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CONTINUOUS AND COMPREHENSIVE EVALUATION (CCE)

1

Dr. R.T. SAROJA
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*Carefully watch your thoughts,
for they become your words.*

*Manage and watch your words,
for they will become your actions.*

*Consider and judge your actions,
for they have become your habits.*

*Acknowledge and watch your habits,
for they shall become your values.*

*Understand and embrace your values,
for they become your destiny.*

- Mahatma Gandhi

INTRODUCTION

“The primary purpose of education is the manifestation of perfection already in Man and Woman” said Swami Vivekananda.

Globalization in every sphere of society has important implications for education. The aims of education simultaneously reflect the current needs and aspirations of a society, its lasting values, concerns as well as broad human ideals. Attitudes, emotions and values are thus an integral part of cognitive development, and are linked to the development of language, mental representations, concepts and reasoning. As children's meta-cognitive capabilities develop, they become more aware of their

own beliefs and capable of regulating their own learning.

The purpose of education is all round personality development of the child / individual. The Report of the International Commission on Education for 21st Century to UNESCO referred to four planes of living of human individuals namely; physical, intellectual, mental and spiritual. Thus, all round personality development implies optimization of hidden potential of every child in the physical, intellectual, mental and spiritual aspects of the students.

Educational Evaluation

Tyler (1951) defined Educational Evaluation as “Educational Evaluation is the judgment process for the educational goals (behavioral objectives) realized through Education and class activities”.

By educational evaluation, **Stufflebeam (1971)** meant “Process of information defining, acquiring and providing necessary for decision-making process”.

C. E. Beeby (1977), described Evaluation as “the systematic collection and interpretation of evidence leading as a part of process to a judgement of value

with a view to action. **Thorpe (1980)** described Educational Evaluation as “Evaluation is the collection, analysis and interpretation of information about any aspect of a programme of education, as a part of a recognized process of judging its effectiveness, its efficiency and any other outcomes it may have”.

Cronbach (1984) described Educational Evaluation as “Education evaluation is the process of information gathering and treatment necessary to make a decision for an education programme”.

From the above definitions it is understood that Evaluation should ideally be valid, reliable, practicable, fair and useful. Evaluation therefore may be taken as a process of collecting evidences about learner’s achievement or development in terms of educational objectives.

Judgements are formed and decisions are taken on the basis of evidences. The components of evaluation are (WBBSE, 2009):

- Collection of information regarding learner’s learning.
- Interpretation of the information.
- Formation of judgement.
- Decision making.

Information is gathered through different types of tests, assignments, project works etc. and by scoring it. Available information is then analyzed for forming judgment regarding the pace of learning as well as level of learning of the pupils. The analysis leads us to decide whether the learning is improved or retarded and

needs remediation. On the basis of the judgement, decision can be taken in the form of allotting marks and grades.

Continuous and Comprehensive Evaluation

Indian Philosophers divide the human personality into three domains namely cognitive, affective and psychomotor which are related to head, heart and hand respectively. Continuous and Comprehensive Evaluation (CCE) refers to a system of school-based assessment of students that covers all aspects of students’ development. It is a developmental process of assessment which emphasizes on Continuity in evaluation and assessment of broad based learning and behavioral outcomes. The term ‘continuous’ is meant to emphasize that evaluation of identified aspects of students’ ‘growth and development’ is a continuous process rather than an event, built into the total teaching-learning process and spread over the entire span of academic session ie formative Evaluation. It also covers the periodicity of assessment normally done at the end of Unit or Term or Course ie Summative Evaluation.

The term ‘comprehensive’ means the assessment of all round development of the child’s personality. It covers both the Scholastic and the Co-Scholastic aspects of students’ growth and development. Scholastic aspects include curricular activities involving evaluation continually and periodically whereas Co-Scholastic aspects include life skills, co-curricular activities, attitudes and values. Since abilities, attitudes and aptitudes can be

expressed in terms of behaviors than written form, assessment may be done using various tools and techniques both internally and externally.

OBJECTIVES OF CCE

- To help develop cognitive, psychomotor and affective skills.
- To lay emphasis on thought process and de-emphasize memorization.
- To make evaluation an integral part of teaching-learning process.
- To use evaluation for improvement of students' achievement and teaching learning strategies on the basis of regular diagnosis followed by remedial measures.
- To use evaluation as a quality control device to raise standards of performance.
- To determine social utility, desirability or effectiveness of a programme and take appropriate decisions about the learner, the process of learning and the learning environment.
- To make the process of teaching and learning a learner centered activity.

Reviews of various Committees on CCE - Emphasis the need for CCE

The Hunter Commission (1982), Calcutta University Commission or Sadler Commission (1917-1919), Hartog Committee Report (1929), the Report of Central Advisory Board / Sargent Plan (1944), Secondary Education Commission / Mudaliar Commission (1952-53) have all made recommendations

regarding reducing the importance on external examination and emphasizing and encouraging internal assessment through Continuous and Comprehensive Evaluation.

National Policy on Education-1986 states that "Continuous and Comprehensive Evaluation that incorporates both scholastic and non-scholastic and non-scholastic aspects of evaluation, spread over the total span of instructional time" Report on the Committee for Review of NPE-1986 - recommendation brought out by Government of India in 1991 lays down norms for "Continuous comprehensive internal evaluation and suggests safeguards against abuse of this evaluation system"

Report on the CABE Committee on Policy brought out by MHRD, Govt. of India in January, 1992 has also referred to the provisions of NPE with regard to evaluation process and examination reforms and also suggested 'continuous and comprehensive internal evaluation of the scholastic and non-scholastic achievement of the students'

The Kothari Commission report (1966) observed, 'on the completion of the course, at the end of the lower or higher secondary stage, the student should receive a certificate from the School which also gives the record of his internal assessment as contained in his cumulative record. This certificate may be attached to that given by the Board in connection with the external examination.' It further adds that, 'This internal assessment or evaluation conducted by the schools is of greater significance and should be given increasing importance. It should be comprehensive, evaluating all

those aspects of students' growth that are measured by the external examination and also those personality traits, interests and attitudes which cannot be assessed by it'

The National Curriculum Framework-2005 (NCF-05) also proposed examination reforms. In its Position Paper on Examination Reforms 2.8 (1), NCERT mandates that School based CCE system should be established to....

- reduce stress on children;
- make evaluation comprehensive and regular;
- provide space for the teacher for creative teaching; and
- provide a tool of diagnosis and for producing learners with greater skills.

National Curriculum Framework -2005 (NCF-05) proposing Examination Reforms has stated - "Indeed, Boards should consider, as a long-term measure, making the Class X examination optional, thus permitting students continuing in the same school (and who do not need a Board certificate) to take an internal school examination instead".

The Position Paper on 'Examination Reforms' by NCERT 2006, says, "Indeed, it is our view that the tenth grade exam be made optional forthwith. Tenth-graders who intend to continue in the eleventh grade at the same school and do not need the Board certificate for any immediate purpose, should be free to take a school-conducted exam instead of the Board exam."

The need for meaningfully assessing children's growth in schools features in

the recently enacted Right to Education Act (RTE) (Ministry of Human Resource Development or MHRD 2009) as well. It states that a "comprehensive and continuous evaluation of the child's understanding to knowledge and his or her ability to apply the same" will now be made.

The efforts of CBSE to provide a leadership and pioneering role in implementing CCE is a major breakthrough which attempts to elevate the status of the schools as equal partners of the Board in assessing the attainment levels of learners. The CBSE in 2010 initiated for the first time an effort to translate the lofty goal of all round development into practice by introducing CCE -scheme in schools.

Thus, keeping these recommendations, the Ministry of Human Resource Development has recently brought in the scheme of Continuous and Comprehensive Evaluation as a part of Examination Reforms Programme with the aim of developing the holistic profile of the learner through CCE.

Features of Continuous and Comprehensive Evaluation:

In Appendix-2 of the Position Paper on Examination Reforms, NCF- 2005 mentions some features of CCE:

- Continuous and Comprehensive Evaluation (CCE) refers to a system of School-based evaluation of students that covers all aspects of students' development.
- The 'continuous' aspect of CCE takes care for 'continual' and 'periodicity' of evaluation.

- Continual means assessment of students in the beginning of instructions (placement evaluation) and assessment during the instructional process (formative evaluation), done informally using multiple techniques of evaluation.
- Periodicity means assessment of performance done frequently at the end of unit / term (summative) using criterion-referenced tests and employing multiple techniques of evaluation.
- The 'comprehensive' component of CCE takes care of assessment of all round development of the child's personality. It includes assessment in scholastic as well as co-scholastic aspects of the pupils' growth.
- Scholastic aspects include curricular areas or subject specific areas, whereas the Co-scholastic aspects include co-curricular and personal social qualities, interests, attitudes, and values.
- Assessment in scholastic areas is done informally and formally using multiple techniques of evaluation continually and periodically. The diagnostic evaluation takes place at the end of unit / term test. The causes of poor performance in some units are diagnosed using diagnostic tests. These are purposefully remediated by giving interventions followed by retesting.
- Assessment in co-scholastic areas is done using multiple techniques on the basis of identified criteria, while assessment in social personal qualities

is done using behavior indicators for various interests, values, attitudes.

Functions of CCE

Continuous and Comprehensive Evaluation helps the class teacher

- To identify learning difficulties in mastering certain competencies and the intensity of such learning difficulties.
- To improve students' learning through diagnosis of their performance.
- To plan appropriate remedial measures to enable the students who have learning difficulties in mastering the competency.
- To improve or alter instructional strategies to enhance the quality of teaching.
- To decide upon the selecting of various media and materials as a supportive system in mastering the competencies.
- To strengthen evaluation procedure itself.

Process of Assessment in CCE

The process of assessment has to be done on the basis of learner's ability to

- learn and acquire desired skills related to different subject areas;
- acquire a level of achievement indifferent subject areas in the requisite measure;
- develop child's individual skills, interests, attitudes and motivation;

- understand and lead a healthy and productive life;
- monitor the changes taking place in child's learning, behavior and progress over time;
- respond to different situations and opportunities, both in and out of school;
- apply what is learned in a variety of environments, circumstances and situations;
- work independently, collaboratively and harmoniously;
- analyze and evaluate;
- be aware of social and environmental issues;
- participate in social and environmental projects and causes; retain what is learned over a period of time.

CONCLUSION

The CCE scheme is thus a curricular initiative and evaluative reform aiming to transform the students from getting mere formal Education to lifelong learning. It aims at creating citizens possessing sound values, appropriate skills and desirable qualities besides academic excellence. It is hoped that this will equip the learners to meet the challenges of life with confidence and success. It is the task of school based on Scholastic and Co-Scholastic assessment to focus on holistic development that will lead to lifelong learning.

Schools or Colleges of Education of the future will need to develop in their learners the ability to take risks, to be adaptable, to be flexible, to cope with constant change and become lifelong learners. In this context, learners become dynamic leaders with their teachers as enablers. CCE will really prove to be a good reform in the Evaluation of teacher students.

