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# From the Chief Editor

It is a matter of great pleasure for me to present Vol. 14 No. 1 of the 'Insight Journal of Applied Research in Education' for researchers, teachers & students of Faculty of Education across the country. The volume consists of 12 research papers and 6 research articles. The research papers cover a wide range of themes including scholastic achievement, Mental Health, Stress Management, Adjustment & Awareness etc. The research articles mostly pertain to Educational Philosophy of 'Sri Aurobindo' & 'Azad'. The other papers cover curriculum framework for General & Engineering Education. I am quite hopeful that these papers shall be found useful by the researchers working in the filed of Education.

I am highly obliged to Prof. Reyaz Punjabi, Vice-Chancellor, Kashmir University for his patronage and administrative support. I also acknowledge the help and support of Prof. S. Fayyaz Ahmad, Registrar of the University.

I would like to place on record the efforts of the members of the Editorial Board who worked as a team to see that the final script of the Journal is ready. However, for some technical reason, there has been some delay in the publication of this volume, for which the editorial board expresses its regrets.

*Prof. N. A. Nadeem*
Chief Editor

# Mastery over the Basic Tools of Learning, Reading, Writing, Arithmetic & Science
## - An Evaluation Study

N.A. Nadeem*
A. Khalida**

**Abstract**

*The present study was carried out to assess the mastery of elementary school students over the basic tools of learning viz., Reading, writing, Arithmetic & Science through their performance in English, Urdu, Maths & science. A sample of 720 students from 66 schools were selected randomly from the six districts of Kashmir valley. The research tool employed for assessment of student's academic achievement was Self-constructed & Standardized Comprehensive Achievement Test (CAT). The main findings were: (1) The overall pass percentage was 16.28%. (2) The subject-wise analysis has revealed that maximum fail percentage of 5th grade students was found in Arithmetic (96.22), followed by Science (90.89), Writing (81.11) and Reading (66.67) respectively. (3) In all areas, the maximum failure percentage in 5th grade was in 'arithmetic' i.e., rural (93.93), urban (98.33) and semi-urban (96.43);(4) The significance of mean difference between rural and urban students in 5th grade showed that urban students had good 'writing' skills than rural students ($t=3.87$, $p<.01$); semi-urban students had good knowledge in 'science' subject than rural students ($t=2.41$, $p<.05$) and urban students were ahead in 'writing' & 'arithmetic' components than semi-urban students ($t=3.21$, $p<.01$; $t=1.9$ [illegible] $p<.05$). (5) The 5th grade boys in comparison to 5th grade girls achieved relatively higher mean score in 'Arithmetic' ($t=3.24$, $p<.01$); however, no significant difference was found in the mean achievement score of boys and girls in 'reading', 'writing' and 'science' components.*

*Key words:* Elementary Students, Reading, Writing, Arithmetic, Science, Learning, Academic Achievement, School, Kashmir.

### Introduction

Education is intended to develop basic learning skills - reading, writing, arithmetic and life skills, necessary for the children to survive and

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improve the quality of life. During childhood, developments in the domains of literacy and numeracy take place through acquisition of basic learning competencies (BLC). These competencies represent levels of learning in a particular subject comprising basic knowledge, understanding, abilities, interests, attitudes and values. The competencies are essentially to be acquired by the end of a particular stage or standard of education. As far as the primary stage is concerned it is in fact the foundation stage for the development of basic competencies.

A decision was taken in 1991 to identify the Minimum levels of Learning that would be followed by all primary schools in the country. The establishment of MLLs was seen as a major step for improving the quality of primary education. It has now been decided to upscale the MLL programme through institutional mechanism across the country. The national resource institutions like the National Council of Educational Research and Training (NCERT), Regional Institutes of Education (RIE), State Councils of Educational Research and Training (SCERT) and District Institutes of Education and Training (DIET) are being networked for this purpose. The District Primary Education Programme has adopted MLL as a major strategy for improvement of the quality of primary education.

As we have not completely achieved the goal because of low enrolment of the backward sections of the society; wastage & stagnation; Low enrolment of girls; apathy and poverty of the parents; heavy and uninteresting curriculum; uninspiring & defective methods of teaching; frequent transfer of teachers; lack of effective inspection and academic guidance by the inspecting staff and inadequate and unattractive school building.

Another significant reason why the school system lacks effectiveness is because success of teaching is seen to depend upon how much of the curriculum a teacher can cover in the course of the academic session. The more the facts from the textbook given to children, the higher the level of teaching! *'Teach these boys and girls nothing but Facts. Facts alone are wanted in life. Plant nothing else and root out everything else'. The speaker, the schoolmaster and the third grown person present, all backed a little and swept with their eyes the rows of little vessels, then and there arranged in order, ready to have imperial gallons of facts poured into them until they were full to the brim"* Charles Dickens in *'Hard Times'*. One more reason is homework giving to students, as most teachers are aware that children have many responsibilities at home, these are ignored.

Jammu and Kashmir is bestowed with special status in the Indian union and gets special grants for educational and developmental programmes from national government; yet it has not made headway in different sectors. Education in rural areas is not up to the mark. The problems of enrolment, wastage, non-utilization of educational facilities,

illiteracy, low productivity and non-utilization of developmental programmes are a matter of concern. Such conditions that are prevalent in the State, in spite of special efforts made, pose several questions: When educational expansion is no more a problem, why literacy percentage is low? In spite of free education, what are the reasons for non-utilization of educational facilities? Studying the way education has operated in such a distinct socio-cultural context requires a deep understanding and scrutiny of several factors as they obtain in the environment.

