant
2.	Female	126	59.61	5.547		

The primary teacher's awareness about learning disability differs in term of gender group.

Hypothesis 4

There is no significant differences on the level of awareness about Learning Disability among the primary teachers in terms of the education program done.

Table 4: **Differences on the level of awareness about Learning Disability among the primary teachers in terms of the education program done**

No	Sub Groups / Personal Variable	N	Mean	S.D.	't'	Level of Significance
1.	D.El.Ed	40	61.98	5.753	1.710	Not Significant
	B.Ed	112	60.22	5.492		
2.	B.Ed	112	60.22	5.492	.610	Not Significant
	None	48	59.69	4.904		
3.	D.El.Ed	40	61.98	5.753	1.985	Significant
	None	48	59.69	4.904		

There is a difference in the level of awareness about learning disability among the teachers with D.El.Ed and teachers with no educational program qualification

Conclusion

From the perusal of the present findings the following conclusions can be drawn from the differential studies. They are, there is a difference in awareness level based on the type of school the teacher works, the gender and qualification of the teacher. The study also shows an average level of knowledge and awareness about learning disability among teachers of primary schools.

Educational Implication

The awareness about learning disability is very much needed among the teachers. It is especially very important among the primary teachers, as the children with learning disability are to be identified at their early stages and be provided with necessary support in his environment both at school and at his home. It is advisable for the school management to give an overall awareness about learning disability, and trainings on managing inclusive classroom teaching.

A STUDY ON ATTITUDE TOWARDS AN ACTIVE LEARNING AMONG SCHOOL STUDENTS IN MADURAI

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Abstract

Active learning is a student's functional impact on learning and participation in the learning process, which allows students to focus on developing knowledge with a focus on skills such as scientific thinking, problem-solving and meta-cognitive activities that extend students' thinking. The primary desire of this study is to determine whether there is a significant difference in the attitude scores of the active learning group. "Pretest-posttest control group design" has been used within the study. The subjects of the groups have been 10th grade students in the schools in Madurai city. Two similar classes have been formed by analyzing average scores from pretest and pre-attitude and have been randomly selected as experimental and control groups, respectively. While the education program and course materials have been prepared and utilised about the active learning method. There has been a significant difference in their attitude toward active learning at the end of the study.

Introduction

Active learning is not a new concept. The roots of active learning can be traced back to Confucius (551-479 BC), who stated, ''I hear and I forget. I see and I be sure. I do and I understand''. Socrates (470-399 BC) had similar views when he said that ''I cannot teach anybody anything. For over fifty years, educators in the social studies field have been advocating active learning in the classroom. Dewey (1938) argued that ''there is an intimate and necessary relation between the processes of experience and education''.

When you observe most social studies classrooms today, probably you see a teacher lecturing and students listening (or pretending to listen) and taking notes. The problematic thing with teaching an active learning lesson is that you are sort of locked into covering a certain amount of time and it is complicated to focus on any one topic for any length of time. So you deal with things so apparently. Other effort of teaching with active learning are difficulties in managing students and noise.

Active learning is anything course-related that all students in a class assemble is called upon to do than simply watching, listening and taking notes (Sabag and Kosolapov, 2012). Turkey has been known for its fulfilment in educational reform over the past three decades. Radical changes happen in education programs due to the dynamic and new practices forced by the Ministry of National Education in 2005, the body responsible for primary, secondary and high schools in Turkey. These improvements alter the content and practices of programs by emphasising student-centred learning.

Active learning has received considerable awareness over the years. Active learning was often organised as a radical change from the traditional direction (Prince, 2004)., Active learning is learning speak in which students take over their learning responsibility, alternative review and evaluation methods are used, practical knowledge is taken place at the end of the process, and students are active in every step of the learning process.

Need and Importance of the Study

The purpose of the study is to determine whether there is a significant difference in the attitude of the school students towards the applied active learning approach.

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Objective of the Study

There has been found a significant difference in the attitude scores of the group to which the active learning approach has been applied. There has been a extensive change in the attitudes of the students. This change indicates that the dynamic learning approach is practical in teaching lessons and positively improves the students' attitude towards the task. This result takes a resemblance to some studies in the literature. Aydede The students to which this learning method was applied were able to learn English in a more entertained way than others. The active learning method students stated was English as an easy-to-learn and entertaining lesson.

This result of the analysis differs from some studies in the literature. According to the study results, it has been confirmed that the active learning approach has a significant effect on students' attitudes towards the school students.

Hypotheses Formulated for the Study

- There is a significant difference in attitude toward active learning among their genders.
- There is a significant difference between attitude toward active learning among their age.
- There is a significant difference between attitude toward active learning in their residing place.
- There is a significant difference between attitudes toward an active learning among their type of schools.
- There is a significant difference between attitude towards an active learning among their medium of instruction.
- There is significant difference between attitude towards an active learning among their social status.

Methodology

This chapter brings out the methodology of the study. It has six sections. The first section serves as an review of this chapter. The second section gives an account of the problem, its objectives and hypotheses to be tested. The third section deals with population, the sample and explains the specimen design of the study. The fourth section furnishes the information about the instrumentation. The fifth section provides the statistical techniques used in this study.

Hypothesis Testing

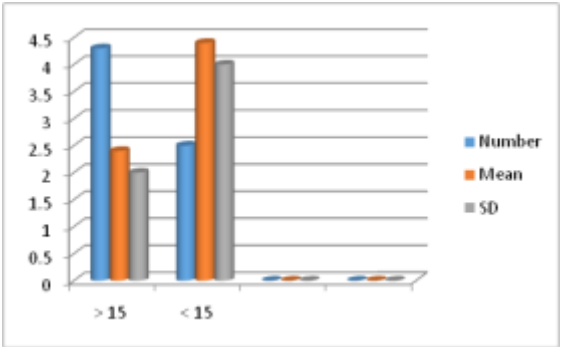
Hypothesis 1

Table 1 Shows The Scores of an Attitude of Active Learning in Terms of Age

S.No	Age	N	M	SD	't'	Critical Value	Level of Significance
1.	Below 15	260	3.00	0.452	6.121	1.960 for df 350 at 0.05 level	Significant
2.	Above 15	90	3.265	0.297			

It is evident from the table 4.2 that there is an existing significant difference in the mean ratings of the school students on an attitude of active learning level in terms of age and their 't' values are 6.121 which are higher than the critical value of 1.960 of degree of freedom 360. The school students aged above 15 are having higher attitude level than below 15 age group students. The hypothesis 1 stated is rejected.

Figure 1: Graph Shows the Scores of an Attitude of Active Learning in Terms of Age



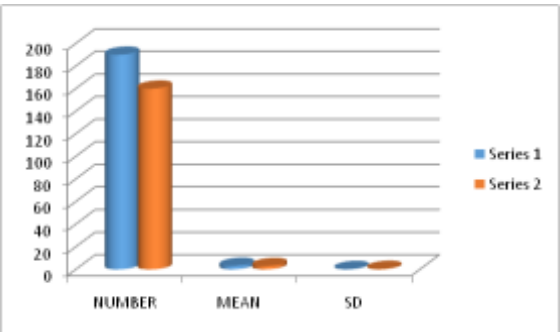
Hypothesis 2

Table 2 Shows the Scores of an Attitude of Active Learning in Terms of Gender

S.No	Gender	N	M	SD	't'	Critical Value	Level of Significance
1.	Female	190	3.168	0.324	4.71	1.960 for df 350 at 0.05 level	Significant
2.	Male	160	2.97	0.467			

It is evident from the table 4.2 that there exists significant difference in the mean ratings of the school students on attitude of active learning in terms of gender and their 't' values are 4.71 which are higher than the critical value of 1.960 of degree of freedom 350. The female students having higher attitude than the male students. The hypothesis 2 stated is rejected.

Figure 2: Graph Shows the Statistical Measures and Results of the Tests of No Significance of Difference Between the Mean Scores of an Attitude on Active Learning in Terms of Gender



Conclusion

The present findings are derived from the empirical data collected by the Investigator. Based on the findings of the related studies and the findings of the present study. The investigator feels that far reaching conclusions could not be arrived at. As discussed earlier the present study has attempted to find out the attitude level of active learning of school students in Madurai District. It has also aimed to find out the difference in terms of personal variables namely age, gender, residence, type of the school, social status and the medium of instruction.

Educational Implications

It has been found that school students are having more attitude on active learning. The study has got an educational implication that attitude plays a vital role of school students in their learning methodologies. The study has shown that there were differences among school students in their attitude in terms of medium of instruction.

Bibliography

Constructivism is a learning theory that focuses more on the roles that our mental schemes play in cognitive growth **(Dr. Shaw & Natarajan, 2017)**. Essentially the theories outline how student experiences make up their own personal understanding of the world, and how this contributes to their learning, and in this case, how students can learn from each other. Meaningful learning, another pedagogical term, refers to knowledge that is acquired in a way that allows students to do something with it; integrating new learning with everything else they already know.

The active learning umbrella term refers to an array of instructional methods that transfer the responsibility of learning back to the learner. This student-centered model helps learners to see themselves and their peers as sources of knowledge, rather than passive listeners (**Hammer & Giordano, 2016**).

A STUDY ON CORRELATION BETWEEN SELF-ESTEEM AND MATHEMATICAL ACHIEVEMENT AMONG B.ED. STUDENT TEACHERS IN MADURAI DISTRICT

[1] P. Shankhari
[2] G. Revathi

Abstract

The study aimed to study the "A study on correlation between self-esteem and mathematical achievement among B.Ed. Student teachers in Madurai district." The investigator used stratified incidental sampling technique for collected 200 samples from B.Ed. Colleges in Madurai District. The investigator planned to undertake survey method as a technique for this study. The investigator prepared questionnaire which has 20 items with 3-point scale. The result revealed that i)There is no significant difference between self-esteem and mathematical achievements Gender among B.Ed. student teacher. ii)There is no significant difference between self-esteem and mathematical achievements Age among B.Ed. student teacher.iii)There is no significant difference between self-esteem and mathematical achievements locality of the college among B.Ed. student teacher.

Keywords: *Self-esteem and mathematical achievements.*

Introduction

The present study is a survey in nature to find out "A study on correlation between self-esteem and mathematical achievement among B.Ed. Student teachers in Madurai district". The investigator in order to find out the self-esteem and mathematical achievements and how it is created impact in their academic achievements. The investigator selected standardized tool and it was administered to the sample selected for the study. Data were collected from the sample. The collected data were given appropriate statistical treatments.

Need and Importance of The Study

In these days students could not find healthy environment in colleges for developing their self-esteem and mathematical achievements. The colleges fail to provide a proper environment to develop better relationship, positive behaviour, social skills, positive attitudes and good mental health in students but the concept of self-esteem and mathematical achievements is to be praised as it has the essence of our activity. The study attempts to identify the relationship between self-esteem and mathematical achievements of B.Ed. College students from government aided and private colleges located in Madurai district.

Objectives of the Study

1. To find out the level of correlation between self-esteem and mathematical achievements among B.Ed. student teachers with respect to gender.
2. To find out the level of correlation between self-esteem and mathematical achievements among B.Ed. student teachers with respect to age.
3. To find out the level of correlation between self-esteem and mathematical achievements among B.Ed. student teachers with respect to the locality of the college.

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Hypotheses Formulated for the Study (H_o)

The following hypotheses (H_o) were formulated for the study:

- There is no significant difference between self-esteem and mathematical achievements Gender among B.Ed. student teacher.
- There is no significant difference between self-esteem and mathematical achievements Age among B.Ed. student teacher.
- There is no significant difference between self-esteem and mathematical achievements locality of the college among B.Ed. student teacher.

Terms and Definitions

1. Self-esteem - Student self-esteem on learning determine their ability and willingness to learn.
2. Mathematical achievements - Achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of examinations ininstructional environments, specifically in college.

Methodology in Brief

The investigator used a stratified random sampling technique for collect 200 samples from B.Ed. Colleges in Madurai District. The investigator planned to undertake survey method as a technique for this study. The investigator prepared the questionnaire which has 20 items with 3-point scale. (Strongly Agree, Agree, Strongly Disagree)

Findings of the Study

Hypothesis No. 1

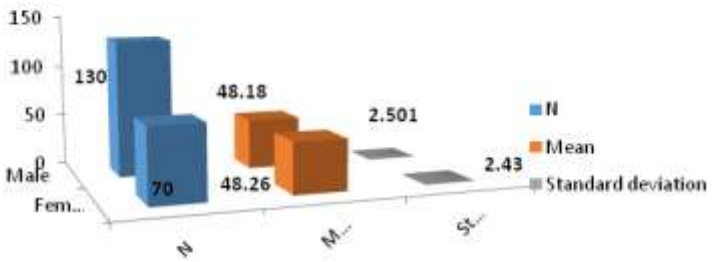
There is no significant difference between self-esteem and mathematical achievements Gender among B.Ed. student teacher.

Table 1 Statistical Measures and Results of the Tests of no Significance of Difference Between the Mean Scores of a Correlation between Self-Esteem and Mathematical Achievements Gender Among B.Ed. Student Teacher Level in Terms of gender

Gender	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Male	130	48.18	2.501	0.281	1.96	Not Significant
Female	70	48.26	2.430			

The table shows that the computed 't' value 0.281is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference correlation between self-esteem and mathematical achievements Gender among B.Ed. student teacher. When we compare the mean scores, Female students are better than the Male students in self-esteem.

Figure 1: Graph shows the statistical measures and results of the tests of no significance of difference between the mean scores of a self-esteem and mathematical achievements in terms of gender



Hypothesis No. 2

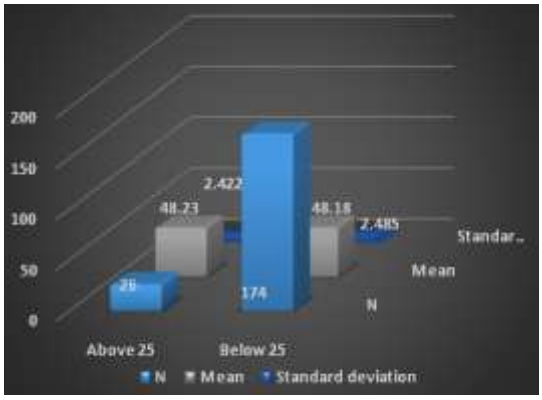
There is no significant difference self-esteem and mathematical achievements Age among B.Ed. student teacher.

Table 2 statistical Measures and Results of the Tests of no Significance of Difference between the Mean Scores of a Self-esteem and Mathematical Achievements Level in Terms of Age

Age	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Above 25	26	48.23	2.422	0.90	1.96	Not Significant
Below 25	174	48.18	2.485			

The table shows that the computed 't' value 0.90is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference self-esteem and mathematical achievements Age among B.Ed. student teacher. When we compare the mean scores, Above25 students are better than the Below25 students in self-esteem.

Figure 2: Graph Shows the Statistical Measures and Results of the Tests of no Significance of Difference Between the Mean Scores of a Self-Esteem and Mathematical Achievements in Terms of Age



Hypothesis No. 3

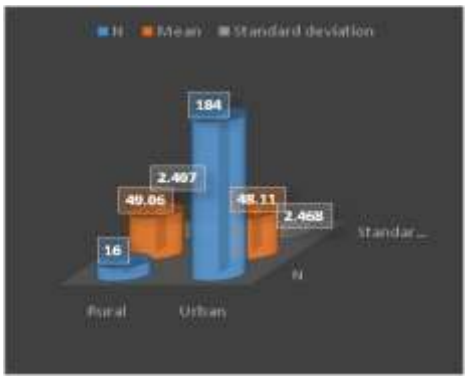
There is significant difference self-esteem and mathematical achievements locality of the college among B.Ed. student teacher.

Table 3 Statistical Measures and Results of the Tests of no Significance of Difference Between the Mean Scores of a Self-Esteem and Mathematical Achievements Level in Terms of Locality of the College

Locality of the College	N	Mean	Standard deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Rural	16	49.06	2.407	1.477	1.96	Not Significant
Urban	184	48.11	2.468			

The table shows that the computed 't' value 1.477 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is significant difference self-esteem and mathematical achievements between locality of the college among B.Ed. second year students. When we compare the mean scores, Rural students are better than the Urban students in self-esteem.

Figure 3: Graph shows the Statistical Measures and Results of the Tests of no Significance of Difference between the Mean Scores of a Self-esteem and Mathematical Achievements in Terms of Locality of the College



Hypothesis Verification

1. There is no significant difference between self-esteem and mathematical achievements Gender among B.Ed. student teacher.
2. There is no significant difference between self-esteem and mathematical achievements Age among B.Ed. student teacher.
3. There is no significant difference between self-esteem and mathematical achievements locality of the college among B.Ed. student teacher.

Hence, All the above Hypothesis are accepted.

Educational Implications

Self-Esteem

Self-esteem or self-identity is the mental and conceptual understanding and persistent regard that sentient beings hold for their own existence. In other words, it is the sum total of being's knowledge and understanding of his or her self. The self-esteem is different from self-consciousness, which is an awareness or preoccupation with one's self. Components of the self-esteem include physical, psychological, and social attributes.

Mathematical Achievements

Mathematics is the study of quantity, structure, space, and change. It has no generally accepted definition. Mathematicians seek and use patterns to formulate new conjectures; they resolve the truth or falsity of conjectures by mathematical proof. When mathematical structures are good models of real phenomena, then mathematical reasoning can provide insight or predictions about nature.

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A STUDY ON EXPLORING THE POTENTIALS OF IMPLEMENTING E-LEARNING PRACTICES AMONG STUDENTS OF B.ED COLLEGES IN MADURAI

[1] M. P. Kavitha
[2] S. Geetha

Abstract

This study aims to explore the potentials of implementing E-learning practices among the students, to check whether there are significant differences in the e-learning practices between male and female learners among the B. Ed students of various B. Ed colleges at Madurai. A total of 300 students were asked to complete the questionnaire, used to identify students' perceptual e-learning style preferences and also to identify students' achievements. In addition, an achievement test was held to determine the students' level, correlating results with the learning style preferences, language achievements, and academic achievement.

Introduction

E-learning systems are a new system of technology. E-learning systems are multidisciplinary. Due to the rapid growth of internet technology, institutions and universities worldwide are investing heavily in e-learning systems to support their traditional teaching. It enhances their students learning experience and performance. The success of e-learning depends on two factors 1. Technological factor (software and hardware used to build e-learning systems).2. Human factor (students and Faculty).

These e-learning systems are divided into three interfaces, Student, faculty and institution. E-learning is a technology based educational tool for learning. E-learning is becoming more and more vital in the world of education. E-learning is a powerful tool that can support and transform education in many ways. E-learning is education through digital media, personal computers, DVDs, mobile phones, and the internet. Through new technological resources, e-learning programs enable many students to attain their educational goals. E-learning is the new generation's learning methodology with the provision of learners' flexibility to learn at their own pace, place & time. E-learning has occupied almost every aspect of life today in education. E-learning in fact, is knowing or training that is prepared, delivered, or managed using various learning technologies that may be deployed either locally or globally.

Need and Importance of the Study

The benefits of e-Learning for learners and faculty include a flexible schedule and instruction at convenient locations, institutions, or homes. It increases achievement and retention since there is immediate feedback to the learners about their progress and accomplishment of specified performance. This is an era where ICT generates numerous transformations to the traditional way of learning. The most known results of these transformations concretize in two means of learning through ICT: e-Learning and computer-assisted learning. Just like the classical ones, these models assume the existence of an efficient learning process based on efficient cooperation and well-established communication activity.

Objectives of the Study

The following objectives were formulated for the study.

- To find out the level of exploring the potential of implementing e-learning practices among the B. Ed student teachers.
- To identify the potential of implementing e-learning practices among the B. Ed student teachers concerning gender.

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- To identify the potential of implementing e-learning practices among the B. Ed student teachers concerning their qualifications.
- To identify the potential of implementing e-learning practices among the B. Ed student teachers about type of colleges.
- To identify the potential of implementing e-learning practices among the B. Ed student teachers concerning their college locality.
- To identify the potential of implementing e-learning practices among the B. Ed student teachers in relation to their marital status.
- To identify the potential of implementing e-learning practices among the B. Ed student teachers in relation to the nature of the college.

Hypotheses Formulated for the Study

The following hypotheses were formulated for the study.

1. There is significant difference between exploring the potential of implementing e-learning practices in terms of their gender.
2. There is significant difference between exploring the potential of implementing e-learning practices in terms of their qualification.
3. There is significant difference between exploring the potential of implementing e-learning practices in terms of their marital status.
4. There is significant difference between exploring the potential of implementing e-learning practices in terms of the locality of the college.
5. There is significant difference between exploring the potential of implementing e-learning practices in terms of their type of college.
6. There is significant difference between exploring the potential of implementing e-learning practices in terms of the nature of the college.

Methodology – Overview

This chapter brings out the methodology of the study. It has six sections. The first section is handled as an overview of this chapter. The second section explains the problem, its objectives and the hypotheses to be tested. The third section deals with the population and the sample and describes the sampling design of the study. The fourth section furnishes the information about the instrumentation. The fifth section provides the statistical techniques used in this study.

Hypothesis Testing

Table 1 Percentage Analysis for the B.Ed Student Teachers Implementing of E-Learning Practices

S.No	Description	No. of Students	% of Students
1.	High	166	55.33
2.	Moderate	84	28
3.	Low	50	16.77

The study reveals that 16.77% of student teachers face low levels of implementing e-learning practices. 28% of student teachers are having moderate level of implementation of e-learning practices. 55.33% of student teachers are having high level of performance of e-learning practices. The study reveals 16.77% of student teachers are facing low level of implementation of e-learning practices. 28% of student teachers are having moderate level of implementation e-learning practices. 55.33% of student teachers are having high level of implementation of e-learning practices.

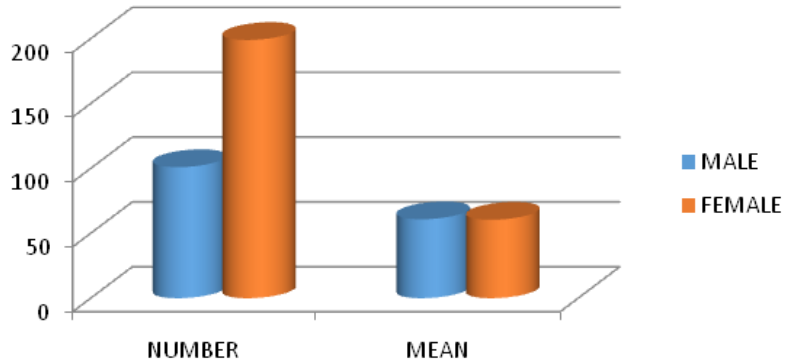
Hypothesis 1

Table 1 Statistical measures and results of test of significance of difference between mean scores of advantages obtained by the B. Ed student teachers in terms of gender

VARIABLE	Sub Variables	N	Mean	SD	't' VALUE	Significance at 0.05 Level
Gender	Male	101	60.8	4.26	0.70	Not Significant
	Female	199	60.42	4.86		

It is evident from the above table no. 4.2 that the obtained 't' value 0.70 is lesser than the table value 1.96 at 0.05 level of significance. This shows that there is no significant difference in their exploring the potentials of implementing e-learning practices among the B. Ed student teachers in terms of gender. Hence the hypothesis 1 is rejected.