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A STUDY ON THE EFFECTIVENESS OF CLIMATE CHANGE INSTRUCTIONAL PACKAGE (CCIP) ON WASTE MANAGEMENT PRACTICES AMONG B.ED. STUDENT- TEACHERS IN BANGALORE CITY

2

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INTRODUCTION

Everything people do leaves behind some kind of waste. Waste is any substance which is discarded after primary use, or it is worthless, defective and of no use. Wastes are unwanted or unusable materials. The term is often subjective (because waste to one person is not necessarily waste to another) and sometimes objectively inaccurate (for example, to send scrap metals to a landfill is to inaccurately classify them as waste, because they are recyclable). Examples include municipal solid waste (household trash/refuse), hazardous waste, waste water (such as sewage, which contains bodily wastes (feces and urine) and surface runoff), radioactive waste, and others. Households create ordinary garbage, while industrial and manufacturing processes create solid and hazardous wastes.

NEED AND IMPORTANCE OF THE STUDY

In recent years Bangalore's sobriquet i.e., 'Garden City' nearly came to be replaced with 'Garbage City' in the wake of ever mounting garbage piles which has caused serious damage to the city's reputation as the capital of modern Indian economy.

With the city's population nearing 10 million, solid waste management remains a big problem. The city's per capita solid waste generation is estimated to be around half-a-kilogram. Going by this, the city generates around 5,000 tonnes of garbage every day. Households in Bangalore city cast out waste like kitchen waste, construction debris, food leftovers, cells, diapers, automobile parts, bulbs, mercury tubes, syringes, polyvinyl coverings, tyres, cardboard packaging, broken furniture, bandages, egg shells, plastic bags, clothes, all kinds of metal, bottles, glass items, chipped porcelain and sanitary ware.

The Bruhat Bengaluru Mahanagara Palike (BBMP) employs more than 14,000 pourakarmikas to tackle it. Dealing with Bangalore's garbage has been a Herculean task for the government, with contractors, bureaucrats and corporators yet to consider scientific disposal instead of the present trucking arrangements. With around 10,000 persons working with the private garbage contractors, the number of workers goes up to around 24,000. Despite considerable advance in collecting and segregating waste at source, nearly 20 per cent of the waste still remains to be picked or is picked irregularly,

giving the city a grumpy look. Several households still dump it on empty sites or into gutters which in turn get clogged during rains and cause flooding.

Under the Union Urban Development Ministry's directives, the BBMP has taken several initiatives on its own to reduce, reuse and recycle the waste. Under the recommendation of the Bangalore Agenda Task Force (BATF), door-to-door collection of waste was introduced. (Earlier, street-end waste bins were the norm.) Secondly, the BBMP introduced segregation of garbage at source by providing four different bins placed over a cart to each waste collector. Two of them were meant for dry waste while another two were to collect wet waste. But the pace of things is pathetically slow and atrocious oversight of the problem in the past is showing itself up in ubiquitous garbage dumped at every conceivable empty site.

The disposal and treatment of waste can produce emissions of several greenhouse gases (GHGs), which contribute to global climate change. The most significant GHG gas produced from waste is methane. It is released during the breakdown of organic matter in landfills. Other forms of waste disposal also produce GHGs but these are mainly in the form of carbon dioxide (a less powerful GHG). Even the recycling of waste produces some emissions (although these are offset by the reduction in fossil fuels that would be required to obtain new raw materials). In the eyes of the experts, the malady lies not in deficient technology but in waste management. Waste management makes an important contribution to

climate protection. Waste reduction, recycling, the energetic use of residual waste and capturing and utilizing landfill gas help to address global climate change by significantly decreasing the amount of GHGs emissions and save energy.

Waste management is all those activities and action required to manage waste from its inception to its final disposal. This includes amongst other things, collection, transport, treatment and disposal of waste together with monitoring and regulation. It also encompasses the legal and regulatory framework that relates to waste management encompassing guidance on recycling etc. The term usually relates to all kinds of waste, whether generated during the extraction of raw materials, the processing of raw materials into intermediate and final products, the consumption of final products, or other human activities, including municipal, (residential, institutional, commercial) agricultural and special (health care, household hazardous wastes, sewage sludge). It is intended to reduce adverse effects of waste on health and the environment. Waste management practices are not uniform among countries (developed and developing nations); regions (urban and rural area) and sectors (residential and industrial).

At international level, United Nations Environmental Programme (UNEP) is positioned to help catalyze enhanced action for climate change mitigation within the waste sector. It provides leadership and encourages partnerships in the fields of waste management and climate change

across countries.

Making smart choices about what we buy, how we use it and how we dispose of it can make a big difference in the amount of waste we produce and the greenhouse gas emissions associated with our consumption. The manufacture, distribution and use of the goods and food we rely on in our daily lives as well as management of the resulting waste all require energy. This energy mostly comes from fossil fuels, which are the largest global source of heat-trapping GHG emissions. In every stage of the life cycle, we can reduce our impact. Thus it is high time that waste management practices should be made as a habit by the Bangaloreans. It is a fact that it is only through education that people can be made to develop awareness, favourable attitudes, values, effective decision making and capabilities to address the challenges of waste management. The teacher assumes important role in the educative process. Teachers are the sculptors who can build eco-friendly generation. Hence they are also called as the “Savior of the Environment”. The Student-teachers are being the future teachers have to deal with the adolescent pupils who are future citizens and with the future of Bangalore with regard to waste management. This is possible only when they themselves have the requisite level of these practices.

The findings of the Indian Council of Social Science Research (ICSSR) funded project (2013) on ‘Climate Change and Education for Sustainable Development in Teacher Education’ carried out by M.J. Ravindranath, Center for Environmental Education (CEE) reveals that even

though there is a separate subject/unit on Environmental Education in the teacher education curriculum in India, it was not adequate to develop requisite awareness and wide ranging adaptive and mitigation practices (including waste management practices) among B.Ed. student-to address climate change.

The present research in India was first of its kind which has focused on to develop and find out the effectiveness of CCIP on awareness and practices (that includes waste management practices beside other practices) among the B.Ed. student-teachers in Bangalore city with respect to addressing climate change.

REVIEW OF RELATED LITERATURE

- Srinivasacharlu & Talawar, Bangalore (2014) conducted a study on “Constructed and Validated the Climate Change Practices Scale (CCPS)”.
- Nalgundwar, Velankar, Joshi, Mankar and Pinto (2014) conducted “A Study of Awareness and Lifestyle related Practices regarding Global Warming among the Teaching Staff of a Medical College in Navi Mumbai”.
- Pallavi and Lalitha (2014) conducted “A Study on People’s Motive towards Climate Change and Environmental Conservation in Bangalore”.
- Chanakya, Ramachandra and Shwetmala (2013) conducted a study on “Towards a sustainable waste management system for Bangalore.”
- Ravindranath (2013) conducted “A Study on What Do Teacher Educators and Teacher Trainees think about

Climate Change and Education for Sustainable Development”?

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Review of related literature reveals that there has yet to be research study not only in Bangalore but also in other parts of India that has focused on to develop and find out the effectiveness of CCIP on awareness, practices etc. among B.Ed. student-teachers with reference to climate change. Hence, the researcher has attempted to realize the need to develop and find out the effectiveness of CCIP on student-teachers studying in the field of secondary level teacher education in Bangalore city by considering the

dependent variable like waste management practices.

STATEMENT OF THE PROBLEM

“A Study on the Effectiveness of Climate Change Instructional Package (CCIP) on Waste Management Practices among B.Ed. Student-Teachers in Bangalore City”.

OBJECTIVES OF THE STUDY

1. To develop the CCIP for the student-teachers of B.Ed. Colleges.
2. To construct and validate the CCPS for B.Ed. student-teachers.
3. To compare the effectiveness of CCIP and Conventional Method of Teaching Environmental Education in enhancing waste management practices among B.Ed. student-teachers.
4. To investigate interaction between ‘experimental treatment’ and locality, gender and subject with reference to enhancement in waste management practices among B.Ed. student-teachers.
5. To investigate whether the B.Ed. student-teachers sustain waste management practices fostered through CCIP.

VARIABLES OF THE STUDY

- Independent Variable : Climate Change Instructional Package (CCIP)
- Dependent Variable : Waste Management Practices
- Moderate Variables : Locality, Gender and Discipline

OPERATIONAL DEFINITIONS

- **CCIP:** This package enables B.Ed. student-teachers to develop the waste management practices for adapting and mitigating the climate change. It includes User Guide, Self Instructional Materials (SIMs) and Documentaries.
- **Conventional Method of Teaching Environmental Education:** It covers the topics like environment; causes, effects and control measures for various types of environmental pollution; meaning, importance, objectives and strategies for teaching environmental education at secondary school level.
- **Waste Management Practices:** It involves activities and actions taken up by B.Ed. student-teachers to manage waste mainly in terms of 4 Rs like Refuse, Reduce, Re-use and Recycle.
- **Student-Teachers of B.Ed. Colleges:** Student-teachers studying at two of the Aided, Urban and Co-Education B.Ed. Colleges affiliated to Bangalore University and located in Bangalore.
- **Gender:** It refers to Male and Female student-teachers studying at B.Ed. colleges and involved in the study.
- **Subject:** It refers to the Science and Arts opted by the student-teachers in their B.Ed. course.
- **Locality:** It refers the place (either from rural or urban areas) from where student-teachers come to B.Ed. College.

HYPOTHESES OF THE STUDY

1. There is no significant difference between Pre-test scores of Experimental and Control Groups with reference to their waste management practices.
2. There is no difference in the effectiveness of CCIP and Conventional Method of teaching Environmental Education on waste management practices among B.Ed. student-teachers.
3. There is no interaction between treatment and locality-gender; locality-subject; and gender-subject with reference to waste management practices among experimental group.
4. Immediate and Delayed Post-test scores of Experimental group differ significantly with reference to waste management practices.

DESIGN OF THE STUDY

Pre-test Post-test equivalent group experimental design was followed as the main focus of was to find out the effectiveness CCIP on waste management practices among student-teachers of B.Ed. Colleges.

Sampling

Multi stage purposive sampling technique was employed to select student-teachers from two B.Ed. colleges in Bangalore city as experimental and control groups.

Tools for Collection of Data

Raven's Standard Progressive Matrices Test (SPMT) was used to obtain two matched groups. For measuring the change in the dependent variables like waste management practices due to treatment variable the following tool was constructed, validated and used.

CCPS

For the present study, CCPS was constructed to measure a wide range of practices to adapt and mitigate climate change. It consists of 100 statements grouped under 10 dimensions like–Personal and Social Life, Water, Electricity, Commuting, Shopping, Cooking, Food Consumption, Paper, Plastic and Waste Management. Content validity was obtained from experts. Item analysis was done by using 't' test for each of the statements for the higher and lower groups. The reliability coefficient of the total scale obtained through both split half and test-retest methods were found to be 0.87 and 0.88 respectively. The intrinsic validity of the scale was found to be 0.93. The tenth dimension of CCPS covers waste management which has ten statements. As the scale is a five point scale, each statement on waste management was provided with five response levels, viz. Always (A), Frequently (F), Sometimes (S), Rarely (R) and Very Rarely (VR). The weightage of the marks for each statement was given according to the level of response i.e., 5 for Always, 4 for Often, 3 for Sometimes, 2 for Rarely and 1 for Very Rarely. The omitted

statement was given zero mark. Thus the maximum score for waste management practices was 50 and the minimum score was 10. High and low scores respectively indicate high and low waste management practices among B.Ed. student-teachers.