The aim of modern education is all-round development of the child, and his growth and development can be effectively judged and appraised by a process of evaluation. A comprehensive programme of evaluation includes academic subjects; physical, moral, intellectual & social development; interests and aptitudes and skills. Evaluation at primary stage should aim at helping the pupil to improve their achievements in basic skills and to develop the right habits and attitudes with reference to the objectives of primary education and these objectives and their implications should be made clear to the teacher.

**Research Overview**

**1. Studies on Students Academic Achievement & Learning**

Various research have been carried out on Academic Achievement (Hughes, 2006; Phillips *et al.*, 2002; Misra, 1998; Su, Fu-hsing, 1994; Knudson, 1995) A number of studies have been attempted to examine Quality of Education (Ma X. & Willms, 2004; Hanushek, 1997; Jong, 1993). Few studies were available on School & Class Size (Ecalle *et al.*, 2006; Blatchford *et al.*, 2003; Reynolds *et al.*, 2001 and Arora & Panda, 1997; Blatchford, 2003; Lee *et al.*, 2000). Only one study was available on Study Habits (Patel, 1996)

The study of Hughes (2006) concluded all school facility design variables had a statistically significant relationship with student achievement within each school category. Phillips *et al.* (2002), during their study on relative reading achievement found a systematic relationship between gender and reading categorization in Grades 1-3, with more boys below average, & no systematic relationship in Grades 4-6. Misra (1998) has found no significant difference in the achievement level of children with and without pre-primary education. In a study conducted by Su, Fu-hsing (1994) showed a significant relationship between reading achievement and content area performance; reading, at earlier grades made a significant contribution to predicting content area performance at later grades. However, this correlation appeared to be not consistently strong as children's grade levels increased. Results by Knudson (1995) showed that children begin school seeing writing as drawing, move to seeing it as printing,

& by Grade 6 identify writing as cursive writing; and that students would improve their writing in Grade 1 by attending to surface-level features of writing, by Grade 3 "trying harder," and by Grade 4 using specific process-writing strategies to approach the writing task.

Ma X. & Willms (2004) observed that school location had small effects on disciplinary climate; the disciplinary measure with the strongest relationship to academic achievement pertained to classroom disruption. Hanushek (1997) has found that there is not a strong relationship between student performance and school resources, at least after variations in family inputs are taken into account. The results of Jong (1993) showed that attention can be considered as an important mediator between home problem behaviour and achievement in school; SES appeared not to be related to arithmetic achievement but exerted a small direct effect on reading comprehension.

In the studies conducted by Ecalle *et al.*, (2006); Blatchford *et al.* (2003); Reynolds *et al.* (2001) and Arora & Panda (1997) it was observed that reduced class size increased student learning whereas large classes had the opposite effect. Blatchford (2003) & Lee *et al.*, (2000) have observed that teacher-child contacts were more frequent & personalized in small classes and suggest that school size influences student achievement directly & indirectly, through its effect on teachers' attitudes.

In the study of Patel (1996), it was found that pupils who had good study habits did get significantly more achievement scores than those who had poor study habits.

## 2. Studies on Evaluation & Examination

Few studies were conducted on **Evaluation** (Boscardin, 2005; Pradhan & Mistry, 1996). Various research have been conducted on **Standardized Achievement Test** (Krieg, 2005; Moon *et al.*, 2003; Holloway, 2001) Many studies were on the basic skills viz. **Reading & Writing** (Merisuo-Storm, 2006; Parke *et al.*, 2006; Wolf, 2006) while as on **Arithmetic Skill** (Pendlington, 2006; Mason & Scrivani, 2004). One study was available on **Continuous Comprehensive Assessment** (Rajput *et al.*, 2005).

**Boscardin (2005)** showed that content coverage was positively correlated with student performance in English & Algebra and the SES of the classroom has a significant impact on student performance. **Pradhan & Mistry (1996)** observed the factors contributed to good results included mastery (of teachers) in the subjects; child-centred teaching, and healthy interaction.

**Krieg (2005)** tried to explore the impact of teacher and student

gender differences on standardized test scores and found that boys perform worse & gain less on math, reading, & writing and the findings revealed that there is no differentiality based upon student gender during instruction among teachers. **Moon *et al.* (2003)** reported that increases in test scores is not necessarily a result of student academic attainment. **Holloway (2001)** undertook a study on use and misuse of standardized tests and discussed that when used appropriately, standardized assessments can assist education reform by tracking individual or group progress and achievement levels.

The study of **Merisuo-Storm (2006)** revealed that girls enjoyed reading significantly more than boys. **Parke, Land & Stone (2006)** were of the opinion that School Performance Assessment Programs have positive impact upon performance in reading and writing. **Wolf (2006)** reported that to improve reading in primary classes, teachers should be certain that any procedures decided upon are in keeping with the cherished techniques that have distinguished Montessori education for over a century.

**Paddington (2006)** believed that children's attitude towards learning mathematics can be changed by improving their self-esteem and changing their ideas about learning mathematics. **Mason & Scrivani (2004)** revealed that students' self-evaluation of their efforts in mathematics was higher in the innovative learning environment than in the traditional.

The study by **Rajput *et al.* (2005)** reported that the assessment scheme was feasible in primary schools; teachers, students and their parents have found the scheme very useful and practicable for assessment of children's all-round development.

## Objectives of the Study:

The objectives of the presents study were framed as under:

1. To study mastery of students over basic tools of learning.
2. To study the subject wise analysis of students in English, Urdu, Maths & Science.
3. To study the performance standards of students in basic tools of learning.
4. To study the gender wise difference of students in basic tools of learning.
5. To study the area wise difference of students in basic tools of learning.
6. To study the significance of mean difference between boys & girls in basic tools of learning.
7. To study the significance of mean difference between rural, urban & semi-urban students in basic tools of learning.