Figure 1: Graph shows the Statistical Measures and Results of the Tests of no Significant of Difference between the mean Scores of Exploring the Potential of Implementing E-learning Practices among the B. Ed Student Teachers in terms of gender



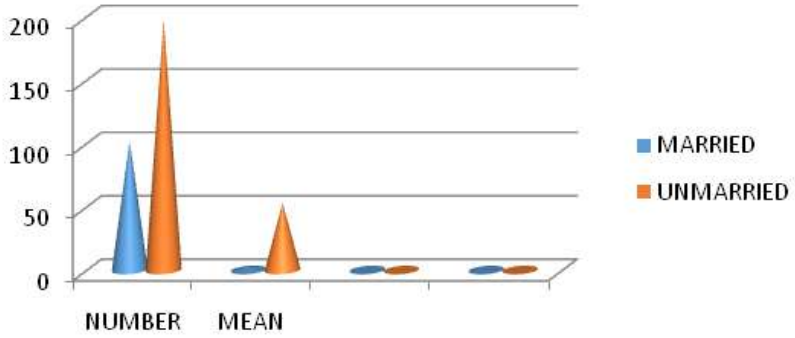
Hypothesis 2

Table 2 Statistical Measures and Results of Test of Significance of Difference between Mean Scores of Advantages Obtained by the B. Ed Student Teachers in terms of Marital Status

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Marital Status	Married	102	48.09	12.10	2.77	Significant
	Unmarried	198	53.02	11.61		

It is evident from the table 4.3 that there exists significant difference in the mean ratings of exploring the potentials of implementing e-learning practices among the B. Ed student teachers in terms of marital status and their 't' values are 2.77 which are higher than the critical value of 1.960 of degree of freedom 300. The unmarried B. Ed student teachers are having more implementation of e-learning practices than the married B. Ed student teachers.

Figure 2: Graph shows the Statistical Measures and Results of the Tests of no Significance of Differencence between the Mean Scores of Access of E-learning Resources among B. Ed Student Teachers in Terms of Marital Status



Conclusion

The investigator verified the hypotheses to find out the significant difference in their exploring the potential of implementing e-learning practices among the B. Ed student teachers in Madurai.

Educational Implications

A profession is calling and implies acquiring a fund of knowledge, range of skills and their application in the service of humanity. The B. Ed student teachers 90% of them are having M.Ed qualifications. 42% of them are having M.Ed with NET / SET qualifications. The study has revealed that the B. Ed student teachers have professional development in all aspects only 50 %. It has shown that most of them remain unaware of their professional competencies. The B. Ed student teachers are uniform in exploring the potential of implementing e-learning practices in terms of gender, marital status, educational qualification and type of colleges. But there is difference in their marital status and academic qualification. The personal variables are not a deciding factor in exploring the potential of implementing e-learning practices.

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Rajasekaran and Arulchelvan (2018) studied "Effectiveness of Visuals in E-Learning on Media Communication Courses" in Tamilnadu. The Objectives were to find out the effectiveness of visuals in media communication courses, to find significant role played with art and design. Random sampling method was used for sampling. Research Design was Survey. The Tool used for Data collection was a self-administered questionnaire.

Alebaikan (2016) in the study on “Perceptions of Blended Learning in Saudi Universities” studied to explore the perceptions of Saudi female lecturers and undergraduate students towards blended learning from their experience as participants in blended courses.

A STUDY ON JOB SATISFACTION AMONG SCHOOL TEACHERS DURING THE PERIOD OF CORONA IN MADURAI

[1] G. Mahalakshmi
[2] S. Geetha

Abstract

The COVID-19 pandemic has led to school termination in 165 countries worldwide, affecting almost 63 million teachers and hundreds of millions of children worldwide. The sudden and drastic change to the organization of schools and study due to the COVID-19 pandemic has come with many challenges, anxiety, and stress that have trobled the well-being and job satisfaction of teachers and other support staff working with children in schools and the community. The pandemic-related school in and the need to adapt to new regulations and guidelines are unprecedented. Policymakers and stakeholders are eager to understand teachers' challenges and find ways to respond to their needs effectively. This study aimed to understand better teachers' self-identified challenges and support throughout the COVID-19 pandemic and how these are associated with teachers' job satisfaction.

Introduction

The COVID-19 pandemic has brought about suddenly and drastic changes in the organization of schools and learning. These changes have led to many challenges, trouble, and stress for teachers and created a burden that jeopardizes their well-being and job satisfaction. The current school interruption and the continuous need to adapt to new regulations and guidelines are unprecedented, and policymakers and stakeholders are eager to understand teachers' challenges and find ways to respond to their needs effectively.

Teacher stress is an ongoing concern and not new to the current pandemic. Before the pandemic, teachers reported heightened levels of mental distress. Work overload has been specific as a primary source of teacher stress. Teachers face numerous stressors in their day-to-day work environment that may compromise their well-being and job satisfaction, such as time constraints, classroom management challenges, and supporting the needs of diverse learners. Additional burdens may exacerbate this due to the pandemic. Prior research advice that many teachers leave the profession due to (a) exhaustion and (b) a lack of confidence in their teaching ability.

These findings take on new meaning in the COVID-19 pandemic, may be creating a "perfect storm" of high levels of debility and lack of confidence in one's teaching ability in this unprecedented context. Teacher stress, well-being, and job satisfaction have also been a significant regard as teachers have had to rapidly adapt, innovate, and mobilize to appliance teaching approaches and learning system for their students throughout the COVID-19 pandemic and the related school disruptions. Research on teacher well-being and job satisfaction during the pandemic confirm teachers' heightened stress and emotional exhaustion levels. While it is demanding to understand the present stressors teachers are experiencing, it is also essential to check supports that may bolster teacher well-being and job satisfaction during the COVID-19 pandemic.

Need and Importance of the Study

This study aimed to understand better teachers' self-identified challenges and support throughout the COVID-19 pandemic and how they are associated with teacher well-being and job satisfaction.

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The goal of the report is to outline critical findings related to teachers' (1) current mental health and well-being and job satisfaction in comparison to before the COVID-19 pandemic, (2) opportunities to attach with their students, parents/caregivers, colleagues, and feel part of the school association during the COVID-19 pandemic, (3) noted support from different sources, (4) meeting the needs of their students, and (5) work experiences during the COVID-19 pandemic.

Objectives of the Study

- To find out the level of job satisfaction among school teachers during Corona.
- To identify the level of job satisfaction among school teachers during Corona about gender.
- To identify the level of job satisfaction among school teachers during the period of Corona about educational qualifications.
- To identify the level of job satisfaction among school teachers during the period of Corona concerning their marital status.
- To identify the level of job satisfaction among school teachers during Corona about the type of colleges.
- To identify the level of job satisfaction among school teachers during Corona about their college locality.
- To identify the level of job satisfaction among school teachers during Corona concerning the nature of the college.

Hypotheses Formulated for the Study

- To identify the level of job satisfaction among school teachers during Corona about gender.
- To identify the level of job satisfaction among school teachers during Corona concerning educational qualification.
- To identify the level of job satisfaction among school teachers during Corona about their marital status.
- To identify the level of job satisfaction among school teachers during Corona about the type of school.
- To identify the level of job satisfaction among school teachers during Corona about their locality of the school.
- To identify the level of job satisfaction among school teachers during Corona concerning the nature of the school.

Methodology – Overview

This chapter brings out the methodology of the study. It has six sections. The first section serves as an overview of this chapter. The second section explains the problem, its objectives, and the hypotheses to be tested. The third section deals with the population and the sample and describes the study's sampling design. The fourth section furnishes the information about the instrumentation. The fifth section provides the statistical techniques used in this study.

Hypothesis Testing

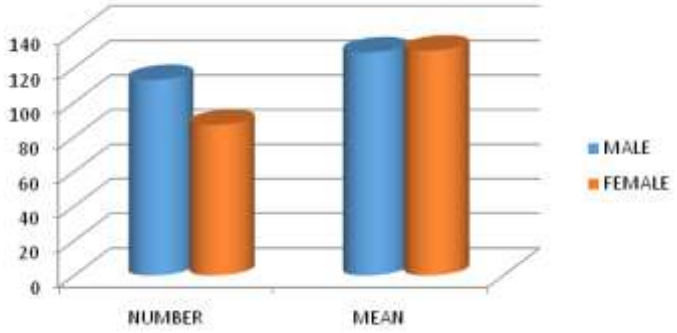
Hypothesis 1

Table 1 Shows the difference between mean scores of advantages obtained by the high school teachers in terms of gender

Variable	Sub Variables	N	Mean	SD	't' Value	Critical Value	Significance at 0.05 Level
Gender	Male	113	129.53	16.25	-0.4831	1.960 for degrees of freedom of 198 at a 0.05 level	Not significant
	Female	87	130.68	17.22			

It is conspicuous from the above table no. 4.1 that the obtained 't' value of 0.48 is lesser than the table value of 1.96 at a 0.05 level of significance. This shows no significant difference in job satisfaction among school teachers during Corona regarding gender. Hypothesis 1 is rejected.

Figure 1:Graph Shows The Statistical Measures And Results Of The Tests Of No Significance Of Difference Between The Mean Scores Of Job Satisfaction Among School Teachers During The Period Of Corona In Terms Of Gender



Hypothesis 2

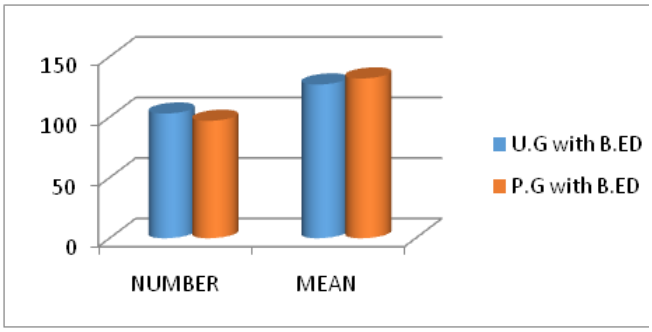
Table 2 shows the difference between mean scores of advantages obtained by the school teachers in terms of academic qualification.

Variable	Sub Variables	N	Mean	SD	't' Value	Critical Value	Significance at 0.05 Level
Academic Qualification	U.G with B.Ed	103	127.88	14.63	-1.8996	1.960 for degrees of freedom of 198 at a 0.05 level	Non Significant
	P.G with B.Ed	97	132.32	18.35			

It is evident from table 4.2 that exists a significant difference in the mean ratings of job satisfaction among school teachers during the period of Corona in terms of academic qualification, and their 't' values are 1.89, which is lesser than the critical value of 1.960 of the degree of freedom 200.

The P.G with B. Ed qualified high school teachers have less job satisfaction among school teachers than the U.G with B. Ed school teachers.

Figure 2:Graph Shows The Statistical Measures And Results Of The Tests Of No Significance Of Difference Between The Mean Scores Of Job Satisfaction Among School Teachers During The Period Of Corona In Terms Of Academic Qualification



Conclusion

The investigator verified the hypotheses to determine the significant difference in job satisfaction among school teachers during Corona in the Madurai district.

Educational Implications

A profession is a calling, and it implies the acquisition of a fund of knowledge, a range of skills, and their application in the service of humanity. The study has revealed that the teachers have professional development & job satisfaction in all aspects. It has shown that most of them remain unaware of their professional competencies.

The teachers are uniform in job satisfaction levels regarding gender, locality, nature, and type of school. But there is a difference in their marital status & academic qualification. The personal variables are not a deciding factor in the level of job satisfaction of the teachers in Madurai in Corona Pandemic.

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AN INVESTIGATION INTO THE PROVISION OF QUALITY AND EFFECTIVE INSTRUCTION TO STUDENTS WITH SUSPECTED DISABILITIES IN A PRIVATE PRIMARY SCHOOL FOR SPECIAL CHILDREN IN MADURAI AND ENVIRONS EDUCATIONAL DISTRICT IN TAMIL NADU

[1] N. Revathi
[2] Dr. M. Arockia Priscilla

Abstract

Learning disabilities are among the most common disabilities experienced in childhood and adulthood. Although identifying learning disabilities in a school setting is a complex process, it is particularly challenging in low- and middle-income countries that lack the appropriate resources, tools, and support. This guide provides an introduction to learning disabilities and describes the processes and practices that are necessary for the identification process. It also represents a phased approach that countries can use to assess their current screening and evaluation services and determine the steps needed to develop, strengthen, and build systems that support students with learning disabilities. This guide also provides intervention recommendations that teachers and school administrators can implement at each phase of system development. Although this guide primarily addresses learning disabilities, the practices, processes, and systems described may also be used to improve the identification of other disabilities commonly encountered in schools.

Introduction

The present study is a survey nature to find out "An investigation into the provision of quality and effective instruction to students with suspected disabilities in a private primary school for special children in Madurai and Environs Educational District in Tamil Nadu" The investigator to consider the provision of quality and to identify the problems faced by special children at primary level. The tool was administered to the sample selected for the study. Data were collected from the model. The collected data were given appropriate statistical treatments. The findings and conclusions drawn from the data have been recorded in this study.

Objective of Special Education

Special education aims to provide an instructional setting that would maximize the academic performance of children with educational problems. These special children are kept in special classes so that the specific and unique instructional procedures can be followed for them depending on their needs.

Definition and Concept of Special Education

“Special Education is that profession concerned with the arrangement of educational variables leading to the prevention, reduction or elimination of those conditions that produce significant defects in the academic, communicative, locomotors or adjustive functioning of children.”– [Robert M. Smith and John T.Neisworth (1973)]. Special Education is an instruction designed for students with disabilities and talents who also have special education needs; some of these students have learning difficulties in regular classrooms but need special education to help them master specific skills and reach their full potential in school.

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Objectives of the Study

- To find out the Level of provision of quality and instruction among primary school teachers in Madurai district is high.
- To find out the significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of gender.
- To find out the significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of age.
- To find out the significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of school management.

Hypotheses of the Study

The following hypotheses were formulated for the study.

- The level of provision of quality and instruction among primary school teachers in the Madurai district is high.
- There is no significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of gender.
- There is no significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of age.
- There is no significant difference among primary school teachers for the provision of quality and instruction to the suspected disabled students in terms of school management.

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Method Adopted for the Study

The researcher has adopted the *Survey Method* of research to find out "An investigation into the provision of quality and effective instruction to students with suspected disabilities in a private primary school for special children in Madurai and Environs Educational District in Tamil Nadu."

Influence of Hypothesis Testing

Hypothesis No:1

The level of provision of quality and instruction among primary school teachers in the Madurai district is high.

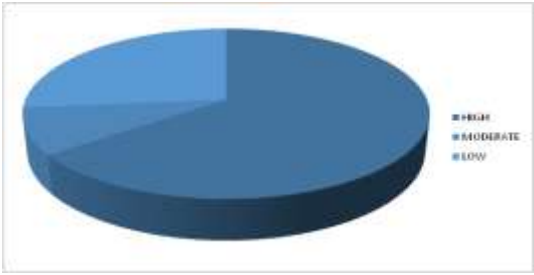
Table 1 Level of Primary School Teachers

S.No	Description	No.of Students
1.	High	110
2.	Moderate	15
3.	Low	25

It is evident from Table 4.1 that the Level of provision of quality and instruction among primary school teachers in the Madurai district is 110. The level of provision of quality and education among primary school teachers in the Madurai district is moderate; the story is 15. The level of provision of quality and instruction among primary school teachers in the Madurai district is 25.

Hence hypothesis 1 is accepted.

Figure 1 Shows the Number of Students in Primary School



Hypothesis No:2

There is no significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of gender.

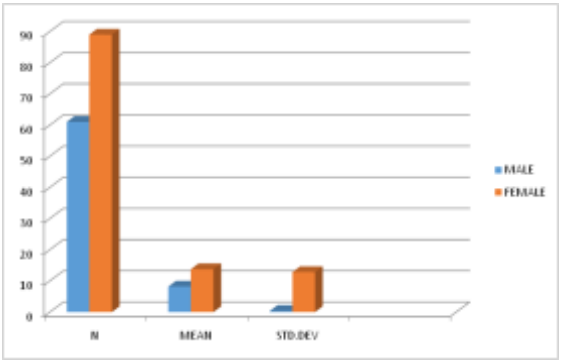
Table 2 Mean, S.D and 'T' Value for the Significant Difference Primary School Teacher Among School Students Gender

Gender	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Male	**61**	8.19	0.40	**1.11**	**1.96**	Not significant
Female	**89**	13.78	2.57			

It is evident from table no 4.1 that the obtained 't' value is 1.11, which is lesser than the table value of 1.96 at the 0.05 levels of significance. This shows that there is a significant difference among primary school teachers in the provision of quality and instruction to the suspected disabled students in terms of gender.

Hence hypothesis is accepted.

Figure 2 Shows the Significant Difference Between Primary School Teacher Based on Gender



Hypothesis No: 3

There is no significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of age.

Table 3 Mean, S.D and 'T' Value For The Significant Difference Primary School Teacher In Age

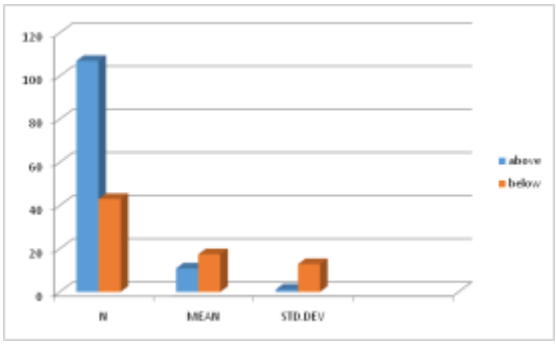
Age	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Above 25	**107**	10.86	1.12	**1.23**	**1.96**	Not significant
Below 15	**43**	17.39	0.94			

It is evident from table no 4.3 that the obtained 't' value is 1.23, which is lesser than the table value of 1.96 at the 0.05 levels of significance. This shows that there is a significant difference among primary

school teachers in the provision of quality and instruction to the suspected disability students in terms of age.

Hence hypothesis is accepted.

Figure 3 Shows the Significant Difference Between Primary School Teachers Based On Age



Hypotheses Verification

- The level of provision of quality and instruction among primary school teachers in the Madurai district is high.
- There is no significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of gender.
- There is no significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of age.
- There is no significant difference among primary school teachers for the provision of quality and instruction to the suspected disabled students in terms of school management.
- There is no significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of class size.
- There is no significant difference among primary school teachers for provision of quality and instruction to the suspected disability students in terms of subject.

Conclusion

Parents and teachers often view cognitive ability as a predictor of the general ability of the learner. They tend to only focus on the Foundation Phase curriculum content in daily teaching. The intellectually challenged school needed Class Room Teaching, Physio Therapy, Speech Therapy, Dance, Drawing, Games / Sports, Vocational Training, Life Skills, and Medical Checkup by doctors. The mentally disabled children are given such attention by our experienced staff in such activities as mentioned above, the self-confidence of the students will grow more and pave the way for the development of human resources. The research findings have shown that depending on the individual, their punctuality, psychological stamina, adapted communication ability, attitude towards others, use of materials and tools, quality of output and their consistency of performance vary between good and acceptable.

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A STUDY ON ATTITUDE OF ENGLISH MAJOR STUDENTS SELF ESTEEM & BEHAVIORAL QUALITIES AMONG B.ED STUDENT TEACHERS IN MADURAI DISTRICT

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Abstract

Step inside a classroom and detect how students' attitudes and behaviors change as self-esteem declines. Students with exceptionalities often determine this to a greater degree than those without exceptionalities. Instead of being seen as "not as smart," the student would be known as the "bad" student or class-clown in the classroom or school. A student's self-esteem can also afflict Knowleeem. Students with higher self-esteem are more likely to participate actively in their education than those with lower self-esteem, although other factors also contribute to lower class aid. Students who cooperate in class have a higher success rate than those who do not. Students with a positive view of themselves and other factors are more motivated to participate in style than those with a negative idea of themselves.

Introduction

Self-esteem is a viral construct within psychology and has been related to virtually every other psychological concept or domain, including personality (e.g., shyness), behavioral (e.g., task performance), cognitive (e.g., attribution bias), and clinical concepts (e.g., anxiety and depression). The environment of acceptance and success raises self-esteem, while the climate of failure lowers it. Adolescents with learning difficulty have trouble expressing their feelings, calming themselves down, and reading non-verbal cues, which can lead to tests in the classroom and with their peers.

Two factors play a crucial role in the development and maintenance of self-esteem:

1. Perceived competence in areas of importance.
2. The experience of social support.

Domains of perceived competence directly impact self-esteem and influence the approval and support of parents and peers. That is, good academic competence and behavioral conduct elicit the consent and authorization of parents. In contrast, good physical appearance, relationships with peers, and athletic competence result in acceptance and support of peers.

Need and Importance of the Study

Self-esteem is how children discern themselves. Self-esteem is not a process that comes to ability and stays in place. It is an ever-changing process, unlike a physical trait like eye color. Because self-esteem is not a fixed characteristic, it can constantly be in flux. Parents, teachers, and success can help students growth high self-esteem. The flip side is parents, teachers, and failure can cause students to develop low self-esteem. Self-esteem not only plays a role in acting and learning; it can also play a role in motivation to succeed. Basis of any type is affected by emotions that are not easily controlled yet very powerful.

Self-esteem can affect students' abilities to make and keep friends, which can also impact educational achievement due to behavioral problems. Due to children's natural tendency to compare themselves with others, those with exceptionalities may have low self-esteem from lack of success in school, sports, and friendships.

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Objective of the Study

Self-esteem has become a household word. Teachers, parents, therapists, and others have focused on boosting self-esteem, assuming that high self-esteem will cause many positive outcomes and benefits. This belief is critically evaluated in this studies.

Appraisal of the effects of self-esteem is complicated by several factors. Because many people with high self-esteem exaggerate their successes and good traits, we emphasize objective measures of outcomes. High self-esteem is also a heterogeneous category, encompassing people who frankly accept their good qualities and selfish, defensive, and arrogant individuals. The modest correlations between self-esteem and performance do not indicate that high self-esteem leads to good performance. Instead, high self-esteem is partly the result of good performance. Efforts to boost pupils' self-esteem have not been shown to improve academic performance and may sometimes be counterproductive. Job performance in adults is sometimes related to self-esteem, although the correlations vary widely, and the direction of causality has not been published. Occupational success may boost self-esteem rather than the reverse.

Overall, the benefits of high self-esteem fall into two categories: enhanced initiative and pleasant feelings. We have not found evidence that boosting self-esteem (by therapeutic invented or college programs) causes benefits. Our findings do not support continued widespread efforts to boost self-esteem in the hope that it will foster improved outcomes. Given the heterogeneity of high self-esteem, indiscriminate praise might just as easily promote narcissism, with its less desirable consequences. Instead, we recommend using recognition to boost self-esteem as a reward for socially desirable behavior and self-improvement.