Treatments for Experimental and Control Groups

1. CCIP

The package was meant for experimental group. After the scrutiny from the experts, the package was tried out on a group of student-teachers other than the sample. The feedback obtained from them and experts was considered while finalizing the package. The total duration for using CCIP was 40 hours. The components of the package were:

1. Orientation Session (1 Hour)
2. Printed User Guide
3. Printed SIMs – 6 Modules (30 Hours)
 - Module 1: The Background of the Climate Change (5 Hours)
 - Module 2: Impacts of Climate Change (6 Hours)
 - Module 3: Global Fight on Climate Change (5 Hours)
 - Module 4: India's Fight on Climate Change (5 Hours)
 - Module 5: Green Solutions for Climate Change (5 Hours)
 - Module 6: Climate Change Education (4 Hours)

4. a) Short Documentaries from YouTube
 - Glimpses of Climate Change (5.48 Minutes)
 - Causes and Effects of Climate Change (3.02 Minutes)
 - Climate Change Coverage on Impacts (3.56 Minutes)
 - Impacts of Climate Change on World (2.22 Minutes)
 - Polar Bears and Climate Change (1.13 Minutes)
 - Climate Change–Causes, Impacts & Solutions (3.55 Minutes)
- b) Documentary Film on ‘An Inconvenient Truth’ (3 Hours)
5. Consolidating Sessions (6 Hours)

2. Conventional Method of teaching Environmental Education

This treatment was meant for control group. It involved using conventional method for teaching a unit on Environmental Education drawn from the paper Education and National Concerns. It involved about 5 hours of time.

Conducting of the Experiment

- Raven’s RPMT was administered among the student-teachers belonging to two designated B.Ed. Colleges to declare homogeneity. The scores which were equally matching were arranged

in descending order in experimental and control groups.

- 36 matched pairs of student-teachers were obtained which formed the sample of the study.
- The sample group of 36 pairs of student-teachers from Control and Experimental Groups were pre-tested on waste management practices.
- Both the experimental and control groups were given treatment respectively through CCIP and Conventional Method of Teaching on Environmental Education.
- After the treatment, both the Experimental and Control Groups were immediately post-tested to know any change in their waste management practices.
- After a gap of four weeks the experimental group was administered delayed post-test to know the sustainability of change occurred on their waste management practices.

STATISTICAL TECHNIQUES AND INTERPRETATION OF DATA

The data was analyzed with the help of statistical techniques like mean, standard deviation, ‘t’ test and Two way ANOVA.

Hypothesis 1

There is no significant difference between Pre-test scores of Experimental and Control Groups with reference to their waste management practices.

Table 1

Comparison of Pre-test Scores of Experimental and Control Groups with reference to Waste Management Practices

Group	N	Mean	S.D.	't' Value	'p' Value at 0.05 Level of Significance
Experimental Group	36	29.19	1.833	0.115	0.909
Control Group	36	29.22	2.058		

The obtained 't' value 0.115 is less than the table 't' value 2.0281 and 'p' value 0.909 is more than table 'p' value 0.05 level of significance with degrees of freedom 35. So the null hypothesis is accepted. This means that "Pre-test scores of Control and Experimental group did not differ significantly with reference to their waste management practices". It proves that before

treatment, experimental and control groups were homogenous in terms of having waste management practices.

Hypothesis 2

There is no significant difference in the effectiveness of CCIP and Conventional Method of teaching Environmental Education on waste management practices among B.Ed. student-teachers.

Table 2

Comparison of Post-test Scores of Experimental and Control Groups with reference to Waste Management Practices

Group	N	Mean	S.D.	't' Value	'p' Value at 0.05 Level of Significance
Experimental Group	36	40.50	3.194	27.000	0.000
Control Group	36	29.17	2.118		

The obtained 't' value 27.000 is far more than the table 't' value 2.0281 and 'p' value 0.000 is less than table 'p' value 0.05 level of significance with degrees of freedom 35. So the null hypothesis is rejected. This means that "post-test scores of control and experimental groups differed significantly with reference to waste management practices". The mean value of post-test score of experimental group is higher than control group which proves that

CCIP as a treatment was greatly effective than Conventional Method of Teaching Environmental Education in enhancing the waste management practices among the B.Ed. student-teachers belonging to experimental group.

Hypothesis 3

a) There is no interaction between treatment and locality-gender with reference to waste management practices among experimental group.

Table 3a:**Summary table of ANOVA of Waste Management Practices in regard to interaction of treatment and Locality–Gender**

Source	df	Mean Square	'F' Value	'p' Value (0.05 level)
Corrected Model	3	51.657	8.182	0.000 **S
Intercept	1	50319.273	7970.243	0.000 **S
Locality	1	28.179	4.463	0.043 **S
Gender	1	57.160	9.054	0.005 **S
Locality × Gender	1	28.179	4.463	0.043 **S

* Not Significant at 0.05 level ** Significant at 0.05 level

A two-way ANOVA was conducted to examine the interaction of treatment and locality–gender with reference to post-test scores of waste management practices among experimental group. The result from the table reveals that the obtained 'F' value 4.463 more than table 'F' value 4.00 with degrees of freedom 1 and 32. The obtained 'p' value 0.043 is significant as this value is more than the table 'p' value 0.05 level of

significance. Hence the null hypothesis that “there is no interaction between treatment and locality–gender with reference to waste management practices” is rejected. This implies that effect of treatment on experimental group was not homogenous as there was significant interaction of treatment and locality–gender with reference to waste management practices.

Table 3a (i)**Locality–Gender wise mean and significance values of Waste Management Practices**

E Group Locality	E Group Gender	Mean	'p' Value (0.05 level)
Rural (16)	Female (10)	39.300	0.542 *NS
	Male (06)	38.500	
Urban (20)	Female (14)	43.071	0.001 **S
	Male (06)	38.500	

* Not Significant at 0.05 level ** Significant at 0.05 level

Table 3a (ii)
Locality–Gender wise contrast and error values for ANOVA of
Waste Management Practices

E Group Gender		Sum of Squares	df	Mean Square	'F' Value	'p' Value (0.05 level)
Rural	Contrast	2.400	1	2.400	0.380	0.542 *NS
	Error	202.029	32	6.313		
Urban	Contrast	87.771	1	87.771	13.902	0.001 **S
	Error	202.029	32	6.313		

From the above tables it can be seen that there was no significant interaction of treatment within female and male genders among rural B.Ed. student-teachers with reference to their waste management practices as the obtained 'F' value 0.380 is less than table 'F' value 4.00 and 'p' value 0.542 more than table 'p' value 0.05 level of significance with degrees of freedom 1 and 32. However there was significant interaction of treatment within female and male genders among urban B.Ed. student-teachers with reference to their waste management practices as the obtained 'F'

value 13.902 is more than table 'F' value 4.00 and 'p' value 0.001 is less than table 'p' value 0.05 level of significance with degrees of freedom 1 and 32. That mean the treatment had more interaction with female B.Ed. student-teachers than male B.Ed. student-teachers belonging urban locality with reference to enhancing waste management practices.

Hypothesis 3

b) There is no interaction between treatment and locality–subject with reference to waste management practices among experimental group.

Table 3b

Summary table of ANOVA of Waste Management Practices in regard to interaction of treatment and Locality–Subject

Source	df	Mean Square	'F' Value	'p' Value (0.05 level)
Corrected Model	3	63.048	12.019	0.000 **S
Intercept	1	57247.418	10913.550	0.000 **S
Locality	1	68.845	13.124	0.001 **S

Source	df	Mean Square	'F' Value	'p' Value (0.05 level)
Subject	1	88.091	16.794	0.000 **S
Locality × Subject	1	23.644	4.507	0.042 **S

* Not Significant at 0.05 level

** Significant at 0.05 level

A two-way ANOVA was conducted to examine the interaction of treatment and locality–subject with reference to post-test scores of waste management practices among experimental group. The result from the table reveals that the obtained 'F' value 4.507 is more than table 'F' value 4.00 with degrees of freedom 1 and 32. The obtained 'p' value 0.042 is significant as this value is less than table 'p' value 0.05 level of

significance. Hence the null hypothesis that “there is no interaction between treatment and locality–subject with reference to their waste management practices” is rejected. This implies that effect of treatment on experimental group was not homogenous as there was significant interaction of treatment and locality–subject with reference to their waste management practices.

Table 3b (i)

Locality–Subject wise mean and significance value of Waste Management Practices

E Group Locality	E Group Subject	Mean	'p' Value (0.05 level)
Rural (16)	Arts (07)	38.143	0.196 *NS
	Science (09)	39.667	
Urban (20)	Arts (10)	39.300	0.000 **S
	Science (10)	44.10	

* Not Significant at 0.05 level

** Significant at 0.05 level

Table 3b (ii)

Locality–Subject wise contrast and error values for ANOVA of Waste Management Practices

E Group Subject		Sum of Squares	df	Mean Square	'F' Value	'p' Value (0.05 level)
Rural	Contrast	9.143	1	9.143	1.743	0.196 *NS
	Error	167.857	3	5.246		
Urban	Contrast	115.200	1	115.200	21.962	0.000 **S
	Error	167.857	32	5.246		

* Not Significant at 0.05 level

** Significant at 0.05 level

From the above tables it can be seen that there was no significant interaction of treatment within Arts and Science B.Ed. student-teachers belonging to rural locality with reference to their waste management practices as the obtained 'F' value 1.743 is less than table 'F' value 4.00 and 'p' value 0.196 more than table 'p' value 0.05 level of significance with degrees of freedom 1 and 32. That mean the treatment had homogenous effect on both Arts and Science B.Ed. student-teachers belonging to rural locality with reference to enhancing waste management practices. However there was significant interaction of treatment within urban B.Ed. student-teachers belonging to

Arts and Science subjects with reference to their waste management practices as the obtained 'F' value 21.962 is more than table 'F' value 4.00 and 'p' value 0.000 less than table 'p' value 0.05 level of significance with degrees of freedom 1 and 32. That means the treatment had more interaction with urban B.Ed. student-teachers belonging to science subject than those belonging to Arts Subject with reference to enhancing waste management practices.

c) There is no interaction between treatment and gender-subject with reference to waste management practices among experimental group.

Table 3c

Summary table of ANOVA of Water Conservation Practices in regard to interaction of treatment and Gender-Subject

Source	df	Mean Square	'F' Value	'p' Value (0.05 level)
Corrected Model	3	52.147	8.320	0.000 **S
Intercept	1	50915.855	8123.813	0.000 **S
Gender	1	65.771	10.494	0.003 **S
Subject	1	74.366	11.865	0.002 **S
Gender × Subject	1	0.022	0.004	0.953 *NS

A two-way ANOVA was conducted to examine the interaction of treatment and gender-subject with reference to immediate post-test scores of waste management practices among experimental group. The result from the table reveals that the obtained 'F' value 0.004 is less than table

'F' value 4.00 with degrees of freedom 1 and 32. The obtained 'p' value 0.953 is not significant as this value is more than table 'p' value 0.05 level of significance. Hence the null hypothesis that "there is no interaction between treatment and gender-subject with reference to their waste management

practices” is accepted. This implies that effect of treatment among experimental group was homogenous as there was no

significant interaction of treatment and gender–subject with reference to enhancing their waste management practices.