**Sample**

For the present study, 720 elementary school students from 66 schools constituted the sample. The sample schools were identified on the basis of random sampling from the list of Govt. Middle Schools, obtained from the Directorate of School Education, Kashmir (DSEK). Out of six districts of Kashmir Valley, 89 Educational Zones were identified from which 50% of the Educational Zones viz., 45 were selected randomly. From each zone, 16 students of class 5th were selected randomly making the total of 720 students.

**Tools Used**

Self-constructed & Standardized Comprehensive Achievement Test (CAT) was administered to measure mastery over basic tools of learning viz., Reading, Writing, Arithmetic & Science.

**Statistical Analysis**

In order to accomplish the objectives of the present study, the data collected during the academic session 2005-06, was subjected to suitable statistical analysis using Percentage, Mean, S.D., t-test and Correlation Statistics.

**Analysis & Interpretation**

In basic Tools of Learning, the reading and writing component consists of English and Urdu Languages, while as Arithmetic is based on Mathematical Scores. In order to assess fully the academic achievement of students in basic tools of learning viz., Reading, Writing, Arithmetic and Science, the results have been presented under the following four sub-heading:

a. Pass and Fail Percentage on the basis of Academic Achievement.
b. Performance Standards of Academic Achievement.
c. Significance of Mean Difference between Rural, Urban and Semi-Urban Students on Academic Achievement.
d. Significance of Mean Difference between Boys and Girls on Academic Achievement.

1.a. **Pass and Fail Percentage:** The forthcoming tables show the overall and area-wise pass and fail percentage of 5th grade sample students enrolled in Govt. schools in Reading, Writing, Arithmetic and Science as Basic Tools of Learning over external criteria evaluation in the form of Comprehensive Achievement Test (CAT).

**Table 1.1. Showing aggregate Pass and Fail %age of Primary Students in Basic Tools of Learning**

| Particulars | Number of students | Number passing | Number failing | Pass %age | Fail %age |
|---|---|---|---|---|---|
| 5th | 720 | 117 | 603 | 16.28 | 83.72 |

While analyzing the aggregate pass & fail percentage of 5th grade students, it was observed that out of 720 students, 603 have failed, which means that a percentage of 83.71 have fallen in failure category. *The results clarify that in aggregate, maximum students have failed in the Comprehensive Achievement Test.*

**Table 1.2. Showing area-wise aggregate Pass and Fail %age of Primary Students in Basic Tools of Learning**

| Particulars | Class | Number of students | Number passing | Number failing | Pass %age | Fail %age |
|---|---|---|---|---|---|---|
| Rural | 5th | 208 | 33 | 175 | 15.86 | 84.13 |
| Urban | 5th | 96 | 16 | 80 | 15.83 | 84.16 |
| Semi-Urban | 5th | 416 | 84 | 332 | 20.24 | 79.75 |

The sub-group analysis as depicted in table 1.2 reveals that in rural, urban & semi-urban areas, the overall condition is same, as the percentage of failures in 5th grade is 84.13, 84.16 & 79.75 respectively. *The results signify that maximum students have failed from all the areas viz., rural, urban & semi-urban.*

**Table 1.3. Showing Pass and Fail %age of 5th Grade Students in Basic Tools of Learning**

| Particulars | Reading | Writing | Arithmetic | Science |
|---|---|---|---|---|
| Pass %age | 33.33 | 18.89 | 3.78 | 9.11 |
| Fail %age | 66.67 | 81.11 | 96.22 | 90.89 |

While analyzing the overall pass and fail percentage of 5th grade students, it was observed that the pass percentage in reading, writing, arithmetic and science as basic tools of learning at primary level is 33.33, 18.89, 3.78 and 9.11 respectively. While as the fail percentage in the said components is 66.67, 81.11, 96.22 and 90.89 respectively. This clearly indicates that the pass percentage in all the components is on the lower side. The table further reveals that the students have not attained the minimum levels of expected achievement, as specified in one of the objectives of primary education. *The results clarify that the maximum failure*

*percentage is in Arithmetic (Mathematics) followed by other skills in the descending order of Science, Writing and Reading components respectively.*

**Table 1.4. Showing area-wise Pass & Fail %age of 5th Grade Students in Basic Tools of Learning**

| Area | Particulars | Reading | Writing | Arithmetic | Science |
|---|---|---|---|---|---|
| Rural | Pass %age | 29.64 | 17.03 | 6.07 | 10.72 |
| | Fail %age | 70.36 | 82.97 | 93.93 | 89.28 |
| Urban | Pass %age | 30.00 | 28.33 | 1.67 | 3.34 |
| | Fail %age | 70.00 | 71.67 | 98.33 | 96.67 |
| Semi-Urban | Pass %age | 42.16 | 22.24 | 3.57 | 13.01 |
| | Fail %age | 57.84 | 77.76 | 96.43 | 86.99 |

The sub-group analysis as depicted in Table 1.4 reveals that in rural area, the pass percentage is 29.64, 17.03, 6.07 and 10.72 in reading, writing, arithmetic and science as basic tools of learning; while as the fail percentage is 70.36, 82.97, 93.93 and 89.28 respectively. The pass percentage of urban students in reading, writing, arithmetic, and science is 30.00, 28.33, 1.67, 3.34 respectively and the fail percentage of the mentioned variables is 70.00, 71.67, 98.33, and 96.67 respectively. In semi-urban students, the pass percentage in reading, writing, arithmetic and science is 42.16, 22.24, 3.57 and 13.01; where as the fail percentage is 57.84, 77.76, 96.43 and 86.99 respectively. The table further reveals that in reading component, the highest pass percentage has been achieved by the semi-urban students (42.16%) followed by urban students which is (30%); in writing component urban students show little bit good percentage (28.33%) followed by semi-urban students (22.76%); 6.07% is the highest percentage in case of arithmetic achieved by the students of rural areas and in science component 13.01% is highest pass percentage by the semi-urban students followed by rural students having 10.72% in the said component. The highest fail percentage (82.97%) has shown by the rural students in writing component while as in arithmetic and science components, the fail percentage of urban students is on the higher side which is 98.33% and 96.67% respectively. *The results make it obvious that in rural, urban and semi-urban areas, maximum failure percentage is in arithmetic and the lowest achievement is from the urban students.*