Hypothesis Formulated for the Study

- There is a significant difference in the attitude of English primary students regarding self-esteem and behavioral qualities among B. Ed student teachers between their genders.
- There is a significant difference in the attitude of English primary students regarding self-esteem and behavioral qualities among B. Ed student teachers between their ages.
- There is a significant difference in the attitude of English primary students regarding self-esteem and behavioral qualities among B. Ed student teachers between their residing place.
- There is a significant difference in the attitude of English primary students regarding self-esteem and behavioral qualities among B. Ed student teachers between their learning place.
- There is a significant difference in the attitude of English primary students in terms of self-esteem and behavioral qualities among B. Ed student teachers between their type of intuition.
- There is a significant difference in the attitude of English primary students regarding self-esteem and behavioral qualities among B. Ed student teachers between their vocabulary skills.

Methodology – Overview

This chapter brings out the methodology of the study. It has six sections. The first section serves as an overview of this chapter. The second section explains the problem, its objectives, and the hypotheses to be tested. The third section deals with the population and the sample and describes the sampling design of the study. The fourth section furnishes the information about the instrumentation. The fifth section provides the statistical techniques used in this study.

Hypothesis Testing

Table 1 Level of the Relation between Self-esteem and Behavioral Qualities

S.No	Rating	Self-Esteem Level	No. of Students	% of Teachers
1.	1.5 to 2.00	High	198	56.57
2.	0.5 to 1.4	Medium	88	25.14
3.	Below 0.4	Low	64	18.28

56.57% of the B.Ed student-teachers have high levels ranging from 1.5 to 2.00. 25.14% of the B.Ed student-teachers have medium levels ranging from 0.5 to 1.4. 18.28% of the B.Ed student-teachers have low levels ranging from below 0.4.

Figure 1 Shows The level of Relation Between Self-Esteem and Behavioral Qualities

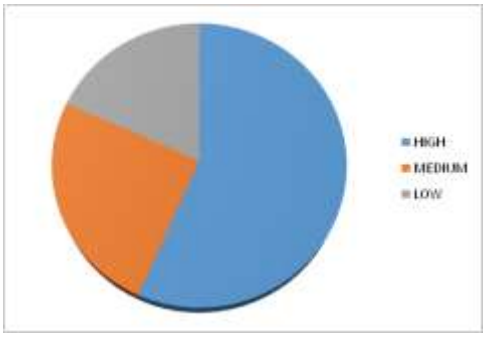
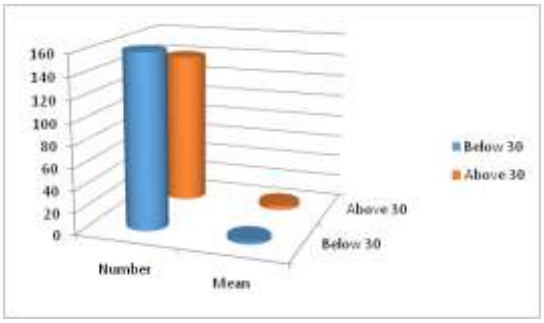


Table 2 Statistical Measures and Results of the Tests of No Significance of Difference Between The Mean Scores Of Self Esteem and Their Behavioral Qualities in Terms Of Age

S.No	Age	N	M	SD	't'	Critical Value	Level of Significance
1.	Below 30	160	3.00	0.452	6.121	1.960 for df 350 at 0.05 level	Significant
2.	Above 30	140	3.265	0.297			

It is evident from table 4.2 that there is an existing significant difference in the mean ratings of B.Ed. Student-teachers on self-esteem and their behavioral qualities level in terms of age and their 't' values are 6.121, which is higher than the critical value of 1.960 for the degree of freedom 360. The B.Ed student-teachers aged above 30 have higher self-esteem levels than those below 30 age group students. Hypothesis 2 stated is rejected.

Figure 2: Graph Shows the Statistical Measures and Results of the Tests of no Significance of Difference Between The Mean Scores of Self Esteem and Their Behavioral Qualities in Terms of Age



Conclusion

The present findings are derived from the empirical data collected by the Investigator. Based on the results of the related studies and the findings of the present study. The investigator feels that far-reaching conclusions could not be arrived at. As discussed earlier, the present study has attempted to discover the cognitive style of B.Ed. Student teachers of Madurai District. It has also aimed to find out the difference in B.Ed. Student teachers among B.Ed. Student teachers include personal variables, namely age, gender, residence, type of college, and the medium of instruction.

Educational Implications

It has been found that B.Ed. Student–teachers have self-esteem. The study has got an educational implication that self-esteem plays a vital role in the student-teachers' behavioral qualities. The study has

shown that there were differences among B.Ed. Student–teachers in their self-esteem in terms of the medium of instruction.

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A STUDY ON ATTITUDE TOWARDS MATHEMATICS OF HIGHER SECONDARY STUDENTS IN RELATION TO THEIR ACHIEVEMENT IN MATHEMATICS

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Abstract

The study aimed to assess and find the relationship between the attitude of highschool students towards mathematics and their level of achievement in the subject. It used the descriptive correlation design with a validated questionnaire and documentary analysis as its primary data gathering tool. Gathered data were analyzed and interpreted using weighted mean and Pearson r. The attitude towards mathematics, as reflected by the students' responses, was described as optimistic. Moreover, the mathematics achievement of the students is approaching proficiency level. Results revealed that a student's attitude towards the subject relates to their performance in the issue. Studies

related to the subject matter may be conducted to testify to the results of this current study. Additional variables may be included to enhance the scope.

Keywords: *Attitude towards mathematics, mathematics achievement, secondary students.*

Introduction

In the teaching and learning process of mathematics, the attitude towards mathematics is essential. It effects students' achievement in mathematics. There are many ways which affect the attitude towards mathematics, such as the teaching method, the support of the structure of the school, the family and the students' attitude towards school. Usually, the way that mathematics is represented in the classroom and perceived by students, even when teachers believe they are presenting it an authentic and the context-dependent practice stands to alienate many students from mathematics (Barton, 2000). A teacher should attempt to improve the student's attitude towards mathematics, a lower level provides a base for higher studies in mathematics. It also causes effect in achIevement of mathematics at the secondary school level In the teaching and learning process of mathematics, the attitude towards mathematics is essential. It effects students' achievement in mathematics. There are many way which affects the attitude towards mathematics, such as the teaching method, the support of the structure of the school, the family and the students' attitude towards school. Usually, the way that mathematics is represented in the classroom and perceived by students, even when teachers believe they are presenting it an authentic and context-dependent way stands to alienate many students from mathematics (Barton, 2000). A teacher should attempt to improve the student's attitude towards mathematics, a lower level provides a base for higher studies in mathematics. It also causes effect in achievement of mathematics at the secondary school level In the teaching and learning process of mathematics, the attitude towards mathematics is essential. It effects students' achievement in mathematics. There are many ways which affect the attitude towards mathematics, such as the teaching method, the support of the structure of the school, the family and the students' attitude towards school. Usually, the way that mathematics is represented in the classroom and perceived by students, even when teachers believe they are presenting it an authentic and context-dependent way stands to alienate many students from mathematics (Barton, 2000). A teacher should attempt to improve the student's attitude towards mathematics a lower level provides a base for higher studies in mathematics .

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It also causes effect in achievement of mathematics at the secondary school level mathematics, the attitude towards mathematics is essential. It effects students' achievement in mathematics. There are many way which affects the attitude towards mathematics , such as the teaching method , the support of the structure of the school , the family and the students attitude towards school. Usually, the way that mathematics is represented in the classroom and perceived by students, even when teachers believe they are presenting it in authentic and context dependent way stands to alienate many students from mathematics (Barton, 2000). A teacher should attempt to improve the students attitude towards mathematics a lower level provides base for higher studies in mathematics. It also causes effect in achievent of mathematics at the secondary school level.

Mathematics expresses itself everywhere, in almost every facet of life in nature all around the world and the technologies in man's hands. Mathematics is the language of science and engineering, describing one's understanding of all observed. Mathematics is a systematic application of matter. It is so said because the subject makes a man organized or systematic. Mathematics makes one's life orderly and prevents chaos, writes Chandra Biswas. Mathematics can help everyone. Mathematics is more than a subject that everyone in school needs to learn. Logic and quantitative reasoning in mathematics courses help everyone make better decisions. Learning how to solve complex challenges is an asset that will pay dividends throughout one's life. Mathematics is essential in one's life, and without realizing it, mathematical concepts are used, as well as skills are learned from doing mathematical problems every day.

Need and Importance of the Study

Their attitude towards Mathematics has become machine centered rather than mind centered. They like to choose studies that would demand less from them. Also, some students do not strive for the maximum score but work only for the minimum. In today's world, many students live unruly without any discipline or values in their life. They don't want to be corrected too. They live as they wish and as they like. Parents are also unable to direct their ways at times. Knowing the importance of mathematics, which can be expressed in the form of values, the investigator attempts to teach the values by helping the students learn and score in Mathematics along with acquiring values for life. It would help the students attain and develop values like perfection, accuracy, punctuality, orderliness, congruency, etc.

Objectives of the Study

- To find out the level of Achievement in Mathematics of Higher Secondary students.
- To find out the attitude of Higher secondary students towards Mathematics is favorable.
- To determine the significant association between Gender in Attitude towards Mathematics of Higher secondary students.

Hypothesis Formulated for the Study

- The level of Achievement in Mathematics of Higher Secondary students.
- The attitude of Higher secondary students towards Mathematics is favorable.
- There is no significant association between Gender in Attitude toward Mathematics of Higher secondary students.

Terms and Definitions

Attitude Towards Mathematics

Attitude toward mathematics (ATM) is the student's organized predisposition to think, feel, perceive, and behave toward mathematics (Jovanovic and King 1998); ATM is an aggregated measure of “a liking or disliking of mathematics, a tendency to engage in or avoid mathematical activities,

Higher Secondary Level

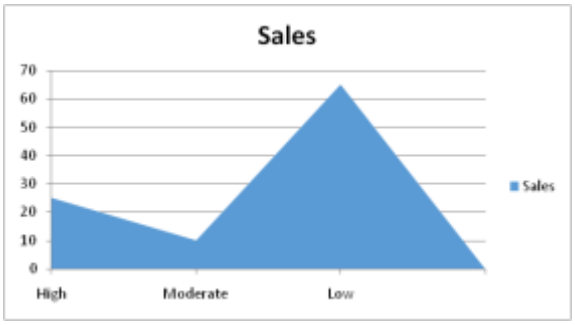
In the Indian educational system, a student undergoes ten years of schooling. After this, a student should experience two years of the academic program to join the college program/degree. These two years of the educational program are called Higher Secondary level.

Hypothesis :1

The level of Achievement in Mathematics of Higher Secondary students.

Table 1. Level of Achievement in Mathematics

S.No	Description	No.of Students	Percentage of Students
1.	High	50	25
2.	Moderate	20	10
3.	Low	130	65

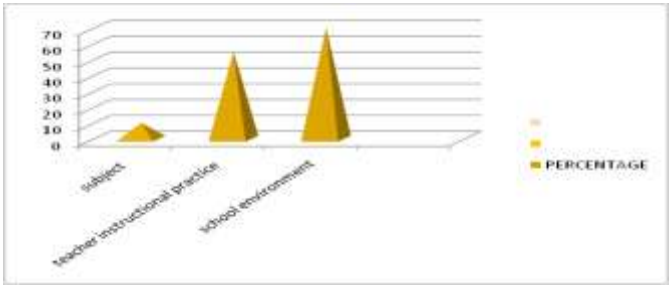


Hypothesis No:2

The attitude of Higher secondary students towards Mathematics is favorable.

Table 2 Attitude Towards Mathematics in Higher Secondary Students

S. No.	Attitude	No of Student	Percentage %
1	Subject	20	10
2	Teacher instructional practice	110	55
3	School environment	70	35
Total		200	100

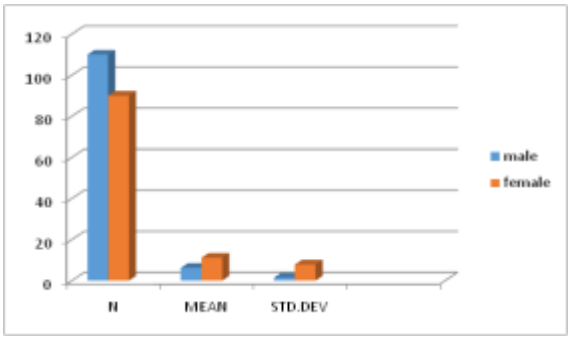


Hypothesis No:3

There is no significant association between Gender in Attitude toward Mathematics of Higher secondary students.

Table 3 Mean, S.D And 'T' value for the Significant Difference Between boys and Girls in Attitude Towards Mathematics

Gender	N	Mean	Standard deviation	Calculated 't' value	Table value at 0.5% level	Remarks
Male	110	6.20	1.40	1.57	**1.96**	Not significant
Female	90	11.12	1.59			



Educational Implications

Attitude towards Mathematics of higher secondary students is the most favorable attitude. All findings regarding sub-samples also reveal the same result: the students have the best attitude toward Mathematics. Though the findings show that attitude towards Mathematics is the most advantageous, there are no satisfactory results in Achievement in Mathematics. This may be due to heavy syllabus, content, and lack of time for preparation and drilling. Astonishingly, the students with illiterate parents have a high level of attitude.

Conclusion

The present research is an eye opener for the investigator to arrive at the result that contributes more to the Achievement in Mathematics among dependent variables. However, there exists a positive relationship between Achievement in Attitude towards Mathematics and Parental Encouragement. The level of achievement in Mathematics and Mental alertness is average which could be improved through suggested means. The attitude towards mathematics is also more favorable and satisfactory.

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A STUDY ON THE EFFECTIVENESS OF THE COMPUTER EDUCATION BY ACCESSING THE COMPUTER LABORATORY LEARNING ENVIRONMENT AT THE B.ED LEVEL

[1] R. Shalini
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Abstract

Computer laboratories have been used in higher education for over thirty years both as a subject of study and as a tool to assist in the learning process within other disciplines. During that time, computer laboratory classes played a significant role in the teaching of computing subjects. However, despite the perceived importance of laboratory classes, little research hasbeen done on computer laboratory environments and their effect on learning. This article describes two instruments. One was designed to assess students' perceptions of various aspects of their computer laboratory environments, and the other was to measure attitudes toward Computer laboratories and computing courses. These instruments determined associations between the laboratory environment and student attitudes.

This study aims to explore the effectiveness of computer education by accessing the computer laboratory practices among the students of various B. Ed colleges in Madurai. A total of 300 students were asked to complete the questionnaire, which was used to identify students' perceptual learning style preferences and also to recognize students' achievements.

Introduction

Each year, new technologies hold the promise to alter the way we think and learn. Computer laboratories are prevalent everywhere, making their way into school systems around the country. It is obvious that there is a demand for technological instruction in high school and college. However, the question should whether Computer laboratories should be implemented in early classrooms is still prudent. With Computer laboratories all around us, children will inevitably be exposed to them, and they will eventually be facilitated into their daily lives. Early experiences should maximize young children's overall growth and development. Their eyes should be opened to the wonderment of learning and the pleasures of discovery. Computer laboratories can help by a vital tool to optimize young children's potential and help aid the learning process. Before introducing children to Computer laboratories, it is meant to address the potential benefits and dangers the machines have on youths (Computer laboratories in Education, 2006).

Computer laboratories are an exciting part of education and learning. They have changed how students learn, study, and do assignments. Furthermore, they have changed the way teachers teach. Every day in the technology field, innovations are made that will improve how educators and students can use Computer laboratories. The most basic way that Computer laboratories help students is through word processing. Through word Claris Works and Microsoft Word, students can access programs to edit, correct spelling errors, and much more. Programs can also be bought that will change writing into the format. It also allows students to be creative, computerize, highlight, underline, and use different fonts. In some classrooms, the teachers use Computer laboratories to compound what they teach.

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Computer laboratories can be used as projectors, to run programs, or simply to print out information quickly. The use of the Internet is also now part of the modern classroom. There are many tutorial programs available. They are excellent at helping students hone their skills at home. These programs are, for the most part, affordable and have a wide range of topics. Many young children use these even before entering school to be more prepared when they enter (Computer laboratories in Education, 2006).

As a researcher, I am interested in understanding the learning environments in computer laboratories in B. Ed colleges. I am also interested in assessing the attitudes of students towards the computer. Since gender differences may occur in students' perceptions, I was also interested in investigating whether they occur in students' perceptions of their computer laboratory environments and their attitudes towards Computer laboratories.

Need and Importance of the Study

Computer laboratories have been used in higher education for over thirty years both as a subject of study and as a tool to assist in the learning process within other disciplines. Computer laboratory classes have played a significant role in the teaching of Computer laboratories in schools and colleges. However, despite the perceived importance of laboratory classes, little research has been done on computer laboratory learning environments in India. This study presents an assessment of the computer laboratory learning environment's attitudes towards computer and computer courses. This study employed two questionnaires to provide quantitative data, i.e., The Computer Laboratory Environment Inventory (CLEI) and The Attitude Towards Computer and Computer Courses (ACCC) s Fisher, 1998). The sample will consist of 300 students from B. Ed colleges affiliated with TNTEU in Madurai. Preliminary analysis shows that CLEI and ACCC are valid and reliable instruments for assessing students' perceptions of their computer laboratory environments. The students will also be found to have positive perceptions about their computer laboratory learning environments. Regarding associations between students' attitudes and perceptions of their computer laboratory environments, most were statistically significant and positively associated with the four scales of the ACCC.

Objectives of the Study

- To identify the potential of implementing Computer laboratory learning practices among the B. Ed student teachers in relation to gender.
- To identify the potential of implementing Computer laboratory learning practices among the B. Ed student teachers in relation to their qualifications.
- To identify the potential of implementing Computer laboratory learning practices among the B. Ed student teachers in relation to their marital status.
- To identify the potential of implementing Computer laboratory learning practices among the B. Ed student teachers in relation to their studying period.
- To identify the potential of implementing Computer laboratory learning practices among the B. Ed student teachers in relation to the type of colleges.
- To identify the potential of implementing Computer laboratory learning practices among the B. Ed student teachers in relation to their locality of the college.
- To identify the potential of implementing Computer laboratory learning practices among the B. Ed student teachers in relation to the nature of the college.

Hypotheses Formulated for the Study

- There is a significant difference in the effectiveness of computer education by assessing the computer laboratory learning environment between their genders.
- There is a significant difference in the effectiveness of computer education by assessing the computer laboratory learning environment between their marital status.

- There is a significant difference in the effectiveness of computer education by assessing the computer laboratory learning environment between their educational qualification.
- There is a significant difference in the effectiveness of computer education by assessing the computer laboratory learning environment between their year of study.
- There is a significant difference in the effectiveness of computer education by assessing the computer laboratory learning environment between their family locality of the college.
- There is a significant difference in the effectiveness of computer education by assessing the computer laboratory learning environment between their type of the college.
- There is a significant difference in the effectiveness of computer education by assessing the computer laboratory learning environment between the nature of the college.

Methodology

This chapter brings out the methodology of the study. It has six sections. The first section serves as an overview of this chapter. The second section explains the problem, its objectives, and the hypotheses to be tested. The third section deals with the population and the sample and describes the sampling design of the study. The fourth section furnishes the information about the instrumentation. The fifth section provides the statistical techniques used in this study.

Hypothesis Testing

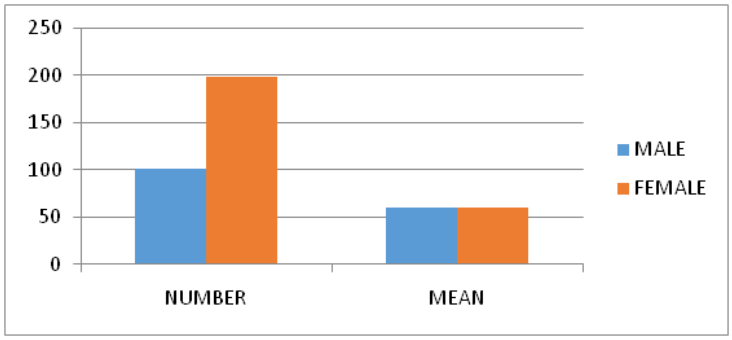
Hypothesis 1

Table 1 shows the statistical measures and results of a significance test of the difference between mean scores of advantages obtained by the B. Ed student teachers in terms of gender.

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Gender	Male	101	60.8	4.26	0.70	Not Significant
	Female	199	60.42	4.86		

It is evident from the above table no. 4.2 that the obtained 't' value of 0.70 is lesser than the table value of 1.96 at a 0.05 level of significance. This shows that there is no significant difference in the effectiveness of computer education by assessing the computer laboratory among the B. Ed student teachers in terms of gender. Hence hypothesis 1 is rejected.

Figure 1Graph shows the Statistical Measures and Results of the Tests of no Significance of difference between the mean scores of Effectiveness of the Computer Education by Assessing the Computer Laboratory Among the B. Ed student Teachers in Terms of Gender



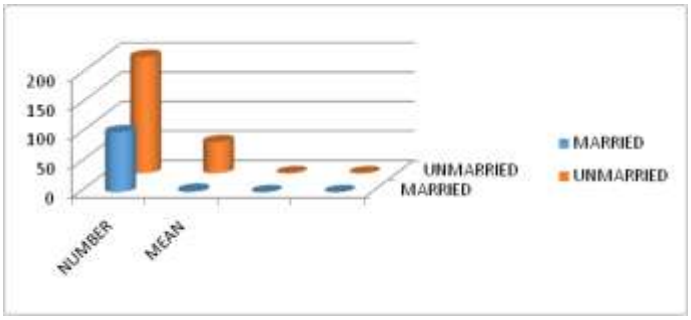
Hypothesis 2

Table 2 shows the statistical measures and results of a significance test of the difference between mean scores of advantages obtained by the B. Ed student teachers in terms of marital status.

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Marital Status	Married	102	48.09	12.10	2.77	Significant
	Unmarried	198	53.02	11.61		

It is evident from table 4.3 that there exists a significant difference in the mean ratings of exploring the potential of effectiveness of computer education by assessing the computer laboratory among the B. Ed student teachers in terms of marital status and their 't' values are 2.77 which are higher than the critical value of 1.960 of the degree of freedom 300. The unmarried B. Ed student teachers have more implementation of e-learning practices than the married B. Ed student teachers.

Figure 2 Graph shows the Mean Scores of Effectiveness of the Computer Education, Assessing the Computer Laboratory among B. Ed Student Teachers in Terms of Marital Status



Conclusion

The investigator verified the hypotheses to determine the significant difference in the effectiveness of computer education by assessing the computer laboratory among the B. Ed student teachers in Madurai.

Educational Implications

A profession is a calling, and it implies the acquisition of a fund of knowledge, a range of skills, and their application in the service of humanity. Of the B. Ed student teachers, 90% of them have M.Ed qualifications. 42% of them have M.Ed with NET / SET qualifications. The study has revealed that the B. Ed student teachers have professional development in all aspects only 50 %. It has revealed that a majority of them remain unaware of their professional competencies. The B. Ed student teachers are uniform in exploring the effectiveness of computer education by assessing the computer laboratory learning environment in terms of gender, marital status, educational qualification, studying year, and type of college. But there is a difference in their marital status and academic qualification. The personal variables are not a deciding factor in exploring the assessment of the computer laboratory among B. Ed student teachers in Madurai.