Table 3c (i)

Gender–Subject wise mean and significance value of Waste Management Practices

E Group Gender	E Group Subject	Mean	‘p’ Value (0.05 level)
Female (24)	Arts (11)	39.818	0.005 **S
	Science (13)	42.923	
Male (12)	Arts (06)	37.000	0.046 **S
	Science (06)	40.000	

* Not Significant at 0.05 level ** Significant at 0.05 level

Table 3c (ii)

Gender–Subject wise contrast and error values for ANOVA of Waste Management Practices

E Group Gender		Sum of Squares	df	Mean Square	‘F’ Value	‘p’ Value (0.05 level)
Female	Contrast	57.441	1	57.441	9.165	0.005 **S
	Error	200.559	32	6.267		
Male	Contrast	27.000	1	27.000	4.308	0.046 **S
	Error	200.559	32	6.267		

* Not Significant at 0.05 level ** Significant at 0.05 level

From the above tables it can be seen that there was significant interaction of treatment within female B.Ed. student-teachers belonging to Arts and Science subjects with reference to their waste management practices as the obtained ‘F’ value 9.165 is more than table ‘F’ value 4.00 and ‘p’ value 0.005 is less than table ‘p’ value 0.05 level of significance with degrees of freedom 1 and 32. That means treatment had

more interaction with female B.Ed. student-teachers belonging to Science Subject than those belonging to Arts Subject with reference to enhancing waste management practices. In addition there was significant interaction of treatment within male B.Ed. student-teachers belonging to Arts and Science subjects with reference to their waste management practices as the obtained ‘F’ value is 4.308 which is more than table

'F' value 4.00 and 'p' value 0.046 less than the table 'p' value 0.05 level of significance with degrees of freedom 1 and 32. That means treatment had more interaction with male B.Ed. student-teachers belonging to Science Subject than those belonging to

Arts Subject with reference to enhancing waste management practices.

4. Immediate and Delayed Post-test scores of Experimental group differ significantly with reference to waste management practices.

Table 4 a:

Comparison of Immediate and Delayed Post-test of Scores of Experimental Group with reference to Waste Management Practices

Experimental Group	N	Mean	S.D.	't' Value	'p' Value at 0.05 Level of Significance
Immediate Post-test	36	40.50	3.194	1.000	0.324
Delayed Post-test	36	40.47	3.229		

The obtained 't' value 1.000 is less than the table 't' value 2.0281 and 'p' value 0.324 is more than table 'p' value 0.05 level of significance with degrees of freedom 35. So the null hypothesis is accepted. This means that "Immediate and delayed post-test scores of Experimental group did not differ significantly with reference to waste management practices". This proves that the waste management practices fostered through CCIP are sustainable by the experimental group. Hence the package was found to be reliable.

MAJOR FINDINGS

1. There was no significant difference in the Pre-test scores of Experimental and Control Groups with reference to their waste management practices. This indicates that both the groups were alike in their waste management practices before subjected to treatment.

2. There was a significant difference in the Post-test scores of Experimental and Control Groups with reference to their waste management practices. This proves that CCIP was more effective than Conventional Method of teaching Environmental Education in enhancing waste management practices among B.Ed. student-teachers.

3. The findings of ANOVA are as follows:
 - a) Locality-Gender: There was no significant interaction of treatment within female and male genders among rural B.Ed. student-teachers with reference to their waste management practices. However there was significant interaction of treatment within female and male genders among urban B.Ed. student-teachers with reference to their waste management practices. That mean the treatment had more

interaction with female B.Ed. student-teachers than male B.Ed. student-teachers belonging urban locality with reference to enhancing waste management practices.

- b) Locality–Subject: There was no significant interaction of treatment within Arts and Science B.Ed. student-teachers belonging to rural locality with reference to their waste management practices. That mean the treatment had homogenous effect on both Arts and Science B.Ed. student-teachers belonging to rural locality with reference to enhancing waste management practices. However there was significant interaction of treatment within urban B.Ed. student-teachers belonging to Arts and Science subjects with reference to their waste management practices. That means the treatment had more interaction with urban B.Ed. student-teachers belonging to science subject
- c) Gender–Subject: There was significant interaction of treatment within female B.Ed. student-teachers belonging to Arts and Science subjects with reference to their waste management practices. That means treatment had more interaction with female B.Ed. student-teachers belonging to Science Subject than those belonging to Arts Subject with reference to enhancing waste management practices. In addition

there was significant interaction of treatment within male B.Ed. student-teachers belonging to Arts and Science subjects with reference to their waste management practices. That means treatment had more interaction with male B.Ed. student-teachers belonging to Science Subject than those belonging to Arts Subject with reference to enhancing waste management practices.

4. A high degree of reliability was found between immediate and delayed post-test scores of waste management practices among experimental group. It proves that the CCIP had sustainable effect on waste management practices among experimental group. Hence the package was found to be reliable.

EDUCATIONAL IMPLICATIONS

- Everyone can agree that making smart choices about what we buy, how we use it, and how we dispose of it can make a big difference in the amount of waste we produce and the greenhouse gas emissions associated with our consumption. Thus in every stage of the life cycle, we can reduce our impact.
- B.Ed. student-teachers are the future teachers who a big responsibility in inculcating waste management practices among the adolescent pupils who are future citizens. This is possible only when they themselves have the required level of waste management practices.

- The findings of the study reveal that CCIP had superiority over the conventional method of teaching Environmental Education in increasing and sustaining waste management practices among B.Ed. student-teachers in Bangalore.
- Bangalore University can consider incorporating the CCIP in the curriculum of their affiliated B.Ed. institutions for developing holistic climate literacy among student-teachers. The Components of CCIP at B.Ed. level can include:
 - I. Teacher Educators Handbook
 - II. Printed Self Instructional Materials (SIMs)
 - III. Documentaries
 - IV. Project Work
 - V. Evaluation
 - VI. Certification

The CCIP can be used by teacher educators for student-teachers in the following way:

 - a) Organize one hour orientation session on CCIP.
 - b) Ask the student-teachers to refer user guide.
 - c) Instruct student-teachers to study the six printed modules of SIMs.
 - d) Screen the documentaries and have discussion.
 - e) Conduct consolidating session after the completion of each module.
- f) Guide student-teachers in project on climate change during practice in teaching.
- g) Involve student-teachers in the activities on environment and climate change.
- The total score for evaluation of CCIP can have 50 marks which includes the following:
 1. Internal Assessment (25M): It can include the evaluating the project done by B.Ed. student-teachers (15M) and their participation in activities on environment (10M).
 2. Theory Exam (25): It can include one hour question paper with 25 marks. The question paper can have two parts. Part-A can include 2 Essay Questions with the option of answering only one question carrying 10 marks. Part-B can include 5 Short Answer Questions with the option of answering only 3 questions each carrying 5 marks.
- Bangalore University can give Climate Literate Certificate to the B.Ed. student-teachers with grades like 'A' (41 to 50 Marks), 'B' (31 to 40 Marks) and 'C' (30 Marks and it's below) based on their overall performance.

LIMITATIONS

- The study was confined to B.Ed. student-teachers studying in Bangalore.
- The study was limited to two parallel groups (36+36) of student teachers from two of B.Ed. Colleges affiliated to Bangalore University.

- The study was confined only to moderate variables like Gender, Subject and Locality.
- Sample groups were selected from two separate B.Ed. Colleges due to the non-availability of good number of student-teachers from same institution.
- The study can be extended to B.Ed. Teacher Educators.
- The study can be extended to Secondary School Students.

CONCLUSION

The present study is first of its kind in India in developing and finding out the effectiveness CCIP on waste management practices among student-teachers of B.Ed. Colleges. The findings reveal that CCIP was found to have significant effect in increasing waste management practices among B.Ed. student-teachers. This package also helps to promote “climate literacy” among student-teachers which ensure them to acquire awareness, suitable attitude, values, decision making skills, practices and capabilities to adapt and mitigate climate change. The package can also serve as a guide to B.Ed. student-teachers in educating the adolescent students in addressing climate change.

SUGGESTIONS FOR FURTHER STUDY

- The study can be extended to study the effectiveness of CCIP on values, attitude etc. pertaining to climate change among B.Ed. student-teachers.
- Similar study could be undertaken with other moderate variables qualification, marital status, socio-economic status etc.
- Similar study could be undertaken with larger sample of B.Ed. student-teachers.
- The study can be extended to D.T.Ed. student-teachers.

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A STUDY ON SELF CONFIDENCE, CREATIVITY AND ATTITUDE TOWARDS PARTICIPATING IN EXTRACURRICULAR ACTIVITIES AMONG IX STANDARD STUDENTS IN KANCHIPURAM DISTRICT

3

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INTRODUCTION

The opportunities of an individual are vary. This multiplicity may be readily perceived in the areas of educational, social and vocational opportunities. In the real world situation in which we have to live, the opportunities are so divergent that in order to get a smooth sailing and to maintain and sustain the pace of our natural and normal development, it is obligatory on our part to make right type of choices.

Self Confidence

Self confidence is the first step to progress, development, achievement and success. Even if we have a lot of abilities and a lot of knowledge, if we do not have self confidence we cannot be success.

Creativity

Creative thinking plays a very important role in man's life. People can achieve great things with the help of their thinking and imagination. Terms like creativity, innovativeness etc. is widely used in the field of education. The ability of thinking is a gift to human beings. Thinking helps to analyze problems, making decision and finding solutions to problem. It is one of the

most unique attributes which distinguish man from animals. This attribute provides man with the ability to use language, without which his knowledge could not be passed on from one man to another or from generation to generation and the freedom and encouragement to act creatively, give man a truly unique position in the universe.

It is predisposition or tendency to react specially towards an object, situation or value usually accompanied by feelings and emotions. This cannot be directly observed, but must be inferred from behavior and careers.

Attitude

It is the predisposition or tendency to react specially towards an object, situation or value usually accompanied by feelings and emotions. This cannot be directly observed, but must be inferred from behavior, both verbal and non-verbal. It plays an important role in shaping one's behavior and careers.

OBJECTIVES OF THE STUDY

- To assess the performance of the self confidence towards participating in extracurricular activities among IX standard students.

- To assess the performance of the creativity towards participating in extracurricular activities among IX standard students.
- To assess the performance of the attitude towards participating in extracurricular activities among IX standard students.

HYPOTHESES

Hypothesis-1

There is no significant correlation among self confidence, creativity and attitude towards participating in extracurricular activities among IX standard students.

Hypothesis -2

There is no significant difference among IX standard students with respect to self confidence based on management of school.

Hypothesis-3

There is no significant difference among IX standard students with respect to creativity based on management of school.

Hypothesis- 4

There is no significant difference among IX standard students with respect to their self confidence towards medium of instruction.

Hypothesis- 5

There is no significant difference among IX standard students with respect to their creativity towards medium of instruction.

Hypothesis-6

There is no significant difference among IX standard students with respect to their attitude.

Hypothesis-7

There is no significant difference among IX standard students with respect to their self confidence towards Rank scoring.

Hypothesis-8

There is no significant difference among IX standard students with respect to their creativity towards Rank scoring.

Hypothesis-9

There is no significant difference among IX standard students with respect to their attitude towards Rank scoring.

Hypothesis-10

There is no significant difference among IX standard students with respect to their self confidence towards extracurricular activity in practice.

METHODS OF INVESTIGATION

The method adopted in the present study is Descriptive research or Survey method.