**1.b. Performance Standards of Academic Achievement:** The forthcoming tables show the overall and area-wise performance standards of 5th and 8th grade students of Government schools in Reading, Writing, Arithmetic and Science as Basic Tools of Learning over Comprehensive Achievement Test CAT).

**Table 1.7. Showing overall Performance Standard of 5th Grade Students in Basic Tools of Learning**

| Particulars | Reading | Writing | Arithmetic | Science |
|---|---|---|---|---|
| Distinction | 1.11 | 0.00 | 0.00 | 0.00 |
| 1st | 2.22 | 0.89 | 0.00 | 0.44 |
| 2nd | 10.44 | 4.22 | 0.22 | 0.89 |
| 3rd | 19.56 | 13.78 | 3.56 | 7.78 |
| Fails | 66.67 | 81.11 | 96.22 | 90.89 |

While analyzing the overall performance standards of 5th grade students in basic tools of learning at primary level, it is evident from the data that on reading component, a neglected lot of 1.11% has obtained distinction, 2.22% has got 1st division, a small percentage (10.44%) figured in 2nd division, 19.56% in 3rd division and a large chunk (66.67%) has failed; where as in writing, none of the students has achieved distinction while 0.89%, 4.22%, 13.78% were placed in 1st, 2nd , 3rd division respectively and 81.11% have failed in writing skill. None of the students has secured distinction or 1st grade in arithmetic test and a small percentage (3.56%) has obtained 3rd division and a major chunk (96.22%) has failed in the said achievement test. In the science subject none of the students secured distinction while 0.44%, 0.89% and 7.78% has been listed in 1st, 2nd, & 3rd grades respectively and 90.89% figured in fail category. While assessing the performance of students through an external measure of achievement, it has been observed that the students achievement is unsatisfactory as the fail percentage is 66.67, 81.11, 96.22 and 90.89 in reading, writing, arithmetic and science respectively. *The results make it clear that excluding reading, none of the students has secured distinction, a small percentage has obtained 3rd division and a large chunk of students have failed in basic tools of learning.*

**Table 1.8. Showing area-wise Performance Standard of 5th Grade Students in Basic Tools of Learning**

| Area | Particulars | Reading | Writing | Arithmetic | Science |
|---|---|---|---|---|---|
| Rural | Distinction | 0.00 | 0.00 | 0.00 | 0.00 |
| | 1st | 1.67 | 1.67 | 0.00 | 0.00 |
| | 2nd | 8.69 | 2.38 | 0.00 | 0.84 |
| | 3rd | 19.41 | 13.81 | 6.07 | 9.88 |
| | Fails | 70.36 | 82.98 | 93.93 | 89.29 |

| | | | | | |
|---|---|---|---|---|---|
| Urban | Distinction | 0.00 | 0.00 | 0.00 | 0.00 |
| | 1st | 0.00 | 3.33 | 0.00 | 0.00 |
| | 2nd | 6.67 | 6.67 | 0.00 | 1.67 |
| | 3rd | 23.33 | 18.33 | 1.67 | 1.67 |
| | Fails | 70.00 | 71.67 | 98.33 | 96.66 |
| Semi-Urban | Distinction | 2.78 | 0.00 | 0.00 | 0.00 |
| | 1st | 4.01 | 0.37 | 0.00 | 0.93 |
| | 2nd | 15.30 | 5.12 | 0.00 | 1.11 |
| | 3rd | 20.07 | 16.75 | 3.57 | 10.98 |
| | Fails | 57.84 | 77.76 | 96.43 | 86.98 |

The sub-table analysis depicted in Table 1.8 shows area-wise performance standards of 5th grade students in basic tools of learning at primary level. It reveals that in rural areas, 19.41%, 13.81%, 6.07%, and 9.88% of the students on reading, writing, arithmetic and science as basic tools of learning fall in the 3rd division. The failures in the mentioned skills are 70.36%, 82.98%, 93.93% and 89.29% respectively. The urban students have secured 3rd division in the above mentioned variables as 23.33%, 18.33%, 1.67% and 1.67%, where as the failure percentage is 70.00%, 71.67%, 98.33% and 96.66% respectively. In semi-urban students, the 3rd division holders have obtained 20.07%, 16.75%, 3.57% and 10.98% in reading, writing, arithmetic and science. The failures are 57.84%, 77.76%, 96.43% and 86.98% respectively. *The results make it clear that from rural, urban and semi-urban areas; none of the students have secured distinction in writing, arithmetic and Science. It further reveals that semi-urban students are ahead in reading and science knowledge; urban students have good writing skills while rural students have shown good results on arithmetic.*

**1. c. Significance of Mean Difference between Rural, Urban and Semi-Urban Students on Academic Achievement:** The following tables show the statistical mean difference between Rural and Urban, Rural and Semi-Urban & Urban and Semi-Urban of 5th and 8th grade sample students at 0.01 and 0.05 levels of confidence over Comprehensive Achievement Test (CAT), which includes the scores obtained in Reading, Writing, Arithmetic and Science as Basic Tools of Learning. In the ensuing tables, the abbreviations used include R (Rural) ; U (Urban) and SU (Semi Urban).