Bibliography

A prime example of meaningful learning is provided by **Dr. Joel Manoharan (2016)**. He was able to show how active learning methods, along with technology, helped his students to achieve genuine understanding and meaningful learning.

Learning enables students to become aware of and determine their problem solving ability and learning needs. **Akinoglu &Tandogan (2017)**.

A COMPARATIVE STUDY ON SPEAKING OF ENGLISH IN THE PANDEMIC SITUATION AMONG THE STUDENTS

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Abstract

The present study is a survey to find out "A Comparative study on speaking of English in the pandemic situation among the students". The investigator has developed and validated the tool for the analysis to find out a comparative survey of speaking English in the pandemic situation among the students in the Madurai district. The investigator has collected related studies from experimental research in educational resources. They have been reviewed and presented here.

Introduction

Speaking is a crucial part of second language learning and instruction. Regardless of its significance, instructing speaking has been underestimated for a long time. English language educators have kept on showing speaking similarly as a reiteration of drills or remembrance of discourse. Notwithstanding, the present world expects that the objective of educating speaking ought to work on students' open skills because, just in like that, students can put themselves out there and figure out how to follow the social and social standards suitable in each informative circumstance, therefore, recent educational exploration on showing students discussion has given some parameters for developing objectives and techniques.

Need and Importance of the Study

Effective communication system during a pandemic includes content, method, people and partners. Content is phased and situation-specific ensuring communication precedes and monitors the operational and community response during the various pandemic stages. The process includes various platforms such as blogs, call centers, webinars, conference calls, online health group videos, and digital news media are the means to ensure communication. People are community participation approach from message conception to delivery. Fear, distrust, and resistance are common reactions during a pandemic, trusted and credible information sources are critical for moving people from awareness to action. Communications before, during and after a pandemic are directed to partners, places and networks viewed by vulnerable populations as accurate, trustworthy and accessible. Hence the investigator has selected the research.

Objectives of the Study

1. To find out that there is no significant difference between the mean scores of the experimental group and control group in the Pre-test.
2. To find out if there is a significant difference between the Post-test mean scores of the control and experimental groups.
3. To find out that there is no significant difference between the mean scores of the Pre -test and Post-test of the control group.
4. To find out if there is a significant difference between the Pre -and Post-test mean scores of the experimental group.
5. To find out that there is a significant difference in the speaking of English in terms of medium of instruction.
6. To find out that there is no significant difference in the speaking of English in terms of concerning their parent support.

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7. To find out that there is no significant difference in the speaking of English in terms of usage of online classes.
8. To find out that there is no significant difference in the speaking of English in terms of gender.
9. To find out that there is a significant difference in the speaking of English in terms of the type of school.

Hypotheses Formulated for the Study

1. There is no significant difference between the mean scores of the experimental group and control group in the Pre-test.
2. There is a significant difference between the Post-test mean scores of the control and experimental groups.
3. There is no significant difference between the control group's mean scores of the Pre-test and Post-test.
4. There is a significant difference between the Pre -and Post-test mean scores of the experimental group.
5. There is a significant difference in the speaking of English in terms of the medium of instruction.
6. There is no significant difference in the speaking of English in terms of respect to their parent support.
7. There is no significant difference in the speaking of English in terms of usage of online classes.
8. There is no significant difference in the speaking of English in terms of gender. 9. There is a significant difference in the speaking of English in terms of the type of school.

Methodology: Overview

This chapter brings out the methodology of the study. It has six sections. The first section serves as an overview of this chapter. The second section explains the problem, its objectives and the hypotheses to be tested. The third section deals with the population and sample and describes the study's sampling design. The fourth section furnishes the information about the instrumentation. The fifth section provides the statistical techniques used in this study.

Hypothesis Verification and Findings

1. There is no significant difference between the mean scores of the experimental group and control group in the Pre-test. Hence hypothesis is accepted.
2. There is a significant difference between the Post-test mean scores of the control and experimental groups. Hence hypothesis is accepted.
3. There is no significant difference between the control group's mean scores of the Pre-test and Post-test. Hence hypothesis is accepted.
4. There is a significant difference between the experimental group's Pre-test and Post-test mean scores. Hence hypothesis is accepted.
5. There is a significant difference in the speaking of English in terms of the medium of instruction. Hence hypothesis is rejected.
6. There is no significant difference in the speaking of English in terms of concerning their parent support. Hence hypothesis is accepted.
7. There is no significant difference in the speaking of English in terms of usage of online classes. Hence hypothesis is accepted.
8. There is no significant difference in the speaking of English in terms of gender. Hence hypothesis is accepted.
9. There is a significant difference in the speaking of English in terms of the type of school. Hence hypothesis is rejected.

Hypothesis Testing

Pre-Test Performance

Hypothesis 1

There is no significant difference between the mean scores of the experimental group and control group in the Pre-test.

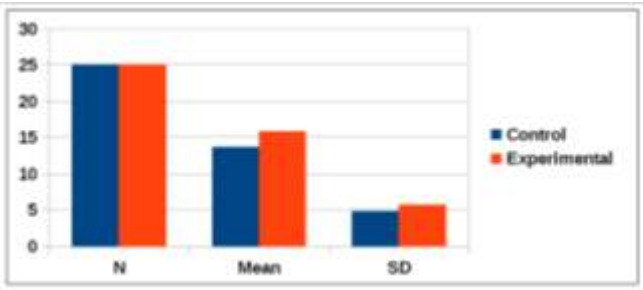
Table 1 Control Vs. Experimental (Pre–Test)

Group	N	Mean	SD	t'	Level of Significance
Control	25	13.66	4.74	1.69	Not Significant
Experimental	25	15.86	5.67		

From the above table 1, it is inferred that the calculated value is 1.69. Which is less than the table value 1.96

Based on the analysis of the data concerned, it is evident that the hypothesis is accepted.

1 Graph Shows the Control Vs Experimental (Pre–Test)



Post-test Performance

Hypothesis 2

There is a significant difference between the mean scores of the control and experimental groups in the Post-test.

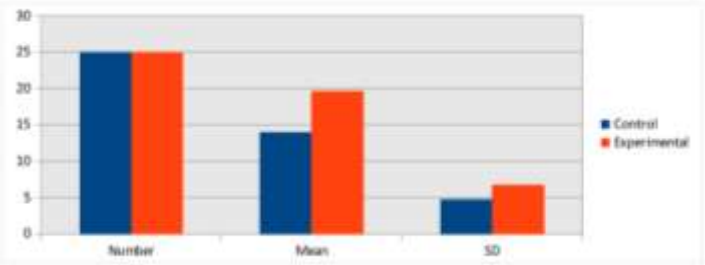
Table 2 Control Vs. Experimental (Post–Test)

Group	N	Mean	SD	't' Value	Level of Significance
Control	25	13.82	4.79	3.60	Significant
Experimental	25	19.66	6.74		

From the above table 4.2, it is inferred that the calculated value is 3.60. Which is greater than the table value 1.96

Based on the analysis of the data concerned, it is evident that the hypothesis is accepted.

2 Graph Shows the Control Vs. Experimental (Post–Test)



Hypothesis 3

There is no significant difference in the speaking of English in terms of gender.

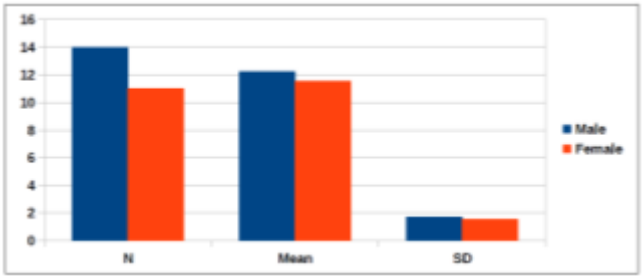
Table 3 Mean, S.D And 'T' Value for the Significant Differences of Speaking of English in Terms of Gender

Gender	N	Mean	SD	't' value	Significance at 0.05 Level
Male	14	12.21	1.672	**1.036**	**Not Significant**
Female	11	11.55	1.508		

It is evident from table no 4.8 that the obtained 't' value is 1.036, which is lower than the table value 1.96 at the 0.05 levels of significance. This shows that there is no significant difference in speaking of English regarding gender.

Hence hypothesis is accepted.

Figure 3 Graph Shows the Statistical Measures and Results of the Tests of Significance of Difference Between the Mean, S.D of Speaking of English in Terms of Gender



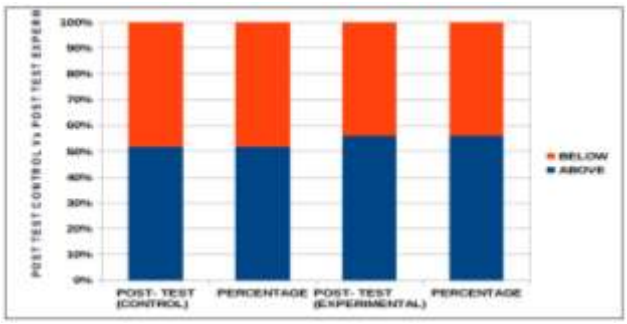
Percentage Analysis Of The Speaking Of English In The Pandemic Post Test Control Vs Post Test Experimental

Group (25)	Post- Test (Control)	Percentage	Post- Test (Experimental)	Percentage
Above	13	52%	14	56%
Below	12	48%	11	44%

It is evident from the table that the study reveals that 52% of the control group and 56% of an experimental group of students are above the average level in speaking of English compared to the Pre-test.

It can be interpreted that most of the students in Madurai are aware of the importance of speaking in English.

Post Test Control Vs. Post-Test Experimental



Conclusion

Good speaking skills of students are the basic need for academic success and future life. Speaking will be a part of society as long as it exists. But the possibilities of communication will develop over time since man is a curious being. So we shall look for the latest communicative techniques to establish ourselves for the future. Speaking of English hasn't stuck to one gender. Both male and female students are aware of the importance of English Speaking and it is evident from the study. This awareness should be given to the rest of the population and help them acquire it through school/ by parents. The investigator concluded that in Madurai, the students speaking level is above average as per the study after the treatment of the Pre-test.

Educational Implications

A profession is a calling and it implies the acquisition of a fund of knowledge range of skills and their application is service to humanity. The study revealed that the students in Madurai have developed speaking of English during the pandemic. It implies that most students are aware of the importance of speaking skills.

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AN EXPERIMENTAL STUDY ON WRITING SKILL AND ACADEMIC ACHIEVEMENT IN ENGLISH AMONG HIGHER SECONDARY STUDENTS IN MADURAI

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[2] Dr. M. Arockia Priscilla

Abstract

The present study is an experimental study on writing skills and academic achievement in English among higher secondary students in Madurai. The investigator has collected related studies from practical research in education and Educational Resources Information Center website. They have been viewed and presented here.

Introduction

All the languages in the world today, English deserves to be regarded as a world language. The world's knowledge is enshrined in English. The increasing awareness of the importance of English in the world should compel us to learn it for unique or specific purposes and to widen our intellectual horizons. So, our aim in teaching English to our students is to enable them to use English with ease and comfort. They should be able to speak and write English effectively.

Writing Skill

By writing skill, the investigator means the ability to respond to advertisements, essay writing, comprehension, and grammatical applications in the written form of English language of Higher Secondary level students.

Academic Achievement

An individual's educational development level is determined by his score on an achievement test designed to measure the knowledge in theoretical study acquired by formal education.

Need and Importance of the Study

The four primary English language skills are reading, listening, speaking, and writing. A person needs a mastery of various elements to use the language to convey thoughts, wishes, intentions, feeling and information in a written form (Pamela, 1991). The four basic English language skills are divided into two categories such as receptive skills and productive skills. Reading and listening are considered sensory skills, whereas speaking and writing are practical skills. Writing is one of the four basic skills. The students start learning to communicate through written form as they interact with others at the school level.

Writing skill is more complicated than that other language skills. Even sometimes, a native speaker of the English language may experience complications in a tricky situation. The writing skill requires a well-structured way of presenting thoughts in an organized and planned way (Braine & Yorozu, 1998).

Advanced writing skill is one of the basic requirements for better academic performance and other writing presentation activities (National Assessment of Educational Progress, 2002). Writing is one of the basic skills of the English language. It is generally considered one of the most difficult that other skills for foreign language students. Even native speakers feel difficulty in showing good command of writing. (Johnstone, Ashbaugh, & Warfield, 2002). The ESL teachers include writing skills in the syllabus because this is essential for students' academic success. (Kellogg, 2008) because writing helps to

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1. reinforce the grammatical structure,
2. enhance the students' vocabulary,
3. and assist other language skills such as reading, listening and speaking.

Objectives of the Study

The following are the objectives of the study.

- To determine the writing skill in responding to advertisements, essay writing on a given general topic, comprehension, transformation and grammatical applications of Higher Secondary students in English.
- To find out a significant difference between the means scores of writing skills in responding to advertisements, essay writing on a given general topic, comprehension, transformation and grammatical applications of Higher Secondary students in English
- To determine the significant difference between writing skills and academic achievement of higher secondary students in English in terms of Gender.
- To determine the significant difference between writing skills and academic achievement of higher secondary students in English in terms of the school's locality.
- To determine the significant difference between writing skills and academic achievement of higher secondary students in English in terms of the medium of instruction.
- To determine the significant difference between writing skills and academic achievement of higher secondary students in English regarding social status.
- To determine the significant difference between writing skills and academic achievement of higher secondary students in English in term types of school.

Hypotheses of the Study

The following are the hypotheses of the study.

- There will be no significant difference between the mean scores of the experimental group and control group in the Pre-test.
- There will be a significant difference between the Post-test mean scores of the control group and the experimental group.
- There will be no significant difference between the mean scores of the Pre-test and Post-test of the control group.
- There will be a significant difference between the Pre-test and Post-test mean scores of the experimental group
- The writing skill in responding to advertisements, essay writing on a given general topic, comprehension, transformation and grammatical applications of Higher Secondary students.
- There is no significant difference between the means scores of writing skills in responding to advertisements, essay writing on a given general topic, comprehension, transformation and grammatical applications of Higher Secondary students in English
- There is no significant difference between writing skill and academic achievement of higher secondary students in English regarding gender.
- There is no significant difference between writing skill and academic achievement of higher secondary students in English in terms of the school's locality.
- There is no significant difference between writing skill and academic achievement of higher secondary students in English in terms medium of instruction.
- There is no significant difference between writing skill and academic achievement of higher secondary students in English in terms of social status.
- There is no significant difference between writing skill and academic achievement of higher secondary students in English in terms of types of school.

Methodology: Overview

This chapter brings out the methodology of the study. It has six sections. The first section serves as an overview of this chapter. The second section explains the problem, its objectives and hypotheses to be tested. The third section deals with the population and sample and explains the study's sampling design. The fourth section furnishes the information about the instrumentation. The fifth section provides the statistical techniques used in this study.

Hypothesis Verification and Findings

The findings of the study are given:

- There will be no significant difference between the mean scores of the experimental group and control group in the Pre-test. Hence hypothesis is accepted.
- There will be a significant difference between the Post-test mean scores of the control and experimental groups. Hence the theory is accepted.
- There will be no significant difference between the mean scores of the Pre-est and Post-test of the control group. Hence hypothesis is accepted.
- There will be significant difference between the experimental group's Pre-test and Post-test mean scores. Hence the theory is assumed.
- The writing skill in responding to advertisements, essay writing on a given general topic, comprehension, transformation and grammatical applications of Higher Secondary students. Hence hypothesis is accepted.
- There is no significant difference between the means scores of writing skill in responding advertisements, essay writing on a given general topic, comprehension, transformation and grammatical applications of Higher Secondary students in English. Hence hypothesis is accepted.
- There is no significant difference between writing skill and academic achievement of higher secondary students in English in terms of Gender. Hence hypothesis is rejected.
- There is no significant difference between writing skill and academic achievement of higher secondary students in English in terms locality of the school. Hence hypothesis is rejected.
- There is no significant difference between writing skills and academic achievement of higher secondary students in English regarding school location. Thus the theory is accepted.
- There is no significant difference between writing skills and academic achievement of higher secondary students in English in terms of the medium of instruction. Hence hypothesis is rejected.
- There is no significant difference between writing skills and academic achievement of higher secondary students in English in terms of social status. Hence hypothesis is rejected.
- There is no significant difference between writing skills and academic achievement of higher secondary students in English in terms of types of school. Hence hypothesis is rejected.

Hypothesis Testing

Post-Test Performance

The mean of post-test performance of the control and experimental groups was calculated after treatment to compare the performance of the two groups. The therapy included the control and experimental groups regarding writing skills and academic achievements. RESEARCH HYPOTHESIS (Hg): There will be a significant difference between the Post-test mean scores of the control and experimental groups.

Null Hypothesis (Ho): There will be no significant difference between the Post-test mean scores of the control group and experimental group.

Table 1: Control vs. Experimental (Pre–Test)

Group	Number	Mean	SD	't' Value	Level of Significance
Control	25	13.56	4.52	1.57	N.S
Experimental	25	15.96	5.67		

The above table (4.1) inferred that the calculated value is 1.57. This is less than the table value of 1.96. Based on the data analysis, it is evident that the null hypothesis is rejected and the research hypothesis is accepted.

Figure 1: Control vs. Experimental (Pre–Test)

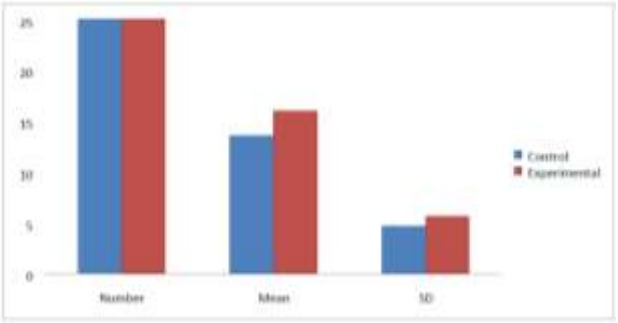


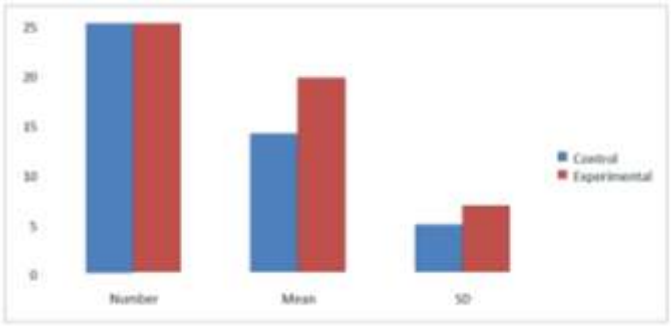
Table 2: Control vs Experimental (Post–Test)

Group	Number	Mean	SD	't' Value	Level of Significance
Control	25	13.92	4.69	3.50	S
Experimental	25	19.56	6.64		

From the above table, it is inferred that the calculated value is 3.50. This is greater than the table value 1.96

Based on the data analysis, it is evident that the null hypothesis is rejected and the research hypothesis is accepted.

Figure 2: Control Vs Experimental (Post–Test)



Control Group Performance

Research Hypothesis(Hg)

There will be no significant difference between the mean scores of the Pre-test and Post-test of the control group.

Null Hypothesis(Ho)

There will be a significant difference between the mean scores of the Pre-test and Post-test of the control group.

Table 3 Pre - Test Vs Post - Test (Control)

Group	Number	Mean	SD	't' Value	Level of Significance
Pre-test	25	13.56	4.64	1.12	N.S
Post-test	25	13.92	4.69		

From the above table, it is inferred that the calculated value is 1.12. This is less than the table value 1.96. Based on the data analysis, it is evident that the null hypothesis is rejected and the research hypothesis is accepted.

Analysis and Interpretation of Data

The investigator has formulated -- hypotheses. Each hypothesis has been discussed one by one in this chapter

Pre- Test Performance

The mean, standard deviation and't' test on the pre-test performance of the subjects before treatment are presented in the following table.

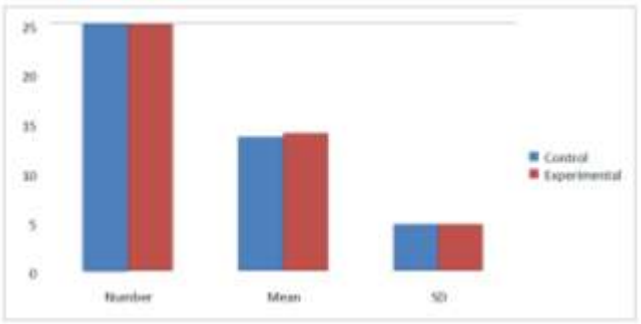
Research Hypothesis (Hg)

There will be no significant difference between the experimental and control groups' mean scores in the Pre-test.

Null Hypothesis (Ho)

There will be a significant difference between the experimental and control groups' mean scores in the Pre-test.

Figure 3: Pre - Test Vs Post - Test (Control)



Experimental Group Performance

Research Hypothesis(Hg):

There will be a significant difference between the experimental group's pre- and Post-test mean scores.

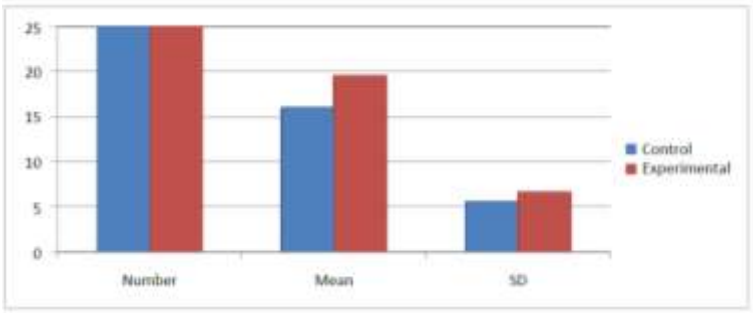
Null Hypothesis (Ho)

There will be no significant difference between the experimental group's pre-test and Post-test mean scores.

Table 4: Pre - Test vs Post - Test (Experimental)

Group	Number	Mean	SD	't' Value	Level of Significance
Pre- test	25	15.96	5.57	6.02	S
Post-test	25	19.56	6.64		

From the above table , it is inferred that the calculated value is 6.02. This is greater than the table value of 1.96. Based on the data analysis, it is evident that the null hypothesis is rejected and the research hypothesis is accepted.



Influence Of Hypothesis Testing Hypothesis No:1

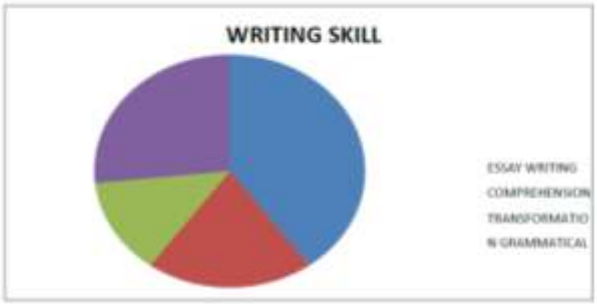
The writing skill in responding to advertisements, essay writing on a given general topic, comprehension, transformation and grammatical applications of Higher Secondary students.