The word 'Survey' indicates the gathering of data regarding current conditions while historical studies discover, describe and interpret what existed in the past. Survey describes and interprets what exists at present. The Survey approach to educational problems in one of the most commonly used approach. It is followed in studying Local, State, National and International aspects of education. It involves interpretation, comparison,

measurement, classification, evaluation and generalization.

Selection of Tools

To verify the hypotheses the following tools and techniques were used in the investigation.

It is the predisposition

- Self confidence tool by investigator.
- Creativity tool by Baquer Mehdi.
- Attitude in Extracurricular activity tool by investigator

Pilot Study

The investigator prepared a two-point scale in self confidence with 25 items, creativity with 10 items and attitude with 34 items. The Questionnaire was given to lecturers in Rajalakshmi College of Education at Thandalam. For establishing the content validity. They suggested to remove some unnecessary statements and made some modifications in other items. On the basis of their suggestions 5 items in self confidence and 4 items in attitude were dropped. Thus the content validity of the scale was established. The Questionnaire consisting 20 items in self confidence, 10 items in creativity and 30 items in attitude with necessary instruction was printed. A copy of this tool is appended.

Pre test and post test was employed by the investigator to 50 students from V.V.M.S at Sriperumbudur (after the interval of 15 days to the same set of students).

Reliability

The reliability of a test may be defined as the degree of the consistency with which the test measures whatever it measures. A test score is called reliable, when we have reason to believe it to be stable and trust worthy. The concept of reliability suggests both stability and consistency of measurement. The reliability co-efficient for self confidence (Spearman Brown formula) as 0.81, creativity 0.7 and attitude in Extra Curricular activities as 0.85.

Validity

A test is said to be valid, if it measures only what it intends to measure. In other words, it could be said that a test is valid logically, when it actually measures or is specifically related to the traits for which it is designed. Validity of the test was determined by the square root of reliability. The validity co-efficient for self confidence is 0.9, creativity 0.83 and attitude in extracurricular activities is 0.92.

Selection of Sample

The study was mainly concerned with IX standard students in the high schools in Kanchipuram District.

In the whole sample 322 IX Standard Students were selected for the study, 134 students were drawn from the government school and 83 students were drawn from Aided school and 105 students from Private school were selected respectively.

Table -4

Composition of selected sample.

Type of school	Name of schools	Number of students
Government	Government Hr. Sec. School, Avalur.	134
	Government Hr. Sec. School Thirupukuzhi.	
Aided	W.T Masilamani Hr. Sec. School Walajabad.	83
	Pachaiyappa's Hr Sec. School Kanchipuram	
Private	Vivekananda Matriculation Hr. Sec. School Sriperumbudur	105
	Victoria Matriculation Hr.Sec.School Kanchipuram	

Correlation among Self confidence, Creativity and Attitude in extracurricular activities.

Variable	Self confidence	Creativity	Attitude
Self confidence	-	.128	.340
Creativity	.128	-	.073
Attitude	.340	.073	-

Management of school difference in self confidence.

Source of Variance	Sum of squares	Df	MS	F-value	Level of significant
Between the groups	126.464	2	63.232	7.948	Significant at 0.01 level
Within the groups	2538.023	319	7.956		
Total	2644.488	321			

FINDINGS OF THE STUDY

- ✓ According to Management of schools the level of Self confidence and Creativity shows difference in selected students.
- ✓ English medium selected student's shows better performance in Self

confidence and Creativity than the Tamil medium selected students.

- ✓ According to Gender the female selected students have positive attitude towards Extra Curricular activities than the male selected students.

- ✓ Rank holder selected students seen to have best performance in Self confidence, Creativity and Attitude towards extracurricular activities.
- ✓ The selected students from the urban area show high level of performance in Creativity.
- ✓ Research concerning the effects of extracurricular activities on different aged children could be conducted.
- ✓ A study should be conducted to determine the effects of parental support in extracurricular activities on academic achievements.

SUGGESTIONS FOR FURTHER STUDIES

- ✓ The present study was carried out during a short period of time with a limited sample. The findings and conclusions need to be verified in a large group size of sample.
- ✓ Experimental study is suggested to concentrate on Self confidence, Creativity and Attitude in Extra Curricular activities.
- ✓ The effects of different extracurricular activities than were researched in this study should be evaluated.
- ✓ Research determining which academic subject areas are most influenced by extracurricular activities can be done.
- ✓ The present study is confined only to the IX standard students in Kanchipuram district. The findings and conclusion should be conducted across the universe with large size of samples.
- ✓ Psychological variable may be incorporated in this study.

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EXPLORATORY FACTOR ANALYSIS: DEVELOPMENT OF PERCEIVED PARENTAL EXPECTATIONS SCALE

4

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INTRODUCTION

Education is believed to be a powerful tool to bring out desirable changes in human beings. Such changes are possible only when an individual is able to gain quality education. There are many factors that determine the accessibility to quality education. Parental expectations is one among the factors that has a strong effect on the career development of children (Whiston & Keller, 2004). In addition to parents influence, children's values, interests and skills also play a vital role in the development and maintenance of motivation and effort towards career goals (Duffy & Dik, 2009). Nowadays in India, students are driven to secure high marks in school public examinations especially at the Std. X and Std. XII level, to fulfil their parents expectations and also to meet other socio-economic and psychological demands. This leads to academic stress among the students.

Studies indicate that academic stress in students causes serious consequences, particularly among the adolescents, when their parents' expectations are unrealistically high with regard to their wards' academic

performance. The Asian Times (2008) quoted statistics from the National Crime Records Bureau of India that 5,857 students in India had committed suicide due to academic stress in the year 2006. A survey report of SNEHA (2009), an NGO working on suicidal prevention also reveals that annually more than 1,00,000 people commit suicide in India, and in the year 2009 about 14,424 people have committed suicide in the State of Tamil Nadu. The report further states that among the 2010 examination related suicides in India, 223 suicides alone were from the State of Tamil Nadu.

REVIEW OF RELATED LITERATURE

Perceived Parental Expectations

It is assumed that setting expectations for children is an essential responsibility of parents especially in the Indian society, as the children's mental, emotional and social developments are significantly influenced by the parents (Burbach & Borduin, 1986). Parental expectations are the realistic belief or a judgment that parents have about their children's future and their achievements (Glick & White, 2004; Yamamoto & Holloway 2010). It is observed that Indian parents demonstrate more commitment to

their children's educational progress (Mohan, 1975). Whiteman and Buchanan (2002) noted that increasing parents expectations about a child is also based on the previous experiences with their other children. High academic performance of their wards is one among the major expectations of parents, even though academic subjects are valued in relation to their prestige rather than their relative fit with the individual's personal interests or inclinations (Gupta & Tracey, 2005). Therefore, parents' demands and expectations from their wards to excel in academic field may cause for the increased behavioural problems and psychological disorders among students (Srinath et al. 2005). According to Ang and Huan (2006), parental expectations are one of the basic sources of academic stress among middle and high school Asian students.

As far as parental expectations with regard to their wards academic achievements, they may bring either tremendous benefits to their children's academic attainments or weighty burden to their wards that might crush their self-esteem and decision-making power depending upon the nature and level of expectations of their parents. As the education at the higher secondary level is more crucial in determining the future career of students in Indian context, a study is needed to assess the influence of parental expectations on the academic success of higher secondary students. Further, the researcher being a teacher working at the higher secondary level for more than three decades, wanted to know the extent of parental expectations and the amount of academic stress perceived by the higher secondary students due to these expectations.

Hence, an attempt is made to study the parental expectations and its effects on the academic performance of the Tamil Nadu State Board Higher Secondary Students who have opted for Mathematics, Physics, Chemistry and Biology as main subjects of study under Part-III, in Thiruvannamalai District, Tamil Nadu.

Rationale for Construction and Validation of the Tool

Not following appropriate and systematic procedures in tool construction, testing and evaluation may undermine the quality and utilization of data (Esposito, 2002). While reviewing the related literature, the researcher has observed that there are few standardised tools available to measure the parental expectations. A critical analysis of available instruments reveal that they are not covering all the aspects with regard to the fulfilment of the objectives set forth by the researcher in terms of cultural constraints, location of study, and appropriateness to the population of the proposed study. Therefore, the investigator felt the need for construction of an instrument with its uniqueness and appropriateness to measure the perceived parental expectations of Higher Secondary Students of Thiruvannamalai District for the proposed study. Hence, the investigator has ventured into the task of constructing a new instrument called, Perceived Parental Expectations Scale.

OBJECTIVES

1. To construct a tool to assess the Perceived Parental Expectations of Higher Secondary Students.
2. To validate the Scale on Perceived Parental Expectations.

PROCEDURE FOLLOWED

To fulfil the above stated objectives, the researcher followed the under mentioned procedure in developing a tool.

(i) Group Discussion

In order to generate the items for the Perceived Parental Expectations, the researcher has gone through the related research carried out in India and in other countries. Further the researcher has organised six group discussions covering the entire Thiruvannamalai District. Each group consisting of randomly selected 30 teachers working at the higher secondary level and having more than 10 years of teaching experience, 30 parents whose wards are studying the Higher Secondary Course and 30 students who have chosen Mathematics, Physics, Chemistry and Biology as main subjects of study at Higher Secondary level during the academic year 2013-2014. These six discussions were mainly focused on various aspects of parental expectations with regard to their wards prospects of education, employment, behaviour, etc.

(ii) Item Generation

Based on the review of related literature and outcome of the six group discussions, the researcher has generated 60 items on perceived parental expectations. In all items, the simplicity in its form, clear understanding and appropriateness are maintained.

(iii) Experts' Opinion, Selection of Items and Norms

The generated 60 items on perceived parental expectations of higher secondary students were subjected to experts' opinion drawn from the department of Psychology, Education and Language to check its content

relevancy, simplicity, repetition, double-barrelled, clarity and appropriateness. Based on the opinion of the experts, some of the items were modified and some were deleted. Thus, 40 items were selected on a five point Likert-type Scale to measure the Perceived Parental Expectations of Higher Secondary Students.

To record the responses of the students for each item of the Perceived Parental Expectations Scale, five alternative options were given as 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree'. All these 40 items were being positive, the weightages assigned for each option are: (i) five scores for 'Strongly Agree', (ii) four scores for 'Agree', (iii) three scores for 'Undecided', (iv) two scores for 'Disagree', and (v) one score for 'Strongly Disagree'. Accordingly, the high score reflects higher level of Parental Expectations and low score reflects lower level of Parental Expectations as perceived by the Higher Secondary Students.

(iv) Try-Out

As the students of Higher Secondary Schools in Thiruvannamalai District constituted the population of the proposed study, a pilot study was conducted on 100 Higher Secondary Students of Thiruvannamalai District drawn from different Government Higher Secondary Schools, Government Aided Higher Secondary Schools, and Un-aided Higher Secondary Schools during the academic year 2013-2014. The collected data were tabulated and subjected to inter-item correlation using Cronbach's Alpha. The Alpha Co-efficient of the tool was found to be 0.960 (Table-1). The items which were having the correlation value of less than 0.30 were deleted. Accordingly, 37 items were selected for the final tool. Again the Cronbach's Alpha was calculated and the value was found to be 0.964 (Table-2).