**Table 1.1.1. Showing Significance of Mean Difference between 5th Grade Rural and Urban Students in Basic Tools of Learning**

| Component | Group | N | Mean | S.D. | t value | Significance |
|---|---|---|---|---|---|---|
| Reading | R | 208 | 25.00 | 13.36 | 0.81 | Not Significant |
| | U | 96 | 26.42 | 10.13 | | |
| Writing | R | 208 | 18.13 | 11.82 | 3.87 | Sig. at .01 level |
| | U | 96 | 26.00 | 13.55 | | |
| Arithmetic | R | 208 | 11.35 | 9.08 | 1.58 | Not Significant |
| | U | 96 | 13.27 | 7.15 | | |
| Science | R | 208 | 13.22 | 10.69 | 1.78 | Not Significant |
| | U | 96 | 15.92 | 9.20 | | |

The perusal of table 1.1.1. makes it obvious that the difference between mean scores of rural and urban students is significant on writing dimension as one of the basic tools of learning. The calculated t-value (3.87) exceeds the tabulated t-value at 0.01 level of significance, as the mean of urban students is decidedly better than that of rural sample. The table does not show any significant relationship in basic tools of learning viz., reading, arithmetic and science as our calculated t-value has been 0.81, 1.58 and 1.78 which is less than the tabulated t-value at 0.05 level of significance. *The results clarify that urban students have good writing skills than rural students.*

**Table 1.1.2. Showing Significance of Mean Difference between 5th Grade Rural and Semi-Urban Students in Basic Tools of Learning**

| Component | *Group* | N | Mean | S.D. | t value | Significance |
|---|---|---|---|---|---|---|
| Reading | R | 208 | 25.00 | 13.36 | 1.65 | Not Significant |
| | SU | 416 | 27.56 | 16.43 | | |
| Writing | R | 208 | 18.13 | 11.82 | 1.34 | Not Significant |
| | SU | 416 | 19.85 | 12.42 | | |
| Arithmetic | R | 208 | 11.35 | 9.08 | 0.92 | Not Significant |
| | SU | 416 | 12.22 | 8.32 | | |
| Science | R | 208 | 13.22 | 10.69 | 2.41 | Sig. at .05 level |
| | SU | 416 | 16.04 | 11.65 | | |

The table depicts that there is a significant difference between rural and semi-urban students on science dimension as basic tool of learning. The calculated t-value is 2.41 which is greater than the tabulated t-value at

0.05 level of significance. It also reveals that calculated t-value on the components reading, writing and arithmetic are 1.65, 1.34 and 2.41 respectively. In these areas, no significant difference has been found as our calculated value is less than the tabulated t-value at 0.05 level of significance. *These results testify that semi-urban students have good knowledge in science subject over basic tools of learning.*

**Table 1.1.3. Showing Significance of Mean Difference between 5th Grade Urban and Semi-Urban Students in Basic Tools of Learning**

| Component | *Group* | N | Mean | S.D. | t-value | *Significance* |
|---|---|---|---|---|---|---|
| Reading | U | 96 | 26.42 | 10.13 | 0.69 | Not Significant |
| | SU | 416 | 27.56 | 16.43 | | |
| Writing | U | 96 | 26.00 | 13.55 | 3.21 | Sig. at .01 level |
| | SU | 416 | 19.85 | 12.42 | | |
| Arithmetic | U | 96 | 13.27 | 7.15 | 1.96 | Sig. at .05 level |
| | SU | 416 | 11.22 | 8.32 | | |
| Science | U | 96 | 15.92 | 9.20 | 0.08 | Not Significant |
| | SU | 416 | 16.04 | 11.65 | | |

The above table shows the significance of mean difference between rural and semi-urban students on writing and arithmetic as basic tools of learning. The obtained t-value of writing and arithmetic is 3.21 and 1.96 respectively which are significant at 0.01 and 0.05 levels of confidence. It further reveals that the two groups do not differ significantly on reading and science dimension as the obtained values 0.69 and 0.08 are not significant at 0.05 level of significance. *The results make it evident that urban students have shown better performance than semi-urban students in basic tools of learning particularly in writing and arithmetic components.*

**1.d. Significance of Mean Difference between Boys and Girls on Academic Achievement:** Tables 1:1.7 & 1:1.8 show the overall and area-wise significance of mean difference between boys and girls of 5th and 8th grade students reading in Govt. schools regarding basic tools of learning viz., Reading, Writing, Arithmetic and Science. In the tables, the abbreviations used are B (Boys) and G (Girls)

**Table 1.1.7. Showing overall Significance of Mean Difference between Boys and Girls of 5th Grade Students in Basic Tools of Learning ( N = 360 in each case )**

| Component | Group | Mean | S.D. | t-value | Significance |
|---|---|---|---|---|---|
| Reading | B | 27.11 | 14.56 | 0.87 | Not Significant |
| | G | 26.18 | 15.22 | | |
| Writing | B | 20.71 | 12.79 | 1.13 | Not Significant |
| | G | 19.63 | 12.52 | | |
| Arithmetic | B | 12.62 | 8.71 | 3.24 | Sig. at .01 level |
| | G | 10.42 | 8.00 | | |
| Science | B | 15.57 | 10.68 | 0.90 | Not Significant |
| | G | 14.83 | 11.62 | | |

Table 1.1.7 reveals that there is a significant difference between boys and girls on arithmetic dimension as basic tool of learning. The calculated value of 3.24 exceeds the tabulated t-value at 0.01 level of significance, as the mean of boys is decidedly better than that of girls. Further, the table does not show any significant difference on reading, writing and science components of learning. *The results testify that boys have shown proficiency on arithmetic test over girls, although the achievement in reading, writing & arithmetic is similar.*