Table 5 Writing Skills of Higher Secondary School Students

S.No	Writing Skill	Students
1	Essay writing	**30**
2	Comprehension	**15**
3	Transformation	**10**
4	Grammatical	**20**

Table shows that writing skill in essay writing is 30% of student, comprehension is 15% of student, transformation is 10% of student and grammatical applications is 20% of Higher Secondary students. Hence hypothesis is accepted.

Figure 5 Shows The Variables of Writing Skill Writing Skill



Writing Skill of Higher Secondary School Students in Medium of Instruction

Hypothesis No:2

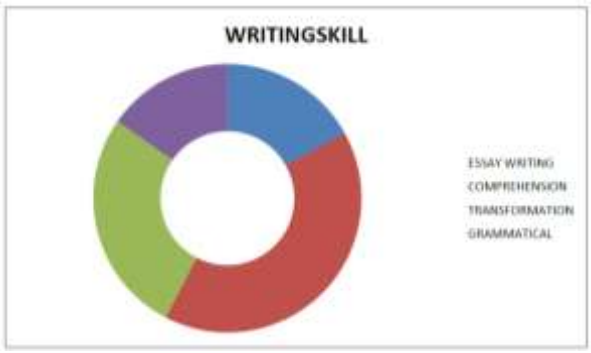
There is no significant difference between the means scores of writing skill in responding to advertisements, essay writing on a given general topic, comprehension, transformation and grammatical applications in the medium of instruction of Higher Secondary students in English

Table 6 Writing Skill Of Higher Secondary School Students In Medium Of Instruction

S.No	Writing Skill	Medium Of Instruction	N	Mean Scores
1	Essay writing	Tamil	50	12.8
		English		
2	Comprehension	Tamil	120	6.27
		English		
3	Transformation	Tamil	80	11.37
		English		
4	Grammatical	Tamil	45	13.18
		English		

Table 4.6 shows scores of writing skills in responding to advertisements, essay writing on 12.8 on a given general topic, comprehension of mean score 6.27, transformation of mean score 11.37 and grammatical applications of mean score 13.18 in the medium of instruction of Higher Secondary students in English. Hence hypothesis is accepted

Figure 6 Shows the Variables of Writing Skill in the Medium of Instruction Writing skills



Conclusion

The research shows the need for finding various methods to develop the writing skill in English who learn English as their second language, which enables them to understand the structure of the language and make them confident in getting high scores in their examinations. The importance of English is shaping the destiny of language learners. They ignore English and pay attention to their subjects. Furthermore, they are not motivated in English classes and to try to get a pass in English, leading them to ignore English. The present study provides information about the writing skill and achievement of higher secondary students in English. The investigator has also given suggestions for implementing various techniques for the improvement of writing skill.

Educational Implications

To overcome the drawbacks, intensive coaching in the language is necessary. It is essential to enrich in the students the habit of reading the original texts extensively and a good deal of written exercises

have to be dealt with the very thought that English is a foreign language. It cannot be learnt easily, i.e., it is hard to understand and has to be eradicated from the students' minds by conducting various programs. From the very early stage of their schooling, students feel that English is unable to understand and hence teachers must create interest in students' minds. Students can be motivated in dialogues, essay writing, composing poetry, etc. Students can be given various training courses in English. Reading habit has to be enriched as it paves way to writing good English. When students take part in written competitions, the usage of good and correct English is a must. India is a multi-lingual country and people from different parts of the country can communicate themselves with the help of English which aids in overcoming the barrier in communication; communicative activities and language games could be conveniently used to build the communicative competence of the learners.

- They could be trained to use the internet to collect various language activities and games. The system of evaluation and examination in English should be
- Changed. Practice makes an action perfect. Therefore, verbal and written training under the teachers' supervision is necessary.
- The teacher should act as a facilitator. Close attention is essential for effective learning. ▪ Exact imitation is essential; therefore, exposure of the learners to good English should be made possible.
- Mistakes should be corrected as soon as possible.
- In a good lesson, the teacher may control, direct, counsel and encourage. Lecturing does not teach many languages. Constant evaluation is necessary to discover whether the teaching is fruitful.
- Teachers should correlate the classroom work with extra reading material readily available and within the linguistic range of the students.
- Quite several new ways and means have been developed for English teaching projects, assignments, etc, can be given.
- New types of English tests for English have been developed and emphasis should be more on comprehension and expression.
- Reading for pleasure, during leisure, be encouraged and good reference books on grammar, fiction, etc., be provided to students so that a Functional Approach may develop. ▪ Listening to sound English, English speech has to be encouraged. Students in this way would get examples of all the various types of vocabulary, dialogues, poems, phonetics, pronunciations, discussions, debates, etc.; thus, the listening practice would ultimately benefit the pupils.
- Knowledge of English sounds and their corresponding with orthography should be vividly explained to the students at a very early stage so that the bad habit does not get deeply rooted. The prevalent theories of language acquisition and pedagogy should be re-evaluated.
- Learners need motivation. Help them to learn from one successful step to another.

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A STUDY ON ATTITUDE OF TAMIL MEDIUM STUDENTS TOWARDS ENGLISH USAGE IN CAREER ACHIEVEMENTS AMONG B.ED SECOND YEAR STUDENTS

[1] V. Indhumathy
[2] G. Revathi

Abstract

This study aimed to determine the students' anxiety, motivation and attitude toward learning English based on their socioeconomic status and English language achievement in National-type Tamil medium institutions. The findings of this study showed that Indian students from urban and rural areas have a moderate level of anxiety in learning English. Students both areas were instrumentally motivated and showed positive attitudes toward learning English. However, negative correlations were identified between English Language achievement and level of motivation in learning English as well as between daily spoken languages at home and with friends and the level of English language achievement. The result of this study also illustrated that level of motivation and attitude are positively correlated. In conclusion, the samples of this study showed high levels of anxiety, motivation, and attitude in learning English. It is recommended that future research take more samples and include qualitative data to increase the reliability of the study.

Introduction

Learning the English language is considered an essential aspect at every stage of the educational process. In general, the two different levels, both school and college, where English is taught to students in various learning situations, seem to serve two other ends. The language taught and learned at these two levels is based on different needs and factors. For instance, in schools, language teaching focuses on factors like marks, completion of syllabus and practice or coaching for students to write examinations. In colleges, language teaching emphasizes soft skills, communication skills and employability skills to meet the requirements of employers from companies and industries.

Need and Importance of the Study

Though education had introduced in Tamilnadu as early as 1978, not many empirical studies have been conducted on the various aspects of this newly introduced pattern of education. It is well known that this pattern of education was introduced in a hurry without caring for even the most essential of the hour. Hence the investigator has made an attempt in this study. It has become imperative to study the level of students' attitude towards English as it has become a primary subject of competency. As a subject, it has become pivotal in the education system. It is also essential to study the methods and approaches to learning English. The level of Tamil medium school students' standards in English and check their attitude become the need of the hour. Hence the investigator has attempted in this study. The high school period is an essential stage to the students to face lot of competition and it is a gateway for them to enter into the higher studies

Objectives of the Study

- To find out the attitude of Tamil medium students towards English usage in carrier achievement among B.Ed second-year students in terms of Gender.
- To find out the attitude of Tamil medium students towards English usage in carrier achievement among B.Ed second-year students in terms of age.
- To find out the attitude of Tamil medium students towards English use in carrier achievement among B.Ed second-year students in terms of Locality of the College.

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- To find out the attitude of Tamil medium students towards English usage in carrier achievement among B.Ed second-year students in terms of Marital status.
- To find out the attitude of Tamil medium students towards English use in carrier achievement among B.Ed second-year students in terms of Parent's Qualification.

Hypothesis Formulated for the Study

1. There is no significant difference between attitude of Tamil medium students towards English usage in carrier achievement among B.Ed second year students in terms of Gender
2. There is no significant difference between attitude of Tamil medium students towards English usage in carrier achievement among B.Ed second year students in terms of Age
3. There is no significant difference between attitude of Tamil medium students towards English usage in carrier achievement among B.Ed second year students in terms of Locality of the College There is no significant difference between attitude of Tamil medium students towards English usage in carrier achievement among B.Ed second year students in terms of Marital status
4. There is no significant difference between attitude of Tamil medium students towards English usage in carrier achievement among B.Ed second-year students in terms of Parent's Qualification.

Analysis and Interpretation of Data: Overview

Analysis of the data starts with statistical processing. The chief purpose of processing the information is to find out the differences in trends and tendencies. This chapter describes the analysis and interpretation of the data collection and the approaches adopted in testing the hypothesis for the study. Each hypothesis deals with a specific issue stated in the objectives for this study. According to John W. Best (1986) in Research in education, “Statistics is a body of mathematical techniques or processes for gathering, organizing and interpreting numerical data (P.197)". Statistical data describes group behaviors or group characteristics abstracted from a number of single observations combined to generalize possible.

Statistical Analysis

The investigator has formulated nine hypotheses.

The “4” test for a large independent sample was used to test the hypotheses, and each theory has been discussed in the following paragraphs.

Hypothesis Testing

Further the data was subjected to an appropriate statistical test for testing the hypothesis. The acceptance or rejection of each null hypothesis would be stated based on the results shown in the corresponding tables, obtained by applying proper statistical techniques.

Hypothesis No. 1

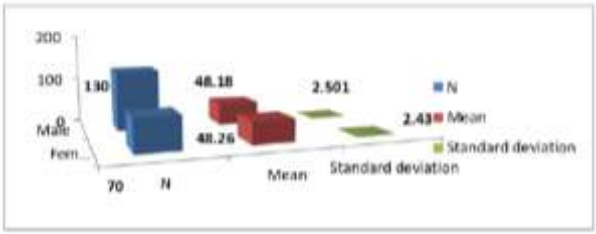
There is no significant difference towards Attitude between Gender among B.Ed second-year students. The significance of difference in the mean ratings of school students on an attitude of Tamil medium students towards English usage level in terms of Gender is presented in the following table.

Table 1 Statistical Measures and Results of the Tests of No significance Of Difference Between The Mean Scores Of An Attitude Of Tamil Medium Students Towards English Usage Level in Terms Of Gender

Gender	N	Mean	Standard Deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Male	130	48.18	2.501	0.281	1.96	Not Signficant
Female	70	48.26	2.430			

The table shows that the computed 't' value 0.28 lis less than table value 1.96 at 0.05level. Consequently, the null hypothesis is to be accepted. Hence it can be said that there is no significant difference towards Attitude between gender among B.Ed secondary students. When we compare the mean scores, Female students are better than the Male students in Attitude.

Figure 1 Graph Shows The Statistical Measures And Results of the Tests of No Significance of Difference Between The Mean Scores of an Attitude of Active Learning in Terms of Gender



Hypothesis No. 2

There is no significant difference in attitude between Age among B.Ed second-year students.

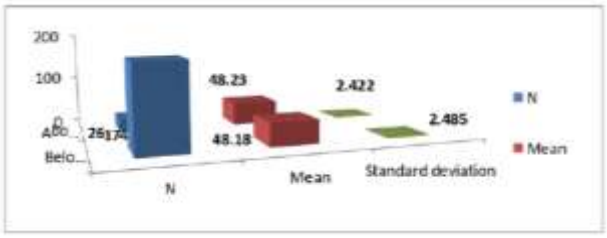
The details regarding the significance of the difference in the mean ratings of school students on an attitude of Tamil medium students towards English usage level in terms of Age are presented in the following table.

Table 2 Statistical Measures and Results of the Tests of no Significance of Difference Between the mean Scores of an Attitude of Tamil Medium Students Towards English usage Level in Terms of age

Age	N	Mean	Standard Deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Above 25	26	48.23	2.422	0.90	1.96	Not Significant
Below 25	174	48.14	2.485			

The table shows that the computed 't' value 0.90is less than the table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted. H**ence it can be said that there is no significant difference in attitude among B.Ed secondary students. When we compare the mean scores, Above25 students are better than the Below25students in attitude.

Figure.2 Graph Shows the Statistical Measures and Results of the Tests of No Significance of Difference between the Mean Scores of an Attitude of Active Learning in Terms of Age



Hypothesis No.3

There is significant difference towards Attitude between locality of the college among B.Ed second year students.

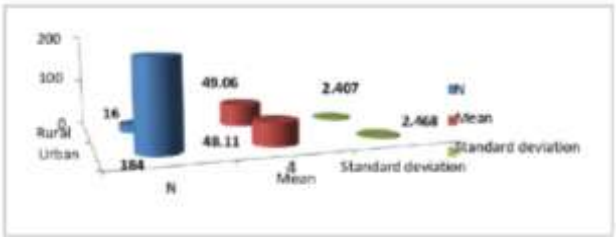
The details regarding significance of difference in the mean ratings of school students on an attitude of Tamil medium students towards English usage level in terms of Locality of the college are presented in the following table.

Table 3 statistical measures and Results of the Tests of no Significance of Difference Between the Mean Scores of an Attitude of Tamil Medium Students towards English usage Level in Terms of Locality of the College

Locality of the College	N	Mean	Standard Deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Rural	16	49.06	2.407	1.477	1.96	Not Significant
Urban	184	48.11	2.468			

The table shows that the computed 't' value 1.477 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is significant difference towards Attitude between locality of the college among B.Ed second year students. When we compare the mean scores, Rural students are better than Urban students in Attitude.

Figure 3 Graph Shows the Statistical Measures and Results of the Tests of No Significance of Difference Between the Mean Scores of an Attitude of Active Learning in Terms of Locality of the College



Hypothesis NO.4

There is no significant difference towards Attitude between school marital status among B.Ed second-year students.

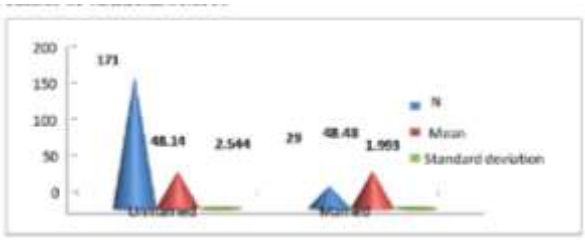
The details regarding significance of difference in the mean ratings of school students on an attitude of Tamil medium students towards English usage level in terms of marital status presented in the following tab

Table 4 Statistical Measures and Results of the Tests of No Significance of Difference Between the Mean Scores of an Attitude of Tamil Medium Students Towards English Usage Level in Terms of Marital Status

Martial Status	N	Mean	Standard Deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Unmarried	171	48.14	2.544	0.689	1.96	Not Significant
Married	29	48.48	1.933			

The table shows that the computed 't' value 0.689 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be **accepted.** Hence it can be said that there is no significant difference towards Attitude between marital status among B.Ed second-year students. When we compare the mean scores, Married students are better than Unmarried students in Attitude.

Figure 4 Graph Shows the Statistical Measures and Results of the Tests of No Significance of Difference between the Mean Scores of an Attitude of Active Learning in Terms of Marital Status



Hypothesis No.5

There is no significant difference in Attitude between Parent's educational status among B.Ed second-year students.

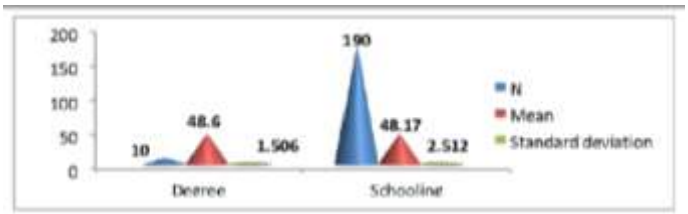
The details regarding the significance of the difference in the mean ratings of school students on an attitude of Tamil medium students towards English usage level in terms of Parent's educational status are presented in the following table.

Table 5 Statistical Measures and Results of the Tests of No Significance of Difference Between the Mean Scores of an Attitude of Tamil Medium Students Towards English Usage Level in Terms of Parents Educational Status

Parents Educational Status	N	Mean	Standard Deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Degree	10	48.60	1.506	0.537	1.96	Not Significant
Schooling	190	48.17	2.512			

The table shows that the computed 't' value 0.537is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be accepted. Hence, there is no significant difference towards Attitude between school parents educational status among B.Ed second-year students. When we compare the mean scores, Degree parents are better than the schooling parents in Attitude.

Figure 5 Graph Shows the Statistical Measures and Results of the Tests of No Significance of Difference between the Mean Scores of an Attitude of Active Learning in Terms of Parent's Educational Qualification



Conclusions

The present findings are derived from the empirical data collected by the Investigator. Based on the findings of the related studies and the findings of the present study. The investigator feels that far-reaching conclusions could be arrived at. As discussed earlier the present study has attempted to find out the attitude of Tamil medium students towards English usage in carrier achievement students of Madurai District. It has also aimed to find out the difference in the school students in terms of personal variables namely age, gender, locality of the college, marital status, types of institution, parents educational status, residence, students qualification.

Educational Implications

It has been found that college students have more attitude toward Tamil medium students towards English usage in carrier achievement. The study has an educational implication that attitude plays a vital role for school students in their learning methodologies. The study has shown that there were differences among college students in their attitude in terms of student's qualification

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A STUDY ON THE USE OF ELECTRONIC GADGETS IN TEACHING AND LEARNING PHYSICS AMONG HIGH SCHOOL STUDENTS

[1] A. Meenakshi
[2] A. Roseline Annal

Abstract

The present study is a survey on Teaching and learning physics among high school students in the Madurai district. The investigator has collected related studies from surveys of research in education and the Education Resources Information Center website. They have been reviewed and presented here.

Introduction

Education is regarded as the source of light. Education is knowledge. It is the man's third eye. This aphorism means that ability opens man's inner eye' flooding him with spiritual and divine light, which forms the provision for man's journey through life. Through education, the development of every aspect of human life becomes possible. Knowledge protects an individual like a mother, inspires him to follow the path of good conduct as a father does' and gives the pleasure one's wife provides. Education leads to the development of personality. According to Hazard Mohammed, of all the gifts that parents can give to their children, the best is the gift of liberal education. The ink in students' pens is purer and noble than even the blood of martyrs."

Significance of the Study

The term "gadget" refers to portable electronic devices belonging to one or more categories: mobile phones, MP3 players, gaming consoles, or any other wireless-enabled devices. Modern technology has experienced a vast expansion in recent years, leading to its extensive use by people from all generations. For a generation of young people, technology has assumed a substantial stake in their social and educational lives. Most adolescents have access to computers, the Internet, cell phones, video games, and many other forms of modern technology. Many researchers have studied that children spend an average of their time on gadgets like telephone, radio, TV, games, Xbox, iPod and stereo systems. Kids use devices for various purposes like playing games, watching videos, listening to songs, chatting with friends, and browsing different websites. They spend most of their time in these activities and ignore their posture, screen brightness, and screen distance from their eyes which ultimately affect their vision and health. Currently, intelligent phones perform phenomenal roles as far as teaching and learning are concerned. For instance, students can access their lecture materials on their smartphones and quickly access information online to meet their information needs via learning management systems, academic databases, and a website, to mention a few. Thus knowing about the use of electronic gadgets in teaching learning physics is very important for high school students. Hence investigator has taken the following topic for her investigation.

Objectives

To find out the significant difference in the use of electronic gadgets in teaching and learning physics of high school students concerning the background variables such as a) gender b) community

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Hypotheses

1. There is no significant difference in the use of electronic gadgets in teaching and learning physics of high school students concerning gender.
2. There is no significant difference in the use of electronic gadgets in teaching and learning physics of high school students concerning the school's locality.

Population for the Study

The population for the present study consists of high school students in Madurai District.

Sample for the Study

The sample consists of 300 high school students from 6 schools in Madurai District.

Hypotheses Testing

Hypothesis – 1

There is no significant difference in the use of electronic gadgets in teaching and learning physics of high school students concerning gender.

Table 1: Differences In The Use Of Electronic Gadgets By High School Students Concerning Gender

Variable	Male N = 120		Female N = 180		Calculated 't' Value	Remark at 5% level
	Mean	S.D	Mean	S.D		
Gender	49.08	9.15	50.68	10.57	1.23	**Not Significant**

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

The calculated 't' value is less than the table value (1.96) at a 5% significance level. Hence the null hypothesis is accepted. So there is no significant difference in the use of electronic gadgets in teaching and learning physics of high school students concerning gender.

Hypothesis – 2

There is no significant difference in the use of electronic gadgets in teaching and learning physics for high school students concerning the school's locality**.**

Table 2 Differences in the Use of Electronic Gadgets Of High School Students Concerning Locality of the School

Variable	Rural N = 150		Urban N = 150		Calculated 't' Value	Remark at 5% level
	Mean	S.D	Mean	S.D		
The locality of the school	48.67	10.92	51.45	8.71	2.14	**Significant**

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

The calculated 't' value is greater than the table value (1.96) at a 5% significance level. Hence the null hypothesis is rejected. So there is a significant difference in the use of electronic gadgets in teaching and learning physics of high school students concerning the school's locality.

Findings

1. The calculated 't' value is less than the table value (1.96) at a 5% significance level. Hence the null hypothesis is accepted. So there is no significant difference in the use of electronic gadgets in teaching and learning physics of high school students concerning gender.
2. The calculated 't' value is greater than the table value (1.96) at a 5% significance level. Hence the null hypothesis is rejected. So there is significant

3. The difference in the use of electronic gadgets in teaching and learning physics of high school students concerning the school's locality.

Interpretations

There is a significant difference in the use of electronic gadgets in teaching and learning physics of high school students concerning the school's locality. The use of electronic devices in teaching and learning physics in urban schools is greater than the rural schools. Urban school's science lab has all facilities. Also, urban school students may know the importance of education and electronic gadgets. They want to use more electronic devices for their better achievement in the subject of physics.

Recommendations

1. Various electronic gadgets must be incorporated into teaching-learning.
2. The seminar, workshop, and symposium should be conducted with the help of electronic gadgets.
3. Parents should find time to take care of their children for the proper use of electronic gadgets about their academic achievement.
4. The teachers should motivate the students to learn more using electronic gadgets.
5. Audio-video programs should be offered to the students.

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A STUDY ON CREATIVITY AND ATTITUDE TOWARDS ENGLISH LANGUAGE IN RELATION TO ACHIEVEMENT OF HIGHER SECONDARY STUDENTS

[1] P. Suganya
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Abstract

The study aimed to study "A study on creativity and attitude towards the English language concerning the achievement of higher secondary students." The investigator used a stratified random sampling technique for collected 200 samples from Higher Secondary Schools in Madurai District. The investigator planned to undertake the survey method as a technique for this study. The investigator prepared a questionnaire that has 20 items on a 3-point scale. The result revealed that i) There is no significant difference between creativity and attitude towards the English language concerning the achievement of higher secondary students in terms of Gender. ii) There is no significant difference between creativity and attitude towards the English language concerning achievement of higher secondary students in terms of Age. iii) There is no significant difference between creativity and attitude towards English language in relation to the achievement of higher secondary students in terms of Medium of instruction.

Keywords: *creativity and attitude.*

Introduction

The present study is a survey to find out "A study on creativity and attitude towards English language about the achievement of higher secondary students". The investigator in order to find out the creativity and attitude and how it is created impact in their academic achievements. The investigator selected a standardized tool and it was administered to the sample selected for the study. Data were collected from the sample. The collected data were given appropriate statistical treatments.

Need and Importance of the Study

These days students could not find healthy environment in schools to develop their creativity and attitude. The schools fail to provide a proper environment to develop better relationship, positive behaviour, social skills, positive attitudes and good mental health in students but the concept of creativity and attitude is to be praised as it has the essence of our activity. The study attempts to identify the relationship between creativity and attitude of Higher secondary school students from government and private schools located in Madurai district.