(v) Factor Analysis

Factor Analysis operates on the notion that measurable and observable variables can be reduced to fewer latent variables that share a common variance and are unobservable, which is known as reducing dimensionality (Bartholomew, Knott & Moustaki, 2011). Decoster (1998) suggested the Exploratory Factor Analysis to identify the number of factors influencing variables and to analyze which variables 'go together'. Therefore, the Perceived Parental Expectations Scale was administered to 300 Higher Secondary Students of Thiruvannamalai District belonging to Government Higher Secondary Schools, Government Aided Higher Secondary Schools, and Un-aided Higher Secondary Schools during the academic year 2013-2014 to identify the number of factors related to it using Exploratory Factor Analysis (Field, 2005). As a result of the Exploratory Factor Analysis, six factors were identified (Table-3), and then, all the 37 items were arranged under those identified six factors through the Rotated Component Matrix (Table-4).

Then these items were suitably named according to the focussing views of each grouped item towards the Perceived Parental Expectations of Higher Secondary Students. The first factor consisted of twelve items with factor loadings ranging from 0.500 to 0.723 and named as 'Academic Excellence'. The second factor consisted of four items with factor loadings ranging from 0.630 to 0.665 and named as 'Excellent Job Profile'. The third factor consisted of four items with factor loadings ranging from 0.624 to 0.706 and named as

'Family Prestige'. The fourth factor consisted of six items with factor loadings ranging from 0.446 to 0.924 and named as 'Financial Obligations'. The fifth factor consisted of four items with factor loadings ranging from 0.515 to 0.924 and named as 'Meeting Unfulfilled Desires'. The sixth factor consisted of seven items with factor loadings ranging from 0.451 to 0.924 and named as 'Good Characters'. The factor loadings of all the 37 items of the final tool are given in Table-5.

(vi) Reliability and Validity

In order to establish the reliability of the Perceived Parental Expectations Scale, the Cronbach's Alpha Co-efficient was calculated and the value was found to be 0.964. The index of reliability is taken as a measure of intrinsic validity. It measures the dependability of test scores by showing how well obtained scores agree with their theoretically true values. The index of reliability gives the maximum correlation which, the given test is capable of yielding in its present form (Garret, 1981). The intrinsic validity coefficient of the tool was also established by taking the square root of reliability coefficient, which was found to be 0.982. Thus, it is inferred that the tool is reliable and valid for the study.

CONCLUSION

As the basic required procedure were adopted by the researcher in the task of developing a new instrument to measure the Higher Secondary Students' Perceived Parental Expectations, it is confirmed that the tool constructed and validated by the researcher is psychologically sound, reliable and valid for further studies in the Indian context.

Table-1:

Item-wise Cronbach's Alpha value of Perceived Parental Expectations Scale (Try-Out)

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	94.3100	1292.438	.434	.960
2	94.2700	1255.310	.779	.958
3	94.0000	1273.455	.559	.959
4	94.1000	1305.970	.367	.960
5	94.5800	1251.943	.820	.958
6	94.4100	1244.103	.792	.958
7	93.5100	1331.707	.045	.962
8	94.4300	1250.692	.801	.958
9	94.1800	1277.907	.610	.959
10	94.2100	1262.915	.715	.958
11	94.0400	1290.645	.499	.959
12	94.0500	1304.654	.344	.960
13	93.9400	1290.037	.479	.960
14	94.3000	1255.000	.671	.959
15	94.3100	1255.913	.768	.958
16	94.4100	1261.396	.705	.958
17	94.2700	1255.896	.785	.958
18	93.9200	1323.004	.156	.961
19	94.6900	1246.155	.852	.958
20	94.0200	1277.454	.552	.959
21	94.0900	1328.648	.095	.961
22	94.3600	1257.546	.776	.958
23	94.4900	1250.212	.788	.958
24	93.9200	1286.155	.433	.960
25	94.0900	1280.951	.584	.959
26	93.6200	1291.713	.439	.960
27	94.7900	1252.895	.828	.958
28	93.6700	1294.567	.340	.960
29	93.8000	1272.545	.490	.960
30	93.9700	1288.898	.452	.960
31	93.6600	1290.651	.416	.960
32	94.2700	1255.310	.779	.958
33	94.3800	1271.309	.663	.959
34	94.2600	1262.013	.738	.958
35	94.7000	1242.253	.839	.958
36	93.7700	1302.967	.393	.960
37	94.4600	1252.352	.808	.958
38	94.0800	1260.842	.716	.958
39	94.7200	1241.800	.886	.957
40	94.7400	1237.912	.888	.957

Cronbach's Alpha	No.of Items
.960	40

Table-2:
Item-wise reliability value of Perceived Parental Expectations Scale
(Final Tool)

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	86.0000	1270.929	.413	.964
2	85.9600	1231.776	.783	.963
3	85.6900	1251.650	.544	.964
4	85.7900	1284.087	.351	.964
5	86.2700	1228.320	.825	.962
6	86.1000	1220.071	.800	.962
7	86.1200	1226.046	.816	.962
8	85.8700	1253.145	.625	.963
9	85.9000	1238.939	.723	.963
10	85.7300	1267.431	.496	.964
11	85.7400	1281.467	.439	.964
12	85.6300	1265.266	.492	.964
13	85.9900	1231.242	.676	.963
14	86.0000	1231.596	.780	.963
15	86.1000	1237.343	.713	.963
16	85.9600	1231.918	.794	.963
17	86.3800	1221.551	.867	.962
18	85.7100	1254.127	.551	.964
19	86.0500	1233.987	.780	.963
20	86.1800	1225.745	.801	.962
21	85.6100	1262.362	.436	.964
22	85.7800	1258.497	.574	.964
23	85.3100	1267.267	.448	.964
24	86.4800	1228.575	.840	.962
25	85.3600	1273.162	.421	.964
26	85.4900	1248.939	.492	.964
27	85.6600	1266.287	.444	.964
28	85.3500	1268.553	.503	.963
29	85.9600	1231.776	.783	.963
30	86.0700	1247.985	.663	.963
31	85.9500	1238.371	.743	.963
32	86.3900	1217.937	.850	.962
33	85.4600	1279.221	.594	.963
34	86.1500	1228.149	.819	.962
35	85.7700	1236.947	.723	.963
36	86.4100	1217.557	.898	.962
37	86.4300	1214.005	.897	.962

Cronbach's Alpha	No. of Items
.964	37

Table-3
Eigen Values and Rotation Sums of Squared Loadings of Items
Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.523	41.954	41.954	15.523	41.954	41.954	5.346	14.449	14.449
2	3.154	8.524	50.478	3.154	8.524	50.478	4.762	12.871	27.320
3	2.188	5.912	56.390	2.188	5.912	56.390	4.634	12.526	39.846
4	1.413	3.819	60.209	1.413	3.819	60.209	4.043	10.927	50.773
5	1.213	3.280	63.489	1.213	3.280	63.489	3.247	8.775	59.548
6	1.195	3.228	66.717	1.195	3.228	66.717	2.653	7.170	66.717
7	.914	2.469	69.187						
8	.877	2.370	71.557						
9	.774	2.092	73.649						
10	.739	1.998	75.646						
11	.709	1.917	77.563						
12	.649	1.753	79.316						
13	.606	1.637	80.953						
14	.560	1.514	82.467						
15	.541	1.463	83.930						
16	.509	1.376	85.306						
17	.479	1.294	86.600						
18	.471	1.273	87.873						
19	.422	1.140	89.013						
20	.389	1.052	90.065						
21	.360	.973	91.038						
22	.335	.906	91.944						
23	.313	.846	92.790						
24	.305	.825	93.615						
25	.299	.808	94.423						
26	.281	.759	95.182						
27	.254	.688	95.870						
28	.254	.686	96.555						
29	.222	.599	97.154						
30	.203	.549	97.703						
31	.188	.508	98.211						
32	.181	.490	98.701						
33	.173	.468	99.169						
34	.164	.442	99.611						
35	.144	.389	100.000						
36	2.336E-16	6.313E-16	100.000						
37	-2.551E-17	-6.895E-17	100.000						

* Extraction Method: Principal Component Analysis.

Table-4
Factor-wise distribution of Items with Loadings
(Rotated Component Matrix^a)

Items	1	2	3	4	5	6
36	.723					
30	.719					
31	.707					
34	.701					
29	.682					
33	.621					
32	.620	.413				
35	.565	.425				
24	.543		.504			
13	.536					
1	.521					
5	.500				.433	
2		.665				
6		.651				
3		.633				
20		.630				
17	.429		.706			
25			.680			
23			.638			
18			.624			.543
27				.924		
19	.410			.623		
21				.570		
22				.529		
4				.550		
16				.446.		
37					.924	
14		.444			.712	
15		.417			.582	
11					.515	
12						.924
8						.774
10						.648
28			.433			.636
7			.420			.571
26						.542
9						.451

Extraction Method: Principal Component Analysis.

^a Rotation Method: Varimax with Kaiser Normalization.

Table - 5:
Items-wise Factor Loadings of Perceived Parental Expectations Scale

S. No.	Item No.	Statements	Factor Loading
Factor-I: Academic Excellence			
1	36	My parents expect me to top the State level rank list.	.723
2	30	My parents expect me to study continuously all the time even without taking the required rest.	.719
3	31	My parents expect me to attend extra coaching classes (Private Tutition) in order to score more marks.	.707
4	34	My parents expect me to undergo rigorous academic special coaching in the school.	.701
5	29	My parents expect me not to get distracted by any other non-academic activities.	.682
6	33	My parents expect me to pay full concentration only my studies.	.621
7	32	My parents expect me to get first rank in my class.	.620
8	35	My parents expect me to score the full marks in those subjects that are helpful for getting admission in to professional courses.	.565
9	24	My parents expect me to break the record of my seniors in studies.	.543
10	13	My parents expect me to be more competent enough to excel others in both curricular an co-curricular activities.	.536
11	1	My parents expect me to lead other students' in Curricular and Co-curricular activities.	.521
12	5	My parents expect me to win all the prizes, medals and other awards in academic field at the school level.	.500
Factor-II: Excellent Job Profile			
13	2	My parents expect me to aim for a highly paid profession.	.665
14	6	My parents expect me to be the most demanded person in the job market.	.651
15	3	My parents expect me to become a renowned person in my profession.	.633
16	20	My parents expect me to be strong in communication skills in order to get placement in reputed organizations.	.630
Factor-III: Family Prestige			
17	17	My parents expect me to bring reputation to the family by getting the best placement.	.706
18	25	My parents expect me to bring laurels to the family by doing higher studies abroad.	.680

S. No.	Item No.	Statements	Factor Loading
19	23	My parents expect me to be praised by the parents of my classmates.	.638
20	18	My parents expect me to be the person talked about proudly by our relatives and neighbours.	.624
Factor-IV: Financial Obligations			
21	27	My parents expect me to pursue my higher studies only on Government merit quota.	.924
22	19	My parents expect me to write as many entrance examinations as required to get admission in reputed institutions.	.623
23	21	My parents expect me to continue higher studies with some sort of scholarship or sponsorship.	.570
24	22	My parents expect me to be economically self -supporting and self-reliant in future.	.529
25	4	My parents expect me to settle their financial commitments.	.550
26	16	My parents expect me to support them in all possible means for their livelihood.	.446.
Factor-V: Meeting Unfulfilled Desires			
27	37	My parents expect me to study the programme which they were aspiring.	.924
28	14	My parents expect me to take up the job which they were aspiring.	.712
29	15	My parents expect me to achieve whatever they failed to achieve.	.582
30	11	My parents expect me to achieve in studies whatever they expected from my siblings.	.515
Factor-VI: Good Characters			
31	12	My parents expect me to be quoted as an exemplary student by the teachers and parents of my school.	.924
32	8	My parents expect me to have only a few selected good friends.	.774
33	10	My parents expect me not to chat or interact unnecessarily with my friends outside the school campus.	.648
34	28	My parents expect me to read only moral books in addition to the subjects of study.	.636
35	7	My parents expect me to be a well cultured person.	.571
36	26	My parents expect me to be self-confident and determined to face all kinds of challenges in my life.	.542
37	9	My parents expect me to be praised by the teachers at the time of Parent-Teacher Association (P.T.A) meetings.	.451

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IMPLEMENTED INTERNSHIP OF SECONDARY TEACHER – EDUCATION PROGRAMME OF BANGALORE UNIVERSITY

5

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INTRODUCTION

Education is one of the basic needs of human beings. It is considered as a birthright. Our Country being a large democratic country in the world, to realize the democratic ideals, to understand the functioning of its government by and large, secondary education is essential. The complete and balanced personality development depends on good education. Hence it is the responsibility of the country to provide proper education to all the individuals of the country.