**Table 1.1.8. Showing area-wise Significance of Mean Difference between Boys and Girls of 5th Grade Students in Basic Tools of Learning**

| Area | Component | Group | N | Mean | S.D. | t-value | Significance |
|---|---|---|---|---|---|---|---|
| Rural | Reading | B | 104 | 25.46 | 12.65 | 0.43 | Not Significant |
| | | G | 104 | 24.46 | 14.03 | | |
| | Writing | B | 104 | 18.18 | 11.45 | 0.06 | Not Significant |
| | | G | 104 | 18.06 | 12.32 | | |
| | Arithmetic | B | 104 | 11.91 | 9.55 | 0.71 | Not Significant |
| | | G | 104 | 10.77 | 8.66 | | |
| | Science | B | 104 | 13.11 | 10.04 | 0.09 | Not Significant |
| | | G | 104 | 13.29 | 11.37 | | |
| Urban | Reading | B | 48 | 25.83 | 9.83 | 0.44 | Not Significant |
| | | G | 48 | 27.00 | 10.72 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Writing | B | 48 | 24.78 | 13.61 | 0.68 | Not Significant |
| | | G | 48 | 27.22 | 13.65 | | |
| | Arithmetic | B | 48 | 14.13 | 7.08 | 0.93 | Not Significant |
| | | G | 48 | 12.40 | 7.36 | | |
| | Science | B | 48 | 15.47 | 8.95 | 0.37 | Not Significant |
| | | G | 48 | 16.37 | 9.73 | | |
| Semi-Urban | Reading | B | 208 | 28.23 | 16.24 | 0.67 | Not Significant |
| | | G | 208 | 26.85 | 16.64 | | |
| | Writing | B | 208 | 21.03 | 13.04 | 1.48 | Not Significant |
| | | G | 208 | 18.74 | 11.85 | | |
| | Arithmetic | B | 208 | 12.63 | 8.63 | 2.79 | Sig. at .01 level |
| | | G | 208 | 9.78 | 7.77 | | |
| | Science | B | 208 | 16.83 | 11.20 | 1.09 | Not Significant |
| | | G | 208 | 15.25 | 12.12 | | |

The sub-group analysis depicted in table 1.1.8. shows the significance of mean difference between boys and girls of 5th grade students in basic tools of learning. The table makes it clear that there is no significant difference between boys and girls of rural, urban and semi-urban students on reading, writing, arithmetic and science dimension as basic tools of learning, because the calculated t-value is less than the tabulated value at 0.05 level of significance. But in case of semi-urban students there is a significant difference between boys and girls on arithmetic dimension where the calculated t-value is 2.79 which are significant at .01 levels. *The table reveals that the boys and girls from rural, urban and semi-urban areas show a similar trend on reading, writing, arithmetic and science, as basic tools of learning, but there is one variation in case of semi-urban students, where the mean of boys is decidedly better than girls.*

**Discussion of Results**

Regarding the aggregate marks of 5th grade students in an achievement test, the results reveal that maximum students in the sample government schools failed in the said test which was used for the first time as a tool for external evaluation as against the routine-teacher made tests. Moreover, the extent of failure is same in selected areas of rural, urban & semi-urban, where a large number of students failed on the basis of aggregate criteria.

While analyzing the subject-wise overall pass and fail percentage of 5th grade students, the results show that the maximum fail percentage is in Arithmetic (Applied Mathematics) followed by other subjects in the

descending order as Science, Writing and Reading Components of English & Urdu respectively. The area-wise pass and fail percentage reveal that in all study areas i.e., rural, urban and semi-urban; maximum fail percentage is in arithmetic and the maximum failure students are from the urban area. The findings of the present study are in tune with Al-Sahel (2005) who has focused on teachers' perceptions of the problem of underachievement and has indicated that the most related problems to underachievement in schools are reading difficulties and poor writing; homework negligence and daydreaming.

The analysis of data regarding mean difference between boys and girls of 5th grade students in basic tools of learning reveal that boys have shown proficiency on arithmetic test compared to girls, although the achievement in reading, writing & science is similar. The results are partly in line with Padhi & Jadhao, 1998 and Reid & Lyn, 1995. Padhi & Jadhao (1998) reported that the performance of girls was lower than that of boys. Reid & Lyn (1995) revealed that males' mathematics self-concept was statistically significantly higher than females', although females' achievement was superior.

During the interactive discussion of the investigator with the teachers and heads of sample schools of the present study, it is concluded that parents' negligence towards children's academic activities in relation to their achievement are responsible for poor performance. The lack of time on the part of parents was most often referred to as the greatest barrier impeding parent involvement. Another important factor observed during the present endeavour is the irregularity of students. Engaging children in the domestic activities without caring for their academic loss again reflects towards the non-involvement of parents with students achievements. Demand-side interventions may be needed to encourage the regular attendance of children in school. One possible approach is to create demand for attendance, through midday meal program or attendance scholarships. Researchers have found that such programmes have positive effects on learning achievement. Moreover teachers attendance is a strong predictor of students learning, strategies that more closely link teachers salaries to their work performance could also be considered.

The most important factor found responsible for low achievement is the maximum number of holidays enjoyed by education sector. Needless to mention that the number of working days is never correlated with the syllabus to be covered by the students. This may be due to the dual control on the schools without any coordination; the Directorate of School Education has control over the administrative matters while the State Board of School Education controls the Examination affairs. It is suggested that the system be overhauled and single line administration needs to be followed if the education sector is to be streamlined.