Objectives of the Study

1. To find out the level of creativity and attitude towards English language in relation to achievement among higher secondary school students for gender.
2. To determine the level of creativity and attitude towards English language with achievement among higher secondary school students for Age.
3. To determine the level of creativity attitude towards the English language about achievement among higher secondary school students for Medium of instruction.

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Hypotheses Formulated for the Study: (H)

The following hypotheses (H) were formulated for the study:

- There is no significant difference between creativity and attitude towards English language in relation to the achievement of higher secondary students in terms of Gender
- There is no significant difference between creativity and attitude towards the English language about the achievement of higher secondary students in terms of Age.
- There is no significant difference between creativity and attitude towards English language in relation to the achievement of higher secondary students in terms of Medium of instruction. Terms and definitions:

1. Attitude - Student attitudes on learning determine their ability and willingness to learn.
2. Creativity – Creativity is the method a person uses to learn. By knowing a student's Creativity, a teacher can use teaching methods that maximize student Creativity.
3. Achievement - Achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of examinations in instructional environments, specifically in school.

Methodology in Brief

The investigator used a stratified random sampling technique to collect 200 samples from Higher Secondary Schools in Madurai District. The investigator planned to undertake the survey method as a technique for this study. The investigator prepared the questionnaire, which has 20 items on 3-point scale. (Strongly Agree, Agree, Strongly Disagree)

Findings of the study:

Hypothesis No. 1

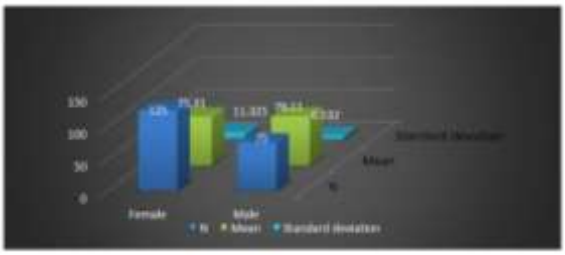
There is no significant difference between creativity and attitude towards English language in relation to the achievement of higher secondary students in terms of Gender.

Table 1 statistical Measures and Results of the Tests of no Significant of difference Between the Mean Scores of Creativity Attitude Towards English Language in Terms of Gender

Gender	N	Mean	Standard Deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Female	125	75.31	11.325	0.55	1.96	Not Significant
Male	75	76.11	6.532			

The table shows that the computed 't' value 0.55 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be accepted. Hence it can be said that there is no significant 2 Female Male difference between creativity and attitude towards English language in relation to achievement in terms of Gender. When we compare the mean scores, Male students are better than Female students.

Figure 1 Graph shows the Statistical Measures and Results of the Tests of no Significance of the Difference between the Mean Scores of Creativity and Attitude towards English Language in Relation to the Achievement of Higher Secondary Students in Terms of Gender



Hypothesis No.2

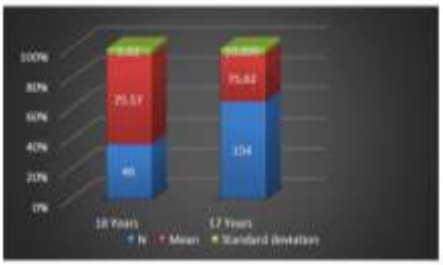
There is no significant difference between creativity and attitude towards English language in relation to achievement of higher secondary students in terms of Age.

Table 2 Statistical Measures and Results of the Tests of no Significance of Difference Between the Mean Scores of Creativity and Attitude Towards English Language in Relation to the Achievement of Higher Secondary Students in Terms of Age

Age	N	Mean	Standard Deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
18 Years	46	75.57	5.920	0.035	1.96	Not Significant
17 Years	154	75.62	10.699			

The table shows that the computed 't' value 0.035 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be accepted. Hence it can be said that there is no significant difference between creativity and attitude towards English language in relation to achievement of higher secondary students in terms of Age. When we compare the mean scores, above 18 year's students are better than the Below 17 year's students.

Figure 2 Graph Shows the Statistical Measures and Results of the Tests of No Significance of the Difference Between the Mean Scores of Creativity and Attitude towards English Language in Relation



Hypothesis No.3

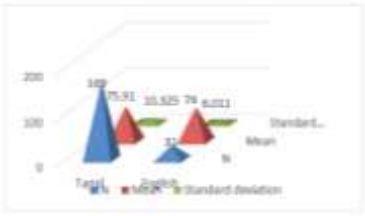
There is no significant difference between creativity and attitude towards English language in relation to achievement of higher secondary students in terms of Medium of instruction.

Table 3 Statistical Measures and Results of the Tests of no Significance of difference between the Mean Scores of Creativity and Attitude towards English Language with Achievement of Higher Secondary Students in Terms of Medium of Instruction

Medium of Instruction	N	Mean	Standard Deviation	Calculated 't' value	Table 't' value at 5% level	Remarks
Tamil	169	75.91	10.325	0.966	1.96	Not Significant
English	31	74.00	6.011			

The table shows that the computed 't' value 0.966 is less than table value 1.96 at 0.05 level. Consequently, the null hypothesis is to be accepted. Hence it can be said that there is no significant difference between creativity and attitude towards English language in relation to the achievement of higher secondary students in terms of Medium of instruction. When we compare the mean scores, English medium students are better than the Tamil medium students.

Figure 3 Graph shows the Statistical Measures and Results of the Tests of no Significance of Difference between the Mean Scores of Creativity and Attitude Towards English Language in Relation to Achievement of Higher Secondary Students in Terms of Medium of Instruction



Hypothesis Verification

1. There is no significant difference between creativity and attitude towards English language in relation to achievement of higher secondary students in terms of Gender
2. There is no significant difference between creativity and attitude towards English language in relation to achievement of higher secondary students in terms of Age.
3. There is no significant difference between creativity and attitude towards English language in relation to achievement of higher secondary students in terms of Medium of instruction. Hence, All the above Hypothesis are accepted.

Educational Implications

Creativity

Knowing a student's creativity allows a teacher to use teaching methods that maximize student learning. Students can use recognition of their individual creativity to find what study methods, environment, and activities help them learn best. The term 'creativity' is only an extension of this. The former is primarily a readiness or preparedness for creativity in a particular situation. It is a condition or state obtaining in a particular learning situation.

Attitude

Student attitudes on learning determine their ability and willingness to learn. Changing students' negative attitudes towards wisdom is a process that involves determining the factors driving the attitude and using this information to bring about change. Every attitude has three components represented in the ABC model of attitudes: A for affective, B for behavioral, and C for cognitive. The affective component refers to the emotional reaction one has toward an attitude object.

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A STUDY OF PROBLEM FACED BY STUDENTS WHILE SOLVING MATHEMATICS PROBLEM FOR HIGHER SECONDARY STUDENTS

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Abstract

The focus of this study is to discuss the important mathematics skills and cognitive abilities in learning that caused the difficulties in mathematics problems-solving among students from students' point of view. The study was carried out on three focused group samples selected through purposeful sampling.

A mixed qualitative and quantitative approach is used to have a clearer understanding. Apart from the questionnaire given, focused group interviews were carried out. Interviews were recorded and transcribed. Data finding was analyzed descriptively. Data findings showed that respondents lacked many mathematics skills such as number-fact, visual-spatial and information skills. Information skill was the most critical. The deficiency of these mathematics skills and cognitive abilities in learning inhibits mathematics problem-solving. This understanding of how the deficits influenced problem-solving is expected to give effective guidelines in preparing diagnostic instruments and learning modules to develop mathematics skills.

Introduction

The importance of problem-solving in mathematical thinking and thus in mathematics education is obvious to many of us. Solving a problem means finding a way out of a difficulty, a way around an obstacle, and attaining an aim that was not immediately attainable. Realistic Mathematics Education is a top view of mathematics learning in The Netherlands. As a result, problem-solving in our country is often related to solving real-world problems. Still, we want to stress that problem solving is not restricted to real-world problems; problems emerging from the 'world of mathematics' can be rich sources for problem-solving activities.

Need and Importance of the Study

We usually see that students have fear towards the subject of Mathematics. They cannot understand the basic concepts of Mathematics and their technique for various reasons. The problems that occur in learning mathematics are relatively more minor in the case of other subjects. Hence, for ordinary students, mathematics becomes more challenging, so they try to avoid it. Problems related to mathematics occur in all stages of students. Therefore, there is a need to study in detail the issues students face in learning. So this study has been conducted with the sole objective of identifying various problems students face in learning mathematics and soliciting suggestive Measures in favor of them.

Objectives of the Study

1. To find out whether there is any significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of gender.
2. To find out whether there is any significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of the school's location.
3. To determine whether there is any significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of the type of the school.

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4. To find out whether there is any significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of age.
5. To find out whether there is any significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of the medium of the school.
4. To find out whether there is any significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of social status.
5. To find out whether there is any significant difference in the problem faced by students while solving mathematics problem for higher secondary students in general.

Hypothesis Formulated for the Study

1. There is no significant difference in students' problems while solving mathematics problems for higher secondary students regarding gender.
2. There is no significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of the school's location.
3. There is no significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of the type of school.
4. There is no significant difference in students' problems while solving mathematics problems for higher secondary students regarding age.
5. There is no significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of the medium of the school.
6. There is no significant difference in students' problems while solving mathematics problems for higher secondary students regarding social status.
7. The problem faced by students while solving mathematics problems for higher secondary students is Average.

Analysis and Interpretation of Data: Overview

The collected data from the sample are analyzed using the statistical application of correlation coefficient and t-test to test the hypotheses. Judicious use of statistics in research reports is often considered a virtue, contributing significantly to the research results. Statistics are usually presented in the form of tables.

Every research is subjected to statistical analysis. Statistical techniques are used to draw inferences from the data the researcher collects. The most important part of the investigation is the analysis and interpretation of data. Analysis of data is one of the basic steps of the research process. It is the process of collecting, analyzing and interpreting numerical data.

Statistical Analysis

- The data collected from 200 students in the Madurai district have been analyzed in this chapter. The statistical analysis started with the computation of Mean and Standard Deviation value correspondingly 't' values F value are found out.
- Descriptive measures of central tendency, measures of variation and percentile scores will be calculated for each variable.
- To find the difference as influenced mathematics solving faced by a student of adolescents ANOVA will be computed.
- To determine the relationship of mathematics, product moment correlation will be used. Regression will be done to predict the academic achievement of the adolescents from third mathematics solving faced by student

Hypothesis Testing

Further, the data were subjected to an appropriate statistical test for testing the hypothesis. The acceptance and rejections of each null hypothesis will be stated based on the results shown in the

corresponding tables. Obtained by the application of proper statistical techniques. The acceptance and rejection have been done at a 0.5% significance level.

Hypothesis No.1

There is no significant difference in students' problems while solving mathematics problems for higher secondary students regarding gender.

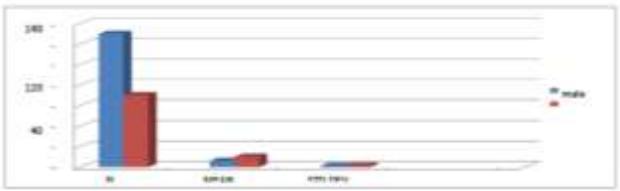
Table 1 Mean, S.D and 't' Values in Problem Faced by Students While

Gender	N	Mean	Standard deviation	Calculated 't' value	Table value at 5% level	Remarks
male	130	6.05	1.226	1.73	**1.96**	Not significant
Female	70	10.1	1.45			

Solving Mathematics Problem for Higher Secondary Students in Terms of Gender

It is evident from table no 4.1 that the obtained 't' value is 1.73 which is lower than the table value 1.96 at the 0.05 levels of significance. This shows no significant difference between male and female students in their Mathematics problems. **Hence hypothesis is accepted.**

Figure 1 Shows The Significant Difference In Attitude Toward Mathematics Based On GENDER



Hypothesis No.2

There is no significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of the school's location.

Table 2 Mean, S.D And 'T' Values In Problem Faced By Students While Solving Mathematics Problem For Higher Secondary Students In Terms Of Location Of The School

locality	N	Mean	Standard deviation	Calculated 't' value	Table value at 5% level	Remarks
rural	160	6.53	1.075	0.19	**1.96**	Not significant
urban	40	11.3	1.464			

It is evident from table no 4.2 that the obtained 't' value is 0.19 which is lower than the table value 1.96 at the 0.05 levels of significance. This shows that there is no significant difference between locality and Mathematics. The problem faced by students while solving mathematics problems for higher secondary students is Average. **Hence hypothesis is accepted.**

Figure 2 Shows the Significant Difference in Mathematics Problems Based on Locality

Hypothesis no.3

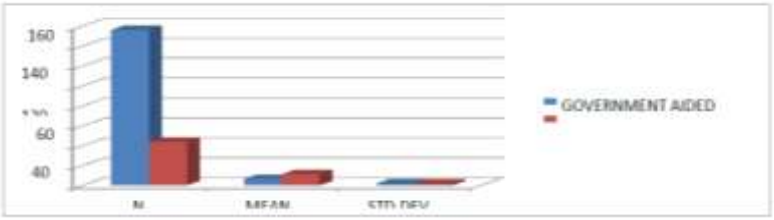
There is no significant difference in the problem faced by students while solving mathematics problems for higher secondary students in terms of the school type.

Table 3 Mean, S.D and 't' Values in Problem Faced by Students while Solving Mathematics Problem for Higher Secondary Students in Terms of Types of School

Types of school	N	Mean	Standard deviation	Calculated 't' value	Table value at 5% level	Remarks
Government	156	6.44	1.931	2.74	1.96	significant
Aided						
private	44	11.18	1.581			

It is evident from table no 4.3 that the obtained 't' value is 2.74 which is higher than 7the table value 1.96 at the 0.05 levels of significance. This shows that there is a significant difference between school location in problem faced by students while solving mathematics problem for higher secondary students is Average. **Hence hypothesis is rejected.**

Figure 3 Shows The Significant Difference Of Mathematics Problems Based On Types Of School



Hypothesis No.4

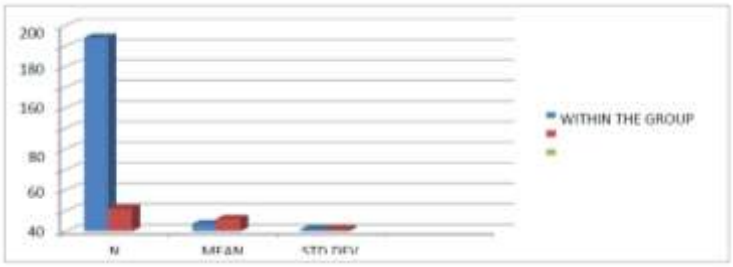
There is no significant difference in students' problems while solving mathematics problems for higher secondary students regarding social status.

Table 4 Mean, S.D And 'T' Values In Problem Faced By Students While Solving Mathematics Problem For Higher Secondary Students In Terms Of Social Status

Social Status	N	Mean	Standard Deviation	Calculated 'f' value	Table value at 5% level	Remarks
Within the Group	188	7.2	1.876	30.57	1.96	Not significant
Between the Group	22	12.03	1.78			

Table 4 shows that the computed 't' value is 30.57 greater than the table value of 1.96 at 0.05. Hence it can be said that there is the social status when we compare the significance level. Therefore the hypothesis stated is rejected.

Figure 4 Shows The Significant Difference In Mathematics Problem Based On Social Status



Conclusion

The present findings are delivered from the heuristic data collected from the present study. Based on the investigator's efforts and the review of related studies, the researcher considers that the research results have not been reached.

As we saw, the present study aims to find out students' problems in solving mathematics problems.

There is a significant difference in the problem faced by students while solving mathematics problems for higher secondary students regarding the school's location.

There is no significant difference in students' problems while solving mathematics problems for higher secondary students in terms of gender, school type, medium of the school, age, and social status.

The study reveals that 25% of higher secondary students are good at the problem faced by students while solving mathematics problems at higher secondary students. 60% of higher secondary students meet a moderate level of the problem faced by students while solving mathematics problems in higher secondary students. 15% of higher secondary students are average in the problem faced by students while solving mathematics problems for higher secondary students

Educational Implications

The present study has educational implications that reflect students' problems while solving mathematics problems among higher secondary students. The study reveals that 25% of higher secondary students are good at the problem faced by students while solving mathematics problems at higher secondary students. 60% of higher secondary students meet a moderate level of the problem faced by students while solving mathematics problems in higher secondary students. 15% of higher secondary students are average in the problem faced by students while solving mathematics problems for higher secondary students. The study has given another picture: the higher secondary school students are uniform in their trouble solving ability in terms of gender, medium of instruction, type of school, age, and social status. These variables do not signify any differences among higher secondary students.

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A STUDY ON EXPLORING DEVELOPING CRITICAL THINKING SKILLS NEEDED FOR SUCCESS BEYOND THE CLASSROOM AMONG STUDENTS OF B.ED COLLEGES IN MADURAI

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"The important thing is not to stop questioning. Curiosity has its reason for existing."
- Albert Einstein

Abstract

This study aims to explore the potential of implementing Critical Thinking strategies in Mathematics among the students, to check whether there are significant differences in the accumulation of information and processing of the available data, identifying, analyzing, synthesizing, and evaluating the same to make effective decisions. This study involved male and female learners among the B. Ed students of various B. Ed colleges in Madurai. A total of 300 students were asked to complete the questionnaire, which was used to identify students' thought processes in assessing the situation via critical thinking and recognize students' achievements. In addition, an achievement test was held to determine the students' level and then correlate results with the learning style preferences, language achievements, and academic achievement.

Introduction

Critical thinking is skillful, responsible thinking that is conducive to good judgment because it is sensitive to context, relies on criteria, and is self-correcting. It is Reflective: Critical thinking is different from just thinking. It is metacognitive—it involves thinking about your review. Critical Thinking Involves Standards: having my thinking measure up to the criteria. Critical Thinking Is Authentic: Critical thinking, at its heart, is thinking about real problems. Although you can reason out puzzles and brain-teasers, the essence of critical thinking comes into play only when you address real issues and questions rather than artificial ones. The following five avenues of thought are effective in stimulating essential thinking: Compare and contrasting, Determining parts-whole relationships, Determining the reliability of sources, Causal explanation and Prediction.

In general mental ability, which includes critical thinking, is one of the strongest predictors of long-term success in the workplace, many other factors determine success, such as motivation, confidence, and time management skills that exist in a dynamic system that changes with every situation.

Need and Importance of the Study

A robust critical thinking pedagogy that encourages students' necessary knowledge, skills, and dispositions may improve students' academic success while encouraging those abilities needed for transfer and competency in the workplace. The development and implementation of pedagogy that promotes students' engagement in the learning process could enable students' critical thinking abilities and transfer those abilities necessary for academic achievement, personal success, and success in the workforce.

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Objective of the Study

To find the difference between the influence of a teaching methodology on critical thinking and academic success in Mathematics among middle school teachers among

- their genders,
- their qualifications
- their locality of the working place.
- their nature of the working environment.
- their medium of instructions
- their marital status.

Hypotheses Formulated for the Study

There is a significant difference between the influence of a teaching methodology on critical thinking and academic success in Mathematics among middle school teachers among their genders, their qualifications, marital status, locality of working place, the nature of the working environment and their medium of instructions.

Methodology

"The Influence of a Teaching Methodology on Critical Thinking and Academic Success of a Middle School Maths Projects"

The methodology adopted was to find the difference between the influence of a teaching methodology on critical thinking and academic success in Mathematics in middle school students on different criteria. It was found that there were variations in identification and implementation in applying crucial thinking concerning age, Gender, status, locality, the nature of the learning environment and the medium of instruction. It was observed that factors like,

Age, Gender, previous knowledge, technical skills, exposure to computers and the internet, academic achievement, infrastructure facilities, cultural background and personal values significantly affect the perceptions and readiness of teachers in critical thinking and academic success**.**

Hypothesis Testing

To obtain the desired objectives by conducting any research study, the first and initial steps were to select suitable persons and their good numbers, providing accurate data regarding the problem's solution. Below is a tabular and graphical representation of the test conducted depending on the credentials adopted.

Hypothesis 1

Table. No. 1 Statistical measures and results of a test of significance of the difference between mean scores of advantages obtained by the B. Ed student teachers in terms of gender

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Gender	Male	101	60.8	4.26	0.70	Not Significant
	Female	199	60.42	4.86		

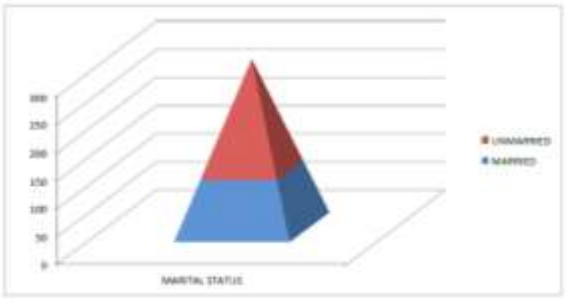
It is evident from the above table no. 4.2 that the obtained 't' value 0.70 is lesser than the table value 1.96 at 0.05 level of significance. This shows no significant difference in exploring the potential of implementing e-learning practices among the B. Ed student teachers in terms of Gender. Hence, hypothesis 1 is rejected.

Hypothesis 2

Table 2 statistical measures and results of the test of significance of the difference between mean scores of advantages obtained by the B. Ed student teachers in terms of marital status

Variable	Sub Variables	N	Mean	SD	't' Value	Significance at 0.05 Level
Marital Status	Married	102	48.09	12.10	2.77	Significant
	Unmarried	198	53.02	11.61		

Graph shows the Statistical Measures and Results of the Tests of no Significant of Difference Between the Mean Scores of Access to E-Learning Resources among B. Ed Student Teachers in Terms of Marital Status



It is evident from the above table that there exists a significant difference in the mean ratings of exploring the potential of implementing critical thinking practices among the B. Ed student teachers in terms of marital status and their 't' values are 2.77, which are higher than the critical value of 1.960 of the degree of freedom 300. The unmarried B. Ed student teachers are having more implementation of e-learning practices than the married B. Ed student teachers.

Conclusion

The investigator verified the hypotheses to determine the significant difference in exploring their potential for implementing critical thinking in mathematics among the B. Ed student teachers in Madurai. This study examined the relationships between mathematical thinking and critical thinking dispositions of mathematics teachers.

In addition, it has been determined whether the sub-dimensions of mathematical thinking are significant predictors of necessary thinking disposition. Critical thinking must be high for teachers to perform effectively and succeed in classroom teaching activities. In this context, teachers need to create teaching environments that can improve learners' critical thinking skills, apply the new learning and teaching methods in their classrooms and make lesson plans about the activities of these methods. Therefore, it is an essential responsibility for mathematics teachers to teach and develop critical thinking in their students in the future. Consequently, it is thought that mathematics teachers should have a high necessary review due to the nature of mathematics and the department they read. This study found that the teachers' critical thinking dispositions were relatively above the middle level. This result is evaluated in terms of essential spirits of thinking. It is found that there are similar findings in the literature.