Good Education is based on good teachers. Teachers are the change agents and leaders of the classroom. The Education Commission (1964-66) states that the destiny of the nation is decided in the classroom. Therefore, Teacher education is very important in the Educational scenario of the country. The teachers play an effective role in moulding and shaping the attitudes, habits, manners and above all the character and personality of the students. A few quotes given below highlights the importance of a teacher.

John Adams (1735-1826) “ A Teacher affects eternity, he can never tell where his influence stops”.

Alexander (355-323 B.C,) “Teachers who educate children deserve more honour than parents”.

From the above quotes, it is clear that a teacher can play an important role in the progress and welfare of a society. A teacher is a member of the society. He has to be sufficiently appreciative of the changing needs and problems of the society and play a dynamic and positive role. A teacher plays his role towards society in two ways. (1) Inside the school by preparing students for becoming effective citizens and (2) Outside the school by assuming the role of a social worker and an agent of social change. Hence teacher education is one of the significant programmes of any country.

NEED AND IMPORTANCE OF THE STUDY

Proper education is necessary to prepare a good teacher. Teacher education is needed to kindle the imagination of the teacher and remove the evils of the hit and miss process, to accord a professional status to the teaching profession and above all, to make the optimum use of the time and energy of the teacher and the taught. The Education Commission (1964-66) said “ A sound programme of professional

education of teachers is essential for the qualitative improvement of education. Investment in teacher education can yield very rich dividends because the financial resources required are small when measured against the resulting improvements in the education of millions”.

The UNESCO – ILO Document on the status of Teachers (1967) stated, “ It should be recognized that the advances in education depends largely on the qualified and ability of the teaching staff in general and on human, pedagogical and technical qualities of the individual teachers”

As stated by Walker (1967) “The function of teacher education is to produce good teachers, the good teacher is one who produces good results in meeting the central presenting of life in whatever social context”.

The National Curriculum Framework (NCF -2005) places different demands and expectations on teacher, which need to be addressed both by initial and continuing teacher education. The importance of competent teachers to the nation’s school system can in no way be overemphasized. Hence the training of a teacher is a major area at present. Pre–service needs to be improved. Hence, the internship experiences need to be organized in a way that is useful in evaluating the teacher’s ability, socialization with in the profession, development of teaching learning concepts, field of experimentation, insight in to new perspectives and motivation to continue learning and reflecting.

OBJECTIVES OF THE STUDY

To analyze the extent to which Internship is practiced in Bangalore University .

To study the planning and preparation made by the teacher education institutions for internship.

To find out the number of lessons delivered by the student teachers and supervised by the teacher educators and the school teachers.

To find out the feedback given by the Teacher – educators.

To find out the co-operation extended by the school teachers during the Internship.

Research Questions

What is the present practice of Internship at teacher education institutions in terms of

- (a) Planning and preparation for internship
- (b) Implementation of Internship
- (c) Number of lessons supervised by the teacher educator and the school teacher.
- (d) Number of lessons delivered in each methodology.

METHODOLOGY

Survey method was followed in the present study.

(a) Sample

There are 12 aided and 69 un-aided colleges under Bangalore University. The sample of the study consisted of randomly selected 462 student teachers from two aided and seven un-aided colleges of Bangalore University. All the Student–teachers from these teacher training colleges who were

present on the day of the visit of the Investigator were selected as sample. Stratified random sampling method was followed.

(b) Tool used

A questionnaire developed by the Investigators was used to collect the data which was titled as ‘Questionnaire for the Student Teachers’. This tool contained 13 items regarding the Demo-lessons, Lesson plan corrections, supervision by the method teachers, activities conducted by the student-teachers etc. and 04 items are related

to the problems faced by the student-teachers during the practice-teaching.

(c) Collection of data

Survey method was used to collect the data. The investigator visited the Aided & Unaided B.Ed Colleges of the Bangalore University. Ten percent of the total Colleges were selected to collect the data for the study.

ANALYSIS OF DATA

The data was tabulated and analyzed in terms of percentage and described in the following paragraphs supported by tables.

Table 1

Responses of student teachers on Demonstration Lessons

Sl. No.	Description	Frequency	%
1.	Demonstration Lessons		
	a) Demonstration Lessons delivered	444	96.10
	b) Demonstration Lessons not delivered	10	2.20
	c) Not responded	8	1.70
	Lessons demonstrated by		
	a) Regular school teachers who handle subjects	146	31.60
	b) Method Masters of the College	214	46.30
	c) Method Masters from other B.Ed. college	59	12.80
	d) A senior Student Teacher-Alumni member	4	0.90
	e) Not responded	21	4.50
		444	96.10

According to table 1, 96.10% of the student-teachers opined that demonstration lessons are being given before sending to schools for internship. 2.20% of the student-teachers opined that they did not get opportunity to observe demonstration lessons before going to

school for Internship. 1.70% of the student teachers have not responded anything.

Only 31% of the student-teachers stated that the Lessons were demonstrated by the school teachers who handle the subjects. 46% of the student-teachers opined that the demo lessons were given by the Method masters of the college. 12.80% of

the student-teachers opined that the demo lessons are demonstrated by the other B.Ed college Method teachers and 4.50% of the student teachers did not express anything.

Table 2

Number of Demonstration Lessons delivered for observation in each method

Sl. No.	Description	Frequency	%
1.	No. of Demonstration Lessons delivered for observation in each method		
	a) One	103	22.30
	b) Two	119	25.80
	c) More than two	234	50.60
	d) Not responded	6	1.30
		462	100.00

As per table 2, 50% of the student-teachers have opined that more than two demo lessons are organized in each method. 25.80% of the student-teachers have expressed that only two demo lessons are conducted in each method. 22% of the student-teachers have stated that their college has conducted only one demo lesson in each method of teaching. 1.30% have not expressed any opinion.

Table 3

Type of practice teaching School

Sl. No.	Description	Frequency	%
1.	Type of practice teaching School		
	a) Government	173	37.40
	b) Private Aided	114	24.70
	c) Private Unaided	153	33.10
	d) Corporation	16	3.50
	e) Not responded	6	1.30
		462	100.00

According to table 3, 37.40 % of the student teachers have responded that they go to Government schools for internship. 24.70% have expressed that they organize their internship in Private Aided schools. 33.10% have expressed that they practiced their teaching in Private unaided schools and 1.30% have not expressed anything in this regard. Different types of schools have different quality, structure and standard of education. It shows that all the student-teachers do not get same school environment during the Internship.

Table 4
Duration of Practice teaching

Sl. No.	Description	Frequency	%
1.	Duration of Practice Teaching		
	a) More than six weeks	314	68.00
	b) Less than six weeks	144	31.10
	Not Responded	4	0.90
		462	100

As reflected in table 4, 68% of the student-teachers have expressed that their internship was for more than six weeks whereas 31.10 % have stated that the internship duration was less than six weeks. 0.90% have not expressed any thing. But according to NCFTE-2009, the duration of internship should be 42 days or seven to eight weeks.

Table 5
Orientation on Lesson Planning

Sl. No.	Description	Frequency	%
1.	Orientation on Lesson Planning		
	a) Oriented on Lesson Plan before sending to school	449	97.20
	b) Not Oriented	12	2.60
	c) Not responded	1	0.20
		462	100.00

Before sending the student-teachers to schools for internship, college should organize the orientation on lesson plan writing. As per table 5, 97% of the student-teachers have stated that orientation was conducted on lesson plan writing. 2.60 % have expressed that it was not conducted and 0.20 % have not expressed any thing.

Table 6
Number of lessons corrected by the method masters

Sl. No.	Description	Frequency	%
1	Number of lessons corrected by the method masters		
	a) Less than 50% of the total lessons	160	34.60
	b) All the lessons	296	64.10
	c) Not responded	6	1.30
		462	100

During internship lesson plan correction is one of the important responsibilities of the Method teachers. As per table 6, 34.60 % of the student-teacher have expressed their opinion that less than

50% of the lesson plans are corrected. 64.10% have opined that all the lesson plans are corrected but 1.30% have not expressed anything.

Table 7
Supervision of lessons

Sl. No.	Description	Frequency	%
1	Supervision of Lessons		
	a) All the teachers of the college	366	79.20
	b) Only method teachers	69	14.90
	c) Co-operative teachers of the school	24	5.30
	d) Not responded	3	0.60
		462	100

During internship lessons given by the student teachers should be supervised by the method teachers. As given in table 7, 79.20 % of the student-teachers opined that all the teachers of the college supervise

the lessons of the student teachers. 14.90 % have expressed that only the method teachers will supervise the lessons given by the student teachers. 0.60% have not expressed anything.

Table 8
Number of lessons Supervised by the method teacher

Sl. No.	Description	Frequency	%
1.	No of lessons Supervised by the method teacher		
	a) One	41	8.90
	b) Two	202	43.70
	c) Two to five	148	32.00
	d) More than five	66	14.30
	e) Not responded	5	1.10
		462	100

According to table 8, 32 % of the student-teachers have said that two to five lessons are supervised by the method teachers. 43.70 % have expressed that two lessons

are supervised by the method teachers. 8.90 % are opined that only one lesson is supervised by the method teachers. 1.10% have not expressed anything.

Table 9
Feedback by the Supervisors

Sl. No.	Description	Frequency	%
1.	Feedback by the supervisors		
	a) During the Class	10	2.20
	b) After Completion of every class	271	58.70
	c) After the completion of all the classes	177	38.30
	d) Not responded	4	0.80
		462	100

Feedback is another prominent responsibility of the supervisors during the internship. As per table 9, 58.70% of the student teachers have opined that feedback was provided soon after completion of every class. 38.30% have expressed that feedback was given after completion of all the classes. 2.20% have said that feedback was given during the class. 0.80% have not expressed anything.