The above discussion reveals that on the average, children have shown

poor performance in basic tools of learning. It is clear from the findings that the students have not attained the minimum levels of expected achievement. The students from all the areas viz., rural, urban & semi-urban have shown lowest achievement in their scholastic areas. They have failed to obtain basic tools of learning, as the following factors have been worked out by a number of workers who after investigations have made the following conclusions.

**Major Findings**

1. Maximum students in the sample government schools did not qualify the Comprehensive Achievement Test (CAT) which was used for the first time as a tool for external evaluation as against the routine-teacher made tests. The overall pass percentage in 5th grade student was 16.28%. Moreover, the extent of failure was somewhat same in rural, urban & semi-urban sample schools.
2. The subject-wise analysis has revealed that maximum fail percentage of 5th grade students was found in Arithmetic (96.22), followed by Science (90.89), Writing (81.11) and Reading (66.67) respectively.
3. In all areas, the maximum failure percentage in 5th grade was in 'arithmetic' i.e., rural (93.93), urban (98.33) and semi-urban (96.43); However, the maximum failure were observed from the urban area.
4. In terms of performance standards, a very small percentage (1.11) secured 'distinction' in reading component; while none of the students could secure 'distinction' in any of the subjects viz., writing, arithmetic and science. A small percentage obtained 3rd division and a large majority of students failed in basic tools of learning. In rural, urban and semi-urban areas; none of the students secured 'distinction' in writing, arithmetic and Science. Area-wise performance standard analysis showed that the 5th grade students of semi-urban area were ahead in 'reading' and 'science'; urban students had good 'writing' skills while rural students showed good results on 'Arithmetic'.
5. The significance of mean difference between rural and urban students in 5th grade showed that urban students had good 'writing' skills than rural students ($t=3.87$, $p<.01$); semi-urban students had good knowledge in 'science' subject than rural students ($t=2.41$, $p<.05$) and urban students were ahead in 'writing' & 'arithmetic' components than semi-urban students ($t=3.21$, $p<.01$; $t=1.96$, $p<.05$).
6. The 5th grade boys in comparison to 5th grade girls achieved relatively higher mean score in 'Arithmetic' ($t=3.24$, $p<.01$); however, no significant difference was found in the mean achievement score of boys and girls in 'reading', 'writing' and 'science' components.
7. The area-wise gender difference of 5th grade students revealed that there was no difference in the mean scores of rural and urban boys &

girls on reading, writing, arithmetic & science respectively. In case of semi-urban students, the mean of boys was higher on 'arithmetic' component than girls; however no difference was found in the mean scores of boys and girls on 'reading', 'writing' and 'science' components.

**Conclusion:**

To sum up the findings of the present study on Govt. primary schools, it is revealed that primary school children have shown poor performance in basic tools of learning. It is clear from the findings that the students have not attained the minimum levels of expected achievement. The students – rural, urban & semi-urban areas, have shown lowest achievement in their scholastic areas. Education is intended to develop basic learning skills - reading, writing, arithmetic and life skills, necessary for the children to survive and improve the quality of life. Poor level of achievement is a big de-motivating factor resulting in repetition and drop out from the schools. Though there are a number of factors which determine the quality of education, the most vital one that attracts the attention of one and all is the level of achievement. These levels of achievement for any nation are so important that they need to be known periodically to keep a tab on the general health of the educational system. Such a requirement warrants the conduct of periodical achievement surveys at different stages of school education in order to initiate remedial measures to improve the quality of learning. The present study has revealed that no serious efforts have been undertaken for non-scholastic aspects of learner i.e., physical, social, moral & intellectual development. Strong attention has to be paid towards all-round development of learner's personality. So, it becomes crystal clear that special attention is needed in order to realize and fulfill the objectives of primary education in scholastic and non-scholastic areas of learner's personality.

**Educational Implications**

On the basis of findings of the present endeavour, the following suggestions need to be taken care of for the optimal fulfillment of the objectives of primary education:

The following improvements are needed for the fulfillment of objectives of primary education.

The first eight years of schooling (Primary & Upper Primary) serves as the foundation for subsequent achievement. It is therefore recommended that external examination may be conducted at 5$^{th}$ grade. This will decidedly bring seriousness in the whole process of teaching learning in the Government Schools.

1. The policy of 'no detention' upto grade 8th appears to be very attractive theoretically but practically speaking and also on the basis of empirical evidence, it is very pertinent to suggest that this policy may be reviewed. Appropriate checks and balances should be introduced so that teachers are bound to teach and teachers teach & students learn and thereby achieve the target of mastering the basic tools of learning.
2. Only those persons should be appointed as teachers who have Bachelors in Education as a basic qualification. Constant encouragement, refresher courses and in-service training to teachers can really improve the quality of education.
3. The poor students should be provided incentives through supply of free textbooks, uniform, stationary and other needed items.
4. A child-centered and activity based process of learning should be adopted at the primary stage.
5. Since the courses are designed corresponding to number of working days during an academic session, and if number of working days is reduced the course content correspondingly needs to be curtailed, so as to avoid overburdening of students.
6. An educational programme should emphasize upon reading, writing, and mathematics (literacy and numeracy) across the subject areas with expectations for performance that are consistent across and within the disciplines and commonly understood by teachers, students, and parents.
7. Primary curriculum should be reorganized according to local conditions, problems and traditions. It should be activity oriented, practical and useful for life. Child psychologists should also be consulted for curriculum formulation. They need to frame educational programme that is comprehensive, challenging, purposeful, integrated, relevant, and standards-based.
8. Strong steps are needed to tackle the problems of low achievement of students.
9. The students should be provided their answer scripts after evaluation, so that they can learn from their own mistakes.
10. There should be constant supervision by the concerned authorities to ensure that schools are open during official hours and that the teachers are present and teaching is done during the official instructional periods. Teacher absenteeism reduces pupil learning time. Truancy on the part of teachers also effects the instructional programme badly. This needs to be thoroughly checked.
11. An academic calendar needs to be formulated well in advance so

that all the concerned viz., students, teachers, parents, etc. fix their targets.