Educational Implications

Here are some of the reasons why students need critical thinking skills in today's age

Enhancing Creativity and Curiosity

A student encouraged to be a critical thinker invariably develops a curiosity about happenings around them. A strong and genuine interest makes students want to analyse and assimilate information and events. In the process, they form their informed ideas, mostly out-of-the-box ones, improving their creativity.

Promoting Self-Assertion and Self-Reflection

Critical thinking is essentially self-disciplined, self-monitored, and self-corrective thinking. Critical thinking is at the forefront of learning, as it aids students in reflecting and understanding their points of view. This skill helps a student figure out how to make sense of the world based on personal observation and understanding.

Boosting Career Prospects

Critical thinking is not confined to the classroom. In the aftermath of COVID-19, the new economy places a lot of demand on a flexible workforce and employees' ability to analyse information from various sources and devise ingenious solutions.

Nurturing Problem-Solvers and Innovators

Critical thinking skills are one of the by-products of essential skills of thinking and the ability to analyse and look at problems in a creative and constructive method. Critical thinkers are invariably good problem solvers. An excellent critical thinker can separate facts from opinions and fiction and examine the issue from all angles before making rational decisions toward solving a problem.

Fostering Allied Life Skills

Critical thinking fosters allied life skills such as organizational skills, planning, open-mindedness, and communication skills. Being a life skill by itself, critical thinking enables you to take on challenges in the personal and professional world easily. It encourages confidence and independence, thereby shaping successful lives. As a crucial thinker, one will learn from mistakes, thereby notching up productivity in all spheres of life.

As education takes different forms in a world hit by a pandemic, students must possess skills like critical thinking that will prepare them for tomorrow. After all, the children of today are the leaders of tomorrow.

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AWARENESS OF UTILIZATION OF ONLINE RESOURCES FOR TEACHING LEARNING PROCESS AMONG HIGHER SECONDARY TEACHERS

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Introduction

The word education has been derived from the Latin words 'educare', meaning 'to train', 'to instruct', 'to draw out' or 'lead forth'. Thus education is an act or process of acquiring and imparting knowledge, skills and attitudes. Education technology is a science of techniques and methods of doing or getting things done related to any art, science, or a particular profession. Technology thus results in new designs and devices and new ideas and processes.

Significance of the Study

The need to use the online resources towards getting current and relevant information for the purpose of academic activities of teaching, learning, research, publication communication, and collaboration activities. The emergence of Information and Communication Technologies (ICTs), particularly the Internet, has recently brought about a remarkable shift from print to electronic resources. This trend produces information, whether scholarly or otherwise, electronically or digitally. Online resources are essential in academic activities by higher secondary teachers because of their awareness and access to Information and Communication Technology (ICT) in the teaching-learning process. Thus knowing about online resources and their utilization in the teaching-learning process is very important for higher secondary teachers. Hence investigator has taken the following topic for her investigation.

Statement of the Problem

The problem undertaken by the investigator is "Utilization of online resources for awareness on teaching-learning process among higher secondary teachers."

Objectives of the Study

1. To determine the level of utilization of online resources for awareness of teaching-learning process among higher secondary teachers.
2. To find out the significant difference in the utilization of online resources for awareness of the teaching-learning process among higher secondary teachers regarding background variables.

Null Hypotheses of the Study

1. The level of utilization of online resources for awareness of teaching-learning process among higher secondary teachers is average.
2. There is no significant difference in the utilization of online resources for awareness of the teaching-learning process concerning gender.
3. There are no significant differences among the government, aided and unaided school teachers in their utilization of online resources for awareness of the teaching-learning process.

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Review of Related Literature

Rajeshkumar. M and **Krishnakumar. R (2018)** conducted a study on a Tool to Measure the Attitude of Teachers of Higher Education Towards Online learning. This study aimed to develop a research tool to measure the attitude of higher education teachers toward Online learning. It seems that there was no research tool to measure. The device was administered to 300 teachers of higher education randomly selected from 15 engineering colleges. This research tool will be of immense use for the educational administrators, which will throw light upon the attitude of teachers of higher education towards Online learning.

Snider and **Sherri. A (2018),** conducted a study on a Critical Analysis of Rural Teachers' Usage of Online Communities. The purpose of this study was to analyze data related to rural teachers' use of online communities. This study's results do not support the widespread use of online communities by these rural teachers to help fill their personal and professional needs. The only online communication technology widely used was E-Mail.

Method Adopted for the Study

The investigator has adopted a survey method of research to find out the "Utilization of online resources for awareness on teaching-learning process among higher secondary teachers."

Tool Used for the Study

This scale was standardized by Helan (2016). It was used for assessing the utilization of online resources. It has 30 statements.

Population of the Study

The study population consists of higher secondary school teachers in the Madurai district.

Sample of the Study

The investigator has used a random sampling technique. The investigator selected 19 higher secondary schools from the Madurai district. 250 teachers have been selected from those 19 higher secondary schools.

Utilization of Online Resources Hypothesis Testing

The level of utilization of online resources for awareness of the teaching-learning process among higher secondary teachers is average.

Table 1: The Level Of Utilization Of Online Resources For Awareness

Experiment Variable	Low		Average		High	
	N	%	N	%	N	%
Utilization of Online resourece	37	14.8	184	73.6	29	11.6

It is inferred from table 4.1 that most of the higher secondary teachers have an average utilization of online resources (73.6%).

Hypothesis 1

There is no significant difference in the utilization of online resources for awareness of the teaching-learning process concerning gender.

Table 2 Mean and SD Score of Utilization of Online Resources of Male and Female Teachers and Calculated 'T' Value

Variable	Male		Female		Calculated 't' value	Remarks
	Mean	S.D	Mean	S.D		
Gender	141.63	11.31	145.78	11.61	2.72	S

(At a 5% level of significance, the table value of 't' is 1.97)

Table (4.2) shows that the computed 't' value of 2.72 is more than the table value 1.97 at 0.05 level. Consequently, the null hypothesis is to be rejected. Hence, there is a significant difference in utilizing online resources for awareness of the teaching-learning process concerning gender. When we compare the mean scores, female teachers are better than male teachers in using online resources.

Hypothesis 2:

There is no significant difference between the government, aided and unaided school teachers in their utilization of online resources for awareness of the teaching-learning process.

Table 3 The 'F' Value Among the Government Aided and Unaided School Teachers in their Utilization of Online Resources

Variable	Source of Variable	Sum of Square	Degrees of Freedom	Calculated F value	Remark
Category of the School	Between	1634.50	2.00	6.22	S
	Within	32441.0	247.00		

(At a 5% level of significance, the table value of 'F' is 3.03)

Table (4.3) shows that the computed 'F' value of 6.22 is more than the table value 3.03 at the 0.05 level. Consequently, the null hypothesis is to be rejected. Hence it can be said that there is significance difference between the government, aided and unaided school teachers in their utilization of online resources for awareness on the teaching-learning process.

Findings

1. The level of utilization of online resources for awareness of teaching-learning process among higher secondary teachers is average. Table 4.1 shows that majority of the higher secondary teachers have an average utilization of online resources (73.6%).
2. Table (4.2) shows that the computed 't' value 2.72 is more than table value 1.97 at 0.05 level. Consequently, the null hypothesis is to be rejected. Hence, there is a significant difference in the utilization of online resources for awareness of teaching-learning process concerning gender. When we compare the mean scores, female teachers are better than the male teachers in their utilization of online resources.
3. The Table (4.3) shows that the computed 'F' value 6.22 is more than table value 3.03 at 0.05 level. Consequently, the null hypothesis is to be rejected. Hence it can be said that there is a significant difference among the government, aided and unaided school teachers in their utilization of online resources for awareness on teaching-learning process.

Interpretations

1. There is significance difference in the utilization of online resources for awareness on teaching-learning process concerning gender. When we compare the mean scores, female teachers are better than the male teachers in their utilization of online resources. It may be because female teachers usually like to use online resources. They also have more interest in using e-content.
2. There are significant differences among the government, aided and unaided school teachers in their utilization of online resources for awareness on the teaching-learning process.

It may be because unaided schools have more online and e-library facilities for teachers. They also give more training to teachers about how to use the online resources. Aided schools have moderate-level online facilities for teachers. But government schools have low-level online facilities for teachers.

Recommendations

1. In higher secondary schools along with, regular programmes, seminars, workshops and symposium on the utilization of online resources can be conducted.
2. Internet based teaching can be followed in higher secondary schools.
3. Training must be given for the higher secondary teachers to browse text from the E-Library and E-Books.
4. Develop the E-Library facility in the higher secondary schools.
5. Modify the computer lab with free internet facility.
6. Give freedom for the teachers to use the available E-Resources in the higher secondary schools.
7. Curriculum should be modify and introduced the new topics about E Resources in their subjects.
8. Modern methods and techniques in teaching should be adopted by the higher secondary teachers.

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COMPARATIVE ANALYSIS ON CHALLENGES FACED BY STUDENTS BETWEEN DISTANCE EDUCATION AND REGULAR EDUCATION

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Abstract

These problems include the quality of instruction, hidden costs, misuse of technology, and the attitudes of instructors, students, and administrators. Each one of these affects the overall quality of distance learning. Regular Learning provides an exceptional learning opportunity, allowing for flexibility in learning methods and materials, schedules, and physical location. Like all learning models, distance learning has inherent problems, especially in isolation, support, technology and discipline. We break down some of the most common challenges of distance education, as well as ideas for improving the learning experience for every student.

Introduction

Distance learners face many issues and challenges. Regular learners get many facilities and are supported by various government schemes, but distance learners do not get such support. Many distance learners leave their studies due to these problems (Kanvaria, Vinod Kumar, 2012). Distance mode students have heterogeneous backgrounds. Their experience, socio-cultural, age, occupational and educational backgrounds are varied. They are motivated to complete their courses. Moreover, the study system is crucial for the study system's social and economic environment, demographic variables, vocational interests, and student attitudes for regular and distance modes.

Regular education faces many issues and challenges which need to be addressed. According to J.D. Singh (2011), in a globalized economy, the role of higher education is essential. Many technical students of premier universities leave the country after their studies leading to a 'brain drain'. About 86%of science and technology students leave the nation and do not return (Singh, J.D., 2011). Although the quantity of higher education institutions is increasing, the quality of higher education institutions is decreasing.

Need and Importance of the Study

Distance learning is a form of education that doesn't require students to be physically present in school. This form of education conducts classes in videos and modules. Even exams are conducted online. The traditional education system has remained quite the same. Universities are still operating face-to-face courses. Although multimedia and technology have changed the experience over the last few decades, students pursuing degrees still attend lectures and examinations.

People are going to have to keep adding to their set of skills. It's not going to be about their bachelor's degree. People have to adapt to new things and learn new skills. This is a part of the new upgrade we are going through in all walks of life. The world is not the same as how traditional academics shaped it. People must adapt to new skills and learn new things to keep up with the modern world. It has changed how we interact with people and learn new things. People's comfort zones are changing. Failing to upgrade will cause you to fall back into the wave of time.

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Objectives of the Study

- To determine the differences between regular and distance mode students at the undergraduate level.
- To determine the significance between student participation through distance and regular education.
- To determine the significance of the student's achievement through distance and regular education.
- To find out the significant towards between distance and regular education relation into gender
- To determine the significance of distance and regular education relation in the locality.
- To find out the significant towards between distance and regular education relation in college location
- To determine the significance of distance and regular education relation in types of college.
- To determine the significance of distance and regular education in parents' economic status.
- To determine the significance of distance and regular education in study mode.

Hypotheses Formulated for the Study

- There will be no significant difference between the mean scores of the experimental group and control group in the Pre-test.
- There will be a significant difference between the Post-test mean scores of the control and experimental groups.
- There will be no significant difference between the control group's mean scores of the Pre-test and Post-test.
- There will be a significant difference between the experimental group's Pre-test and Post-test mean scores.

Methodology

The investigator has used an experimental method to study writing skills and academic achievement in English among higher secondary students. It is a single group pre-test treatment post-test experimental study.

Pre-Test Performance

The mean, standard deviation and 't'- test on the pre-test performance of the subjects before treatment are presented in the following table

Hypothesis: 1

There will be no significant difference between the mean scores of the experimental group and control group in the Pre-test.

Table 1

Group	Number	Mean	SD	't' Value	Level of Significance
Control	25	13.14	2.45	1.27	Non Significant
Experimental	25	14.11	2.49		

Control Vs Experimental (Pre–Test)

From the above table, it is inferred that the calculated value is 1.27, which is less than the table value 1.96. Based on the analysis of the data concerned, it is evident that the research hypothesis is accepted.

Post-Test Performance

The mean post-test performance of the control and experimental groups was calculated after treatment to compare the performance of the two groups.

Hypothesis: 2

There will be a significant difference between the Post-test mean scores of the control and experimental groups.

Table 2 Control vs. Experimental (Post–Test)

Group	Number	Mean	SD	't' Value	Level of Significance
Control	25	13.94	4.65	5.13	Significant
Experimental	25	19.59	6.62		

From the above table, it is inferred that the calculated value is 5.13, more significant than the table value of 1.96. Based on the analysis of the data concerned, it is evident that the research hypothesis is accepted.

Control Group Performance

Hypothesis: 3

There will be no significant difference between the mean scores of the Pre-test and Post-test of the control group.

Table 3: Pre - Test vs Post - Test (Control)

Group	Number	Mean	SD	't' Value	Level of Significance
Pre-test	25	13.56	4.64	1.12	Non Significant
Post-test	25	13.92	4.69		

From the above table, it is inferred that the calculated value is 1.12, less than the table value1.96. Based on the analysis of the data concerned, it is evident that the research hypothesis is accepted.

Experimental Group Performance

Hypothesis: 4

There will be a significant difference between the experimental group's Pre-test and Post-test mean scores.

Table 4: Pre - Test vs. Post-test (Experimental)

Group	Number	Mean	SD	't' Value	Level of Significance
Pre-test	25	15.96	5.57	6.02	Significant
Post-test	25	19.56	6.64		

From the above table, it is inferred that the calculated value is 6.02, which is greater than the table value of 1.96. Based on the analysis of the data concerned, it is evident that the research hypothesis is accepted.

Sample Selected for the Study

A research study is concerned with acquiring knowledge about the characteristics of a population or several populations. Most of the time, it is not necessary and sometimes not possible to study the entire population in a single research study. Research is a process of drawing inferences about a large aggregate of subjects of a certain kind based on analyzing a small sample of that aggregate or population.

Hypotheses Verification and Findings of the Study

The main findings of the study and their interpretation are given below:-

- There will be no significant difference between the mean scores of the experimental group and control group in the Pre-test. Accepted
- There will be a significant difference between the Post-test mean scores of the control and experimental groups. Accepted
- There will be no significant difference between the control group's mean scores of the Pre-test and Post-test. Accepted
- There will be significant differences between the experimental group's Pre-test and Post-test mean scores. Accepted.

Educational Implications of the Study

The educational implications of the study are given below:

- Guidance and counseling services should be provided to undergraduate students to help in their vocational interests following their social and economic needs. ❖ The distance mode organizations should be concerned about the vocational interests of distance mode students. They should open courses that provide vocations to distance mode students after completing education.
- Online courses of short duration should be started so that students who want jobs early may be attracted to distance education programs.
- In regular mode, the vocational interests were found to be high. So special provisions should be made to take care of the vocational interests of college students.

Conclusion

Studies were conducted in the field of distance education and higher education. However, very few comparative studies were carried out on regular and distance education. Distance learning is a form of education that doesn't require students to be physically present in college. Common Learning provides an exceptional learning opportunity, allowing for flexibility in learning methods, materials, schedules, and physical location.

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A STUDY ON ATTITUDE TOWARDS ONLINE EDUCATION AMONG SCHOOL STUDENTS

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Abstract

This study aimed to examine undergraduate students' attitudes towards online learning in District Madurai. The study mainly focused on exploring the relationship between undergraduate students' attitudes towards Technology Acceptance Model, with a particular reference to online education.

Keywords: *Online Education, Attitude, Technology, Undergraduate, Ordinal Regression*

Introduction

Online Education, a technology-based modern tool of education, a class without walls and boundaries, with a trail of advantages: Easy availability, global accessibility, affordable cost, flexibility of time, and a green examination system, has gained popularity all over the world. In India, its use is encouraged in Higher Education, and the results appear favorable. However, at Secondary School level, it is still nascent. The paper's objective is to find out whether in secondary schools.

Need and Importance of the Study

Students Education is associated with positive behaviors and it is to a successful outcome. Successful education can only be assured through students who have acquired the necessary knowledge and skills.

Students Education or belief in their capacity to study efficiency is a significant factor determining successful education. Student have to be very active, alert, energetic enthusiastic and dynamic. They must possess deep understanding of reasoning power, power of discrimination, originality, imagination, memory, tract fullness, and emotional stability

Objectives of the Study

- To find out the signification difference in attitude towards online education concerning gender.
- To find out the signification difference in attitude towards online education concerning locality.
- To find out the signification difference in attitude towards online education concerning the location of schools.

Hypothesis Formulated for the Study

- There is no signification difference in attitude towards online education concerning gender.
- There is no signification difference in attitude towards online education concerning locality.
- There is no significant difference in attitude towards online education regarding the location of schools.

Terms and Definitions

The investigator's views of the key terms in the present study are as follows: Education. It refers to the belief in one's ability to achieve goals and overcome obstacles in daily living.

School students: Refers to the student studying under Matric Hr Sec Schools.

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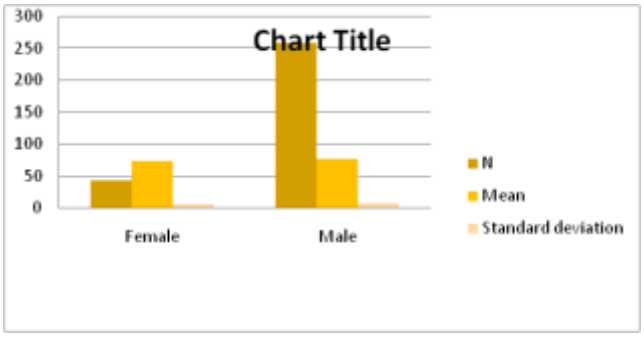
Hypothesis No: 1

There is no signification difference in attitude towards online education concerning gender.

Table 1 Mean, S.D And 'T' Value For The Significant Difference Online Education Among School Students In Gender

Gender	N	Mean	Standard deviation	Calculated 't' value	Table value at 5% level	Remarks
Male	**42**	73.31	5.816	1.721	**1.96**	Not significant
Female	**158**	76.32	10.534			

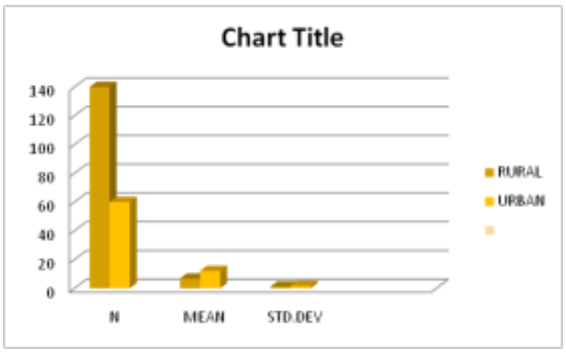


Hypothesis No:2

There is no significant difference in attitude towards online education regarding locality.

Table 2 Mean, S.D And 'T' Value For The Significant Difference Online Education Among School Students School In Locality

Locality	N	Mean	Standard deviation	Calculated 't' value	Table value at 5% level	Remarks
Rural	**140**	6.821	1.26	**1.06**	**1.96**	Not significant
Urban	**60**	12.13	1.76			

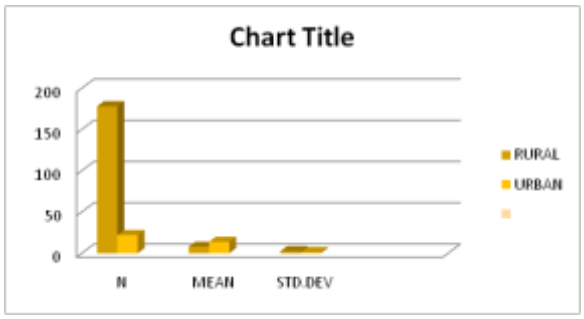


Hypothesis No:3

There is no signification difference in attitude towards online education concerning school location.

Table 3 Mean, S.D And 'T' Value For The Significant Difference Online Education Among School Students In School Location

School of Location	N	Mean	Standard deviation	Calculated 't' value	Table value at 5% level	Remarks
Rural	**178**	7.84	2.28	**1.19**	**1.96**	Not significant
Urban	**22**	13.8	1.32			



Educational Implications

In contrast to the present findings, other studies had not reported any association between the age of the students and attitude towards online classes. The result of the present study indicates that there was a significant association found between the academic level or category of the respondents and their attitude toward online education among them. Most respondents with a positive attitude were high school and intermediate students. Unfortunately, no study explained the association between academic level and attitude towards online classes. The results of the present study indicate a higher significant association between the respondents' family income and attitude towards online classes.

Conclusion

Online classes and tutorials are bound to progress further in coming years in all spheres, especially in education. The parallel form of education like the coaching institutes boasts a very high percentage of placement in reputed & top institutes. However, the major drawback of these institutes is that they are costly and very tiring for the students.

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தமிழாசிரியர்களின் தொழில்நுட்பக்கருவிகளின் செயல்திறன் மற்றும் உணரப்பட்ட திறன் நிலை - ஓர் ஆய்வு

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அறிமுகம்

‘எண்பொருள வாகச் செலச்சொல்லித் தான்பிறர்வாய்
நுண்பொருள் காண்ப தறிவு’

மாணவர்களின் திறமைகளை வளப்படுத்துவதும் சுயக் கட்டுப்பாட்டை வளர்ப்பதும் சிறந்த கருத்துகளைக் கேட்டுணரச் செய்வதும் எதையும் கற்றுக் கொள்வதில் முனைப்பை ஏற்படுத்துவதும் கல்வியின் பரிணாமங்கள் ஆகும். இப்பரிணாமங்கள் பண்பட்ட நிலையில் சிறந்த மனிதன் உருவாகின்றான்.

‘அறிவுஅற்றம் காக்கும் கருவி செறுவார்க்கும்
உள்ளழிக்க லாகா வரண்’

அறிவு அழிவு வராமல் காக்கும் கருவியாகும். மேலும் பகைவராலும் அழிக்க முடியாத எத்தகைய சூழ்நிலையிலும் அரண் போல காத்து நிற்பதாகும். இப்படிப்பட்ட மேன்மையான அறிவினை வழங்குவது கல்வி செயல்பாடுகள் ஆகும். அதிலும் தாய்மொழி கற்கும் போது, அம்மொழிக்கல்வி அனைத்து பாடப்பிரிவுகளையும் கற்பதற்கு ஆதாரமாக இருக்கின்றது. தமிழாசிரியர்களுக்கு தமிழ்க்கல்வி அரிவோடு, புதுமைக்கு ஏற்ப தன் செயல்பாட்டு உத்திகளை மாற்றியமைக்கும் தொழில்நுட்பத் திறனும் மிக அவசியம். அத்திறன் குறித்து இவ்வாய்வேட்டில் ஆராயப்படுகிறது.