Table 10
Number of lessons delivered by the student teachers in a day

Sl. No.	Description	Frequency	%
1.	No. of lessons delivered by the Student-teacher in a day		
	a) Only one lesson in any one subject	256	55.40
	b) Two lessons in two subjects	201	43.50
	c) Not Responded	5	1.10
		462	100

As per table 10, 55.40 % of the student teachers have stated that they deliver only one lesson in any one subject in a day. 43.50 % have said that they deliver two lessons in two subjects in a day. 1.10 % have not expressed anything.

Table 11
Conduct of Co-curricular activities

Sl. No.	Description	Frequency	%
1.	Conduct of any co-curricular activities out of the classroom like exhibition or street play		
	a) Conducting co-curricular activities	207	44.80
	b) Not conducting	252	54.50
	c) Not responded	3	0.70
		462	100

According to table 11, 54.50 % of the student-teachers have said that they did not conduct any co-curricular activities. 44.80% of the student teachers said that they conducted the co-curricular activities.

Table 12
Conduct of unit test

Sl. No.	Description	Frequency	%
1.	Conduct of unit test after completion of unit/topic in concerned school subjects		
	a) Yes	455	98.50
	b) No	3	0.60
	c) Not responded	4	0.90
		462	100

As shown in table 12, 98.50% of the student teachers have stated that they conducted unit test after completion of the unit in concerned subjects. Only 0.60 % have stated that they did not conduct the unit test.

Table 13
Analysis of the unit test

Sl. No.	Description	Frequency	%
1.	Statistical Analysis of the unit test		
	a) Yes	443	95.90
	b) No	9	1.90
	c) Not Responded	10	2.20
		462	100

Table 13 shows that 95.90 % of the student teachers have analyzed the test papers statistically. Only 1.90% have expressed that they have not analyzed statistically.

FINDINGS OF THE STUDY

- Demonstration lessons are not given in all the institutions.
- Correction of lesson plans is not done completely. Below 50% of the lesson plans are corrected by the method teachers.
- Supervision of the lessons given by the student-teachers & feedback is not satisfactory in many institutions.
- More than 50% of the student teachers are not organizing any co-curricular activities other than the classroom teaching.

- Method teachers are giving very less Demo-lessons.
- Many a times student teachers are giving two lessons of two subjects in a day.
- Teacher training institutions are selecting different types of schools for internship. They are different in quality of education & other aspects of teaching. Hence all the student teachers will not get the same experience & training in teaching.

CONCLUSIONS

Internship is one of the prominent activities in the Teacher Preparation

Programme. NCF-TE-2009, expects Internship of substantial duration in a school under the supervision of teacher educators as well as school teachers. They will be required not only to acquire proficiency in the planning of lessons and their delivery but also to organize co curricular activities and participate in school activities and processes. The study has revealed that a lot needs to be done to improve the quality of internship. Monitoring of internship will have to be done systematically and rigorously. This may result in producing better teachers.

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SENSITIVITY OF PRIMARY SCHOOL TEACHERS TOWARDS RESEARCH

6

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INTRODUCTION:

Research and evaluation activities are carried out to improve the quality of education. Research work is an important aspect in the empowerment of Teachers and Project staff gets vision through the research activities. These activities are carried out as per the guidelines sent by the MHRD by contacting and taking advice from State level universities, different institutions and experts (Institute of Public Auditors of India, New Delhi, 2009). Action research work is carried out by the district project functionaries such as BRC, CRC coordinators, District coordinators and Teachers. To know the difficulties of education field and for improving teaching methods SSAM allocated 500 Rs. grants for Action Research for primary teachers who are interested in research activities. In the year 2006-07, 2007-08 and 2008-09 in Sabarkantha District the no of research studies has been undertaken by teachers are 4, 5 and 6 respectively. It is very poor condition (IPAI, New Delhi, 2009). The situation is same for other district of Gujarat till today. What the stake holders are thinking about the research is also important to know the reasons behind lack interest in research. In the present study

investigator has tried to know the Sensitivity of primary teachers towards research.

STATEMENT OF THE PROBLEM

The statement of the problem was as under-

“Sensitivity of Primary Teachers towards Research”

The attempt has been made to know the Sensitivity of the Primary Teachers towards research. A survey has been conducted with the help of questioner.

OBJECTIVES

1. To study the Sensitivity of primary teachers towards research.
2. To study the Sensitivity of primary teachers towards research with reference to gender.
3. To study the Sensitivity of primary teachers towards research with reference to habitat.
4. To study the Sensitivity of primary teachers towards research with reference to educational experience.
5. To study the Sensitivity of primary teachers towards research with reference to educational qualifications.

VARIABLES

The variables included in the study are as follows:

Table: 1**List of Variables and its degree**

Sr. No.	Variable	Type of variable	Level	Type of level	Tool of Measurement
1	Gender	Independent	2	Male Female	Bases on Primary Information
2	Habitat	Independent	2	Rural Urban	Bases on Primary Information
3	Educational experience	Independent	2	0 to 10 Years 10 to 20 Years	Bases on Primary Information
5	Sensitivity towards research	Dependent	-	-	Self Made Opionaire

HYPOTHESIS:

1. There will be no significance difference in the mean score of male and female primary teachers on Sensitivity of towards research of Sensitivity scale.
2. There will be no significance difference in the mean score of rural habitat and urban habitat primary teachers on Sensitivity of towards research of Sensitivity scale.
3. There will be no significance difference in the mean score of primary teachers having experience less than ten years and experience having greater than ten years on Sensitivity of towards research of Sensitivity scale.

Area and Type of Research:

In the present study survey has been conducted to know the present situation of Sensitivity of primary teachers towards research. So this becomes Applied Research. Data have been collected and analyzed so it is Quantitative Research. The study concerns with Research and Evaluation.

Delimitation of Research:

The present research delimited to only Visnagar Taluka Primary School Teachers.

TOOL OF THE STUDY

In order to study and measure the opinion of primary teachers towards research an opionaire was prepared. It includes statements related to the Concept of research, Interest in research, Importance of research, Use of research and merits of research.

Total 50 items were constructed among them there were 35 positive and 15 negative statements. The minimum score was 250 and maximum was 0 with five point rating scale.

Population and Sample:

There were 80 Government Primary Schools in Visnagar Taluka. All the Primary Teachers of the schools have been selected as a population for the present study. For the selection of the sample 30 Primary Schools have been selected as a sample. From the selected schools 80 Primary Teachers have been selected purposively keeping in the mind the variables of the study.

DATA COLLECTION

Data has been collected with the help of the opinionaire. The permission for data collection have been taken from the principal and as per time allotted for the collection of the data investigator have gone to the schools and has collected data from teachers of the schools with the help of self-made opinionaire during January , 2015.

DATA ANALYSIS

Scoring has been done as per key. The main objective of the present study was to

know the Sensitivity of the primary teachers in relations to some variables so t ratio has been calculated to test the constructed null hypothesis.

Effect of Gender on Sensitivity of Primary Teachers on Sensitivity scale

Effects of Gender on Sensitivity on Primary Teachers on Sensitivity of towards research of Sensitivity scale. Sensitivity scale are given as follows.

Table: 2

Effect of Gender on Sensitivity of Primary Teachers on Sensitivity scale

SAMPLE	N	MEAN	SD	SEM	t-Value	Sig
MALE	40	212.23	21.57	5.01	3.29	SIG
FEMALE	40	228.74	23.25			

From the above table, it has been seen that the mean score and SD of the male primary teachers are found 212.23 and 21.57 respectively on Sensitivity towards research of Sensitivity scale, mean score and SD of the female primary teachers are found 228.74 and 23.25 respectively on Sensitivity towards research of Sensitivity scale. Calculated t- value was found 3.29 with 5.01 standard error of mean, which shows that calculated t-value found significant at 0.01 level of the significance. From the above research, it can be find that mean score of the male primary teachers

was found higher than the mean score of the female primary teachers on Sensitivity of towards research of Sensitivity scale at 0.01 level of the significance, which shows that sensitivity of male primary teachers was found higher than the sensitivity of female primary teachers.

Effect of Habitat on Sensitivity of Primary Teachers on Sensitivity scale

Effects of habitat on Sensitivity on Primary Teachers on Sensitivity of towards research of Sensitivity scale. Sensitivity scale are given as follows.

Table: 3

Effect of Habitat on Sensitivity of Primary Teachers on Sensitivity scale

SAMPLE	N	MEAN	SD	SEM	t-Value	Sig
RURAL	36	208.36	21.17	4.99	4.42	SIG
URBAN	44	230.41	23.42			

From the above table, it has been seen that the mean score and SD of the rural habitat primary teachers are found 208.36 and 21.17 respectively on Sensitivity towards research of Sensitivity scale, mean score and SD of the urban habitat primary teachers are found 230.41 and 23.42 respectively on Sensitivity towards research of Sensitivity scale. Calculated t-value was found 4.42 with 4.99 standard error of mean, which shows that calculated t-value found significant at 0.01 level of the significance. From the above research, it can be find that mean score of the urban habitat

primary teachers was found higher than the mean score of the rural habitat primary teachers on Sensitivity of towards research of Sensitivity scale at 0.01 level of the significance, which shows that sensitivity of urban habitat primary teachers was found higher than the sensitivity of rural habitat primary teachers.

Effect of Experience on Sensitivity of Primary Teachers on Sensitivity scale

Effects of Experience on Sensitivity of Primary Teachers on Sensitivity of towards research of Sensitivity scale. Sensitivity scale are given as follows.

Table: 4

Effect of Experience on Sensitivity of Primary Teachers on Sensitivity scale

SAMPLE	N	MEAN	SD	SEM	t-Value	Sig
Experience > 10 years	48	212.74	21.62	5.21	3.72	SIG
Experience < 10 years	32	232.1	23.59			

From the above table, it has been seen that the mean score and SD of the primary teachers having experience less than ten years are found 212.74 and 21.62 respectively on Sensitivity towards research of Sensitivity scale, mean score and SD of the primary teachers having experience greater than ten years are found 232.10 and 23.59 respectively on Sensitivity towards research of Sensitivity scale. Calculated t-value was found 3.72 with 5.21 standard error of mean, which shows that calculated t-value found significant at 0.01 level of the significance. From the above research, it can be find that mean score of the primary teachers having experience less than ten years was found higher than the mean score

of the primary teachers having experience greater than ten years on Sensitivity of towards research of Sensitivity scale at 0.01 level of the significance, which shows that sensitivity primary teachers having experience less than ten years was found higher than the sensitivity of the primary teachers having experience greater than ten years on Sensitivity of towards research of Sensitivity scale

DISCUSSION AND CONCLUSION

From the above research, it can be find that mean score of the male primary teachers was found higher than the mean score of the female primary teachers on Sensitivity of towards research of Sensitivity scale at 0.01 level of the significance, which shows

that sensitivity of male primary teachers was found higher than the sensitivity of female primary teachers. Mean score of the urban habitat primary teachers was found higher than the mean score of the rural habitat primary teachers on Sensitivity of towards research of Sensitivity scale at 0.01 level of the significance, which shows that sensitivity of urban habitat primary teachers was found higher than the sensitivity of rural habitat primary teachers and mean score of the primary teachers having experience

less than ten years was found higher than the mean score of the primary teachers having experience greater than ten years on Sensitivity of towards research of Sensitivity scale at 0.01 level of the significance, which shows that sensitivity primary teachers having experience less than ten years was found higher than the sensitivity of the primary teachers having experience greater than ten years on Sensitivity of towards research of Sensitivity scale

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