The above suggestions need sincere consideration in the hands of competent authorities and if implemented immediately will provide good results and will help improve the quality of primary education.

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# Job Satisfaction of " *Rehbar-e-Taleem*" Teachers in District Anantnag

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**Introduction**

Job satisfaction is a very complex and comprehensive phenomena. It can hardly be seen in isolation from life situation perhaps in many ways, these two fields may add to or subtract from the total fund of satisfaction assimilated by an individual. Job satisfaction is a widely accepted Psychological aspect of function in any profession.

In the field of Education little research has been conducted on job satisfaction. Studies on job satisfaction of teachers reveal interesting contradiction. Therefore, it will be proper to explore more and more to confirm, verify and validate. The most research begins with the intention of job satisfaction of teachers.

Education is considered to be the most effective instrument for equalizing opportunities and reducing disparities between human beings. In a democratic society like ours, the thrust is to equalize and enlarge the coverage and improve the quality of education in educational institution so that a person belonging to any caste, creed, Sex, region or economic strata would have the chance of developing his potential to the fullest possible extent. No doubt, huge amounts of money are being spent on education to eradicate illiteracy but still a huge proportion of mankind remains in the grip of illiteracy.

It was Hartog Committee (1929) which first of all drew attention to the vide spread prevalence, in the system of elementary education of wastage, stagnation and lapsing into illiteracy. In the year 1944, John Sargent, the then Education Commissioner to the Government of India, prepared a comprehensive educational plan in which besides other things education was made free and compulsory for all children in the age group of( 6-11) years. According to Kothari commission (1964-66) estimates, stagnation is the highest in lower primary classes than upper primary classes. Regarding dropout incidences it pointed out that against 100 children admitted in grade I, there were only 37 in class IV.

The National Policy on Education (1986) emphasized two aspects in elementary education;

i. Universal enrolment and universal retention of children up to 14 years of age.

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ii. A substantial improvement in the quality of education.

The revised national policy of Education (1992) emphasized on

i. Universal access and enrollment.
ii. Universal retention of children up to 14 years of age.
iii. A substantial improvement in the quality of education to enable all children to achieve essential levels of learning.

Every year enrollment drives are launched throughout the country to enroll children in schools but little attention seems to have been paid to the retention of those children who have already entered into the school. In spite of these efforts, there are habitations still without primary school and nearly one third of the schools in the rural areas are facing deficiency of teaching staff.

In order to provide minimum essential facilities for primary schools, few years back a new scheme was adopted which is known as *" Rehbar-e-Taleem"* scheme. The scheme was effectuated for provision of services of teaching guides called *"Rehbar-e- Taleem"* in the primary and middle schools to make up the deficiency of the staff as per the enrollment.

The person to be provided to make up the deficiency of the staff at the elementary level of education will be designated as *"Rehbar-e- Taleem"*. The under lying objective is to posit the role of the teaching guide as catalyst for quality education and to ensure the overall development of the personality of the children. Drawn from the local community, the accountability of the teacher called as *"Rehbar-e- Taleem"* would be measured within the community to secure universal enrollment and to check the incidence of dropouts.

**Objectives of the Scheme**

The objectives behind launching the scheme of *"Rehbar-e- Taleem"* are as under:

a. Promoting the decentralized management of elementary education with the community participation.
b. To ensure accountability and responsiveness through strong back- up and supervision through the community.
c. To operationalise effectively the schooling system at the gross root level.

**Objective of the Study**

1. To study the extent of job satisfaction among *"Rehbar-e- Taleem"* teachers.

**Selection of the Sample**

The sample for the present study was collected at two stages. At the first stage the survey was conducted throughout the district Anantnag, to

know about the total number of *"Rehbar-e- Taleem"* teachers and their places of posting. At the second stage 100(one hundred) *"Rehbar-e- Taleem"* teachers were randomly taken out from different schools.

**Data Collection Tools**

The investigator used the following tools.

1. Job satisfaction scale developed by Meera Dixit.
2. Information blank was used to collect the relevant data.

**Statistical Treatment**

The data collected was subjected to the following statistical treatment.

Percentage Statistics

Mean/S.D

t.test

**Analysis and Interpretation of Data**

In order to achieve the objective the data collected was tabulated as under.

**Table 1.0 shows level of satisfaction (qualification- wise)**

| | Trd. Post graduates | | Post graduates | | Trd. graduates | | graduates | | Below graduates | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % |
| High satisfied | 5 | 17.8 | 6 | 37.5 | 6 | 35.3 | 16 | 64.0 | 10 | 71.4 |
| Low satisfied | 23 | 82.1 | 10 | 62.5 | 11 | 64.7 | 9 | 36.0 | 4 | 28.5 |

The perusal of table 1.0 shows the level of satisfaction qualification-wise. The induction of teachers under the "Rehbar-*e*-*Taleem*" scheme, shows that among the trained post graduate teachers, 5 were highly satisfied and 23 were low satisfied and their percentage level of satisfaction has been calculated as 17.8 and 82.1 respectively. Among the post graduates, 6 teachers have been found highly satisfied with a percentage level of satisfaction 37.5 and 10 teachers were low satisfied with a percentage level of satisfaction 62.5. Among the trained graduates 6 have been found highly satisfied with a percentage level of satisfaction 35.3 and 11 were low satisfied with a percentage level of satisfaction 64.7. Among