ஆய்வின் தலைப்பு

“தமிழாசிரியர்களின் தொழில்நுட்பக் கருவிகளின் செயல்திறன் மற்றும் உணரப்பட்ட திறன் நிலை” - ஓர் ஆய்வு

ஆய்வு தலைப்பின் விளக்கம்:

“பழையன கழிதலும் புதியன புகுதலும்
வழுவல கால வகையினானே”

என்ற நன்னூல் நூற்பாவிற்கேற்ப பழைய முறைகளில் கற்றல் மாறி, புதிய முறைகளில் தொழில்நுட்பத் திறன் நெறியில் கற்றல் முறை மேம்பட்டு வருகிறது. ஆசிரியர், மாணவர் நேரடிக் கற்பித்தல் என்ற முறையிலிருந்து மாறியும், துணைக்கருவிகளில் ஒன்றாகவும் தொழில்நுட்பத்தின் வளர்ச்சி உருவாகியுள்ளது. இவ்வாறு தொழில்நுட்பக் கருவிகளைக் கொண்டு பாடத்தைக் கற்பிப்பதின் மூலம் மாணவர்களுக்கு ஆர்வம் ஏற்பட்டு, விரும்பிக் கற்பர். பழைய முறைகளில் கற்றல் மாறி இன்றைய தொழில்நுட்ப வளர்ச்சியின் பங்கு அளப்பறியதாகிவிட்டது. இந்த தொழில்நுட்பக் கருவிகளைக் கொண்டு இன்றையத் தலைமுறை மாணவர்களுக்கு புதிய முறையில் தமிழ் பாடத்தினைக் கற்பித்தால், மாணவர்களின் விருப்பம் மேலோங்கும். புதியப் போக்கிற்கு தமிழாசிரியர்களுக்கு அத்திறன் குறித்து தெளிவு மிக அவசியம். தமிழ்மொழியைக் கற்பிக்கும் ஆசிரியர்கள் புதுமையான செயல்திறன்களையும் பெற்றிருக்க வேண்டும்.

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அப்போது தான் காலத்தால் அழியாது அனைவரின் மனதிலும் தமிழ்மொழி நிலைப் பெற்றிருக்கும். உலக அரங்கில் தமிழ்மொழியை உயர்த்தவும், கால வெள்ளத்தால் தமிழ்மொழி அழியாது காத்திடவும், ஒவ்வொரு தமிழரும் தம் தாய்மொழியை விருப்பத்தோடு கற்றிடவும் தமிழாசிரியர்கள் புதிய தொழில்நுட்பக் கருவிகளின் செயல்திறனை அறிந்திருக்க வேண்டும்.

ஆய்வின் நோக்கங்கள்

- தொழில்நுட்பக் கருவிகளின் செயல்திறன் குறித்து தமிழாசிரியர்களின் நிலைப்பாட்டினை அறிதல்
- இன்றைய நவீன உலகத்தில் தொழில்நுட்பக் கருவிகளின் முக்கியத்துவத்தினை தமிழாசிரியர்களுக்கு உணர்த்துதல்.
- தொழில்நுட்ப செயல்திறன் குறித்து விழிப்புணர்வினை ஏற்படுத்துதல்
- தொழில்நுட்ப செயல்திறன் கருவிகளைக் கையாளுவதற்கு தமிழாசிரியர்களுக்கு ஆர்வமும் ஈடுபாடும் இருக்கிறதா என பரிசோதித்தல்
- தொழில்நுட்ப செயல்திறன் கருவிகளைக் கையாளுவதற்கானப் பயிற்சியினை அளித்தல்.
- மேற்கண்டவற்றை இவ்வாய்வானது நோக்கமாகக் கொண்டுள்ளது.

ஆய்வின் கருதுகோள்கள்

- தமிழ் மொழி கற்பிக்கும் தமிழாசிரியர்களில் இரு பாலினரும் தொழில்நுட்பக் கருவிகளின் செயல்திறனைப் பெரும்பாலும் உணரவில்லை.
- புதியத் தலைமுறை தமிழாசிரியர்களிடம் தொழில்நுட்பக்கருவிகளின் செயல்படுத்துவதில் விருப்பம் உள்ளது.
- இன்றைய நவீன காலக்கட்டத்தில் மாணவர்களுக்கான தமிழ் கற்றல் - கற்பித்தல் செயல்பாடுகள் புதுமை முறையில் தேவைப்படுகிறது.
- திருமணத்திற்கு பின் அவர்களின் குடும்பசூழ்நிலை பாதிப்பினை ஏற்படுத்தவில்லை.
- தமிழ் மொழி குறித்த தொழில்நுட்பப் பயன்பாடு எளிதாக அமைய கல்வித்தகுதி தடை இல்லை.
- இளங்கலை ஆசிரியர் பயிற்சி மட்டும் எடுத்த தமிழாசிரியர்கள் தொழில்நுட்ப அறிவு உடையவர்களாக இருக்கலாம்.
- நவீனப்பள்ளிகளில் பணிப்புரியும் தமிழாசிரியர்களிடம் இவை குறித்த கற்றலும் புரிதலும் ஓரளவு உள்ளது.
- உயர்நிலைப் பள்ளி அளவில் இருக்கும் செயல்திறன் உத்தி பயன்பாடு குறைவாகவும், ஆரம்பப்பள்ளி அளவில் பயன்பாடு சற்று மிகுந்தும் வேறுபாடு காணப்படுகின்றது.

ஆய்வு கருவி

போ. வீரஜோதி, திருமதி அய்யம்மாள் (2021) அவர்களால் 'தமிழாசிரியர்களின் தொழில்நுட்பக் கருவிகளின் செயல்திறன் மற்றும் உணரப்பட்ட திறன் நிலை' என்ற தலைப்பில் உருவாக்கப்பட்டு, தரப்படுத்தப்பட்ட வினாநிரல் இந்த ஆய்விற்கு பயன்படுத்தப்பட்டுள்ளது.

மாதிரிகள் அட்டவணை

வ.எண்	மாறிகள்	துணை மாறிகள்	மாதிரி	மொத்தம்
1.	பாலினம்	ஆண்	41	130
		பெண்	89	
2.	வயது	20 - 35	66	130
		36 - 50	52	
		51 - 65	12	
3.	அனுபவம்	0 - 5	53	130
		6 - 10	53	
		11 - 15	12	
		15 வருடத்திற்கு மேல்	12	
4.	திருமண நிலவரம்	திருமணமானவர்	107	130
		திருமணமாகதவர்	23	
5.	கல்வித்தகுதி	இளங்கலை	62	130
		முதுகலை	66	
		பி.எச்.டி	2	
6.	ஆசிரியர் பயிற்சி கல்வித்தகுதி	இளங்கலை கல்வியியல்	112	130
		முதுகலை கல்வியியல்	18	
7.	பள்ளியின் பிரிவு	அரசு சார்ந்த	33	130
		அரசு சாராத	97	
8.	கற்பிக்கும் வகுப்பு	தொடக்கநிலை	82	130
		உயர்நிலை	48	

கருதுகோள்: 1

- **தமிழ் மொழி கற்பிக்கும் தமிழாசிரியர்களில் இரு பாலினரும் தொழில்நுட்பக் கருவிகளின் செயல்திறனைப் பெரும்பாலும் உணரவில்லை.**

பாலினம்	எண்ணிக்கை	கூட்டு சராசரி	திட்ட விலக்கம்	't' மதிப்பு	0.5% பரப்பில் சிறப்பான வேறுபாடு
ஆண்	41	8.19	0.40	1.11	1.96 வேறுபாடு இல்லை*
பெண்	89	13.78	2.57		

மேலே கணக்கிடப்பட்ட 't' மதிப்பு - 1.11 என்பது அட்டவணை மதிப்பு 1.96 - ஐ விட குறைவாக உள்ளதால் தமிழ் மொழி கற்பிக்கும் தமிழாசிரியர்களில் இரு பாலினரிடமும் தொழில்நுட்பக் கருவிகளின் செயல்திறனில் பெரும்பாலும் ஈடுபாடு இல்லை. ஆகவே கருகோள் 1 ஏற்றுக்கொள்ளப்படுகிறது.

கருதுகோள்: 2

- புதியத் தலைமுறை தமிழாசிரியர்களிடம் தொழில்நுட்பக் கருவிகளைச் செயல்படுத்துவதில் விருப்பம் உள்ளது.

வயது நிலை	எண்ணிக்கை	கூட்டு சராசரி	திட்ட விலக்கம்	't' மதிப்பு	'F' மதிப்பு	0.5% பரப்பு	முடிவு
20 - 35	66	9.13	1.33	1.55	1.768	1.96	வேறுபாடு இல்லை
36 - 50	52	14.26	1.30				
36 - 50	52	14.26	1.30	0.12	8.571		
51 - 65	12	18.16	0.38				
20 - 35	66	9.13	1.33	0.03	23.367		
51 - 65	12	18.16	0.38				

மேலே கணக்கிடப்பட்ட 't' மதிப்பு - 1.70 என்பது அட்டவணை மதிப்பு 1.96- ஐ விட குறைவாக உள்ளதால் தமிழாசிரியர்களின் தொழில்நுட்பக் கருவிகளைக் கையாளுவதில் வயது இடைவெளியில் வேறுபாடு இல்லை. ஆகவே கருதுகோள் 2 நிராகரிக்கப்படுகிறது.

கருதுகோள்: 3

- இன்றைய நவீன காலக்கட்டத்தில் மாணவர்களுக்கான தமிழ் கற்றல் - கற்பித்தல் செயல்பாடுகள் புதுமை முறையில் தேவைப்படுகிறது.

அனுபவ நிலை	எண்ணிக்கை	கூட்டு சராசரி	திட்ட விலக்கம்	't' மதிப்பு	'f' மதிப்பு	0.5% பரப்பு	முடிவு
0 - 5 வருடம்	53	8.60	0.83	0.75	1.778	1.96	வேறுபாடு இல்லை
6 - 10 வருடம்	53	13.05	1.11				
0 - 5 வருடம்	53	8.60	0.83	0.12	1.412		
11 -ற்கு மேல்	24	17.29	1.04				

மேலே கணக்கிடப்பட்ட 't' மதிப்பு - 0.77 என்பது அட்டவணை மதிப்பு 1.96- ஐ விட குறைவாக உள்ளதால் தமிழாசிரியர்களின் தொழில்நுட்பக் கருவிகளைக் கையாளுவதில் அனுபவ இடைவெளியில் வேறுபாடு இல்லை. ஆகவே கருதுகோள் 3 நிராகரிக்கப்படுகிறது.

கருதுகோள்: 4

- **திருமணத்திற்கு பின் அவர்களின் குடும்பசூழ்நிலை பாதிப்பினை ஏற்படுத்தவில்லை.**

திருமண நிலை	எண்ணிக்கை	கூட்டு சராசரி	திட்ட விலக்கம்	't' மதிப்பு	0.5% பரப்பில் சிறப்பான வேறுபாடு	முடிவு
திருமணம் ஆனவர்	107	10.86	2.46	1.23	1.96	இல்லை*
திருமணம் ஆகாதவர்	23	17.39	0.94			

மேலே கணக்கிடப்பட்ட 't' மதிப்பு - 1.23 என்பது அட்டவணை மதிப்பு

1.96- ஐ விட குறைவாக உள்ளதால் தமிழாசிரியர்களின் தொழில்நுட்பக் கருவிகளைக் கையாளுவதில் திருமண நிலைக் குறித்த வேறுபாடு இல்லை. ஆகவே கருதுகோள் 4 ஏற்றுக்கொள்ளப்படுகிறது.

கருதுகோள்: 5

- **தமிழ் மொழி குறித்த தொழில்நுட்பப் பயன்பாடு எளிதாக அமைய கல்வித்தகுதி தடை இல்லை.**

கல்வித் தகுதி	எண்ணிக்கை	கூட்டு சராசரி	திட்ட விலக்கம்	't' மதிப்பு	'f' மதிப்பு	0.5% பரப்பு	முடிவு
இளங்கலை	62	8.95	0.11	1.11	19.77	1.96	வேறுபாடு இல்லை
முதுகலை	66	14.69	1.89				
முதுகலை	66	14.69	1.89	0.30	5.706		
முனைவர்	2	19	0.11				
இளங்கலை	62	8.95	1.51	0.65	7.154		
முனைவர்	2	19	0.11				

மேலே கணக்கிடப்பட்ட 't' மதிப்பு அட்டவணை மதிப்பு

1.96-ஐ விட குறைவாக உள்ளதால் தமிழாசிரியர்களின் தொழில்நுட்பக் கருவிகளைக் கையாளுவதில் கல்வித்தகுதி குறித்த வேறுபாடு இல்லை. ஆகவே கருதுகோள் 5 ஏற்றுக்கொள்ளப்படுகிறது.

கருதுகோள்: 6

- **இளங்கலை ஆசிரியர் பயிற்சி மட்டும் எடுத்த தமிழாசிரியர்கள் தொழில்நுட்ப அறிவு உடையவர்களாக இருக்கலாம்.**

ஆசிரியர் படிப்பு	எண்ணிக்கை	கூட்டு சராசரி	திட்ட விலக்கம்	't' மதிப்பு	0.5% பரப்பில் சிறப்பான வேறுபாடு	முடிவு
இளங்கலை	112	11.09	2.63	1.28	1.96	இல்லை
முதுகலை	18	17.77	0.64			

மேலே கணக்கிடப்பட்ட 't' மதிப்பு 1.28 அட்டவணை மதிப்பு

1.96- ஐ விட குறைவாக உள்ளதால் தமிழாசிரியர்களின் தொழில்நுட்பக் கருவிகளைக் கையாளுவதில் ஆசிரியர் பயிற்சி குறித்த வேறுபாடு இல்லை. ஆகவே கருதுகோள் 6 நிராகரிக்கப்படுகிறது.

கருதுகோள்: 7

- நவீனப்பள்ளிகளில் பணிப்புரியும் தமிழாசிரியர்களிடம் இவை குறித்த கற்றலும் புரிதலும் ஓரளவு உள்ளது.

பள்ளியின் பிரிவு	எண்ணிக்கை	கூட்டு சராசரி	திட்ட விலக்கம்	't' மதிப்பு	0.5% பரப்பில் சிறப்பான வேறுபாடு	முடிவு
அரசு சாரா	33	8.12	0.98	0.30	1.96	இல்லை
அரசு சார்ந்த	97	13.39	2.80			

மேலே கணக்கிடப்பட்ட 't' மதிப்பு 0.30 அட்டவணை மதிப்பு

1.96- ஐ விட குறைவாக உள்ளதால் தமிழாசிரியர்களின் தொழில்நுட்பக் கருவிகளைக் கையாளுவதில் பணிப்புரியும் தமிழாசிரியர்களிடம் வேறுபாடு இல்லை. ஆகவே கருதுகோள் 7 நிராகரிக்கப்படுகிறது.

கருதுகோள்: 8

- உயர்நிலைப் பள்ளி அளவில் இருக்கும் செயல்திறன் உத்தி பயன்பாடு குறைவாகவும், ஆரம்பப்பள்ளி அளவில் பயன்பாடு சற்று மிகுந்தும் வேறுபாடு காணப்படுகின்றது.

வகுப்பு பிரிவு	எண்ணிக்கை	கூட்டு சராசரி	திட்ட விலக்கம்	't' மதிப்பு	0.5% பரப்பில் சிறப்பான வேறுபாடு	முடிவு
ஆரம்ப நிலை	81	9.85	1.930	0.96	1.96	இல்லை
உயர் நிலை	49	15.61	1.821			

மேலே கணக்கிடப்பட்ட 't' மதிப்பு 0.96 அட்டவணை மதிப்பு

1.96- ஐ விட குறைவாக உள்ளதால் தமிழாசிரியர்களின் தொழில்நுட்பக் கருவிகளைக் கையாளுவதில் வகுப்பு பிரிவுகளில் வேறுபாடு இல்லை. ஆகவே கருதுகோள் 8 நிராகரிக்கப்படுகிறது.

ஆய்வின் கண்டுபிடிப்புகள்

- **தமிழ் மொழி கற்பிக்கும் தமிழாசிரியர்களில் இரு பாலினரும் தொழில்நுட்பக் கருவிகளின் செயல்திறனைப் பெரும்பாலும் உணரவில்லை.**
- **கருதுகோள்1 ஏற்றுக்கொள்ளப்பட்டது.**
- **புதியத் தலைமுறை தமிழாசிரியர்களிடம் தொழில்நுட்பக்கருவிகளின் செயல்படுத்துவதில் விருப்பம் உள்ளது.**
- **கருதுகோள்2 நிராகரிக்கப்பட்டது.**
- **இன்றைய நவீன காலக்கட்டத்தில் மாணவர்களுக்கான தமிழ் கற்றல் - கற்பித்தல் செயல்பாடுகள் புதுமை முறையில் தேவைப்படுகிறது.**
- **கருதுகோள்3 நிராகரிக்கப்பட்டது.**
- **திருமணத்திற்கு பின் அவர்களின் குடும்பசூழ்நிலை பாதிப்பினை ஏற்படுத்தவில்லை.**
- **கருதுகோள்4 ஏற்றுக்கொள்ளப்பட்டது.**
- **தமிழ் மொழி குறித்த தொழில்நுட்பப் பயன்பாடு எளிதாக அமைய கல்வித்தகுதி தடை இல்லை.**
- **கருதுகோள்5 ஏற்றுக்கொள்ளப்பட்டது.**
- **இளங்கலை ஆசிரியர் பயிற்சி மட்டும் எடுத்த தமிழாசிரியர்கள் தொழில்நுட்ப அறிவு உடையவர்களாக இருக்கலாம்.**
- **கருதுகோள்6 நிராகரிக்கப்பட்டது.**
- **நவீனப்பள்ளிகளில் பணிப்புரியும் தமிழாசிரியர்களிடம் இவை குறித்த கற்றலும் புரிதலும் ஓரளவு உள்ளது.**
- **கருதுகோள்7 நிராகரிக்கப்பட்டது.**
- **உயர்நிலைப் பள்ளி அளவில் இருக்கும் செயல்திறன் உத்தி பயன்பாடு குறைவாகவும், ஆரம்பப்பள்ளி அளவில் பயன்பாடு சற்று மிகுந்தும் வேறுபாடு காணப்படுகின்றது.**
- **கருதுகோள்7 நிராகரிக்கப்பட்டது.**

பரிந்துரைகள்

- **தமிழாசிரியர்களுக்கு தொழில்நுட்பக் கருவிகளைக் கையாளுவது குறித்து அரசு மற்றும் அரசு சாராத அனைத்து பள்ளிகளிலும் வல்லுநர்களைக் கொண்டு பயிற்சி அளிக்க வேண்டும்.**
- **செயலிகளைத் தமிழாசிரியர்கள் பதிவிறக்கம் செய்துக் கொண்டு தம் கற்பித்தல் துணைக்கருவியாகப் பயன்படுத்த வேண்டும்.**
- **ஆசிரியர்கள் மாணவர்களின் தமிழ் ஆர்வத்தைத் தூண்டி நிலையான தமிழ் வளத்தினை வழங்க தம்மை காலத்திற்கேற்ப புதுப்பித்து கொள்ள வேண்டும்.**
- **கண்களுக்கும், செவிக்கும் விருந்தளிக்கும் வகையில் வகுப்பறை இருக்க வேண்டும்.**
- **தொழில் நுட்பக் கருவிகள் குறித்த பயிற்சி பட்டறைகள், கருத்தரங்குகளை தமிழாசிரியர்களுக்கு என்று பிரத்தேயமாக அரசு நிகழ்த்த வேண்டும்.**
- **தமிழ் குறியீடுகள், மென்பொருள், வன்பொருள் செயல்கூறுகளைப் பள்ளியின் கணினி ஆய்வகங்களில் உள்ள அனைத்து கணினியிலும் உள்ளீடு செய்ய வேண்டும்.**
- **தமிழாசிரியர்கள் தொழில்நுட்பக் கருவிகளைக் கையாள, இயங்குபடம் தயாரிக்க, விளக்கக் காட்சிப்படங்கள், வலையொளி பதிவுகளைக் காணச் சிறப்பான நேரத்தை ஒதுக்க வேண்டும்.**
- **துணை நூற்பட்டியல்**

• நற்றமிழ் கற்பிக்கும் முறைகள்	ஸ்ரீ.ஜி.வி.பதிப்பகம், திருவல்லிக்கேணி, சென்னை - 5
• சிறப்புத்தமிழ்	சாரதா பதிப்பகம்
• பாடப்பொருள் மற்றும் தமிழ் கற்பித்தல்	✓ ஸ்ரீ கிருஷ்ண பதிப்பகம்
• மேம்பட்ட கல்வி ஆராய்ச்சி	பேராசிரியர் முனைவர் அ.மீனாட்சிசுந்தரம்
• கல்வி ஆராய்ச்சி அடிப்படைகள்	பேராசிரியர் முனைவர் அ.மீனாட்சிசுந்தரம்
• "மொழி கற்பித்தலில் தொழில்நுட்பத்தை ஆராய்தல்"	✓ ஓரேயின் வெளியீடுகள் - ✓ பாருபள்ளி ஸ்ரீநிவாசன் ராவ்
• "இந்தியாவில் ஆசிரியர்களிடம் கல்வித்தொழில்நுட்பம்"	நேகா மிக்லானி - ஆய்வுக்கட்டுரை
• கல்விச்செயல்பாட்டில் கல்வித்தொழில்நுட்பத்தின் செயல்திறன்	திருமதி. தக்ஷாயினி
• தமிழ் இலக்கிய வரலாறு	தமிழண்ணல்

முடிவுரை

உலகில் பலநூறு மொழிகள் இருந்தாலும் இன்றும் தமிழ்மொழியே கன்னிப்பெண்ணாக வலம் வருகிறாள். காரணம் என்னவென்றால் காலத்திற்கேற்ப தன்னைப் புதுப்பித்துக் கொள்ளும் திறன் நம் தாய்மொழி தமிழுக்கு உண்டு. இதில் பெரும் பங்கு அம்மொழியைக் கற்பிக்கும் தமிழாசிரியர்களுக்கும் உள்ளது. மொழி தான் ஒரு இனத்தின் மாபெரும் அடையாளம். எனவே, தான் இன்றைய நவீன சூழலில் ஏற்பட்டுள்ள தொழில்நுட்பத் தாக்கம் தமிழ்மொழியின் கற்பித்தலில் மாறானப் பாதிப்பை ஏற்படுத்திவிடக் கூடாது என்ற நோக்கோடு மேற்கொண்ட இவ்வாய்வு மேலும் பலவற்றை அறியச் செய்தது. தமிழாசிரியர்களால் தான் தமிழ் நிலைத்து உலக அரங்கில் முதன்மைப் பெறும். அதற்கு தமிழாசிரியர்கள் தொழில்நுட்பக் கருவிகளின் திறனைப் பெற்றிருக்க வேண்டும். அதன்படியே அவர்களும் தங்களைப் புதுப்பித்துக் கொள்கின்றனர்.

வாழ்க எம் தாய்மொழி தமிழ்! வளர்க எம் இனம் தமிழினம்!
தமிழன் என்று சொல்லடா..! தலை நிமிர்ந்து நில்லடா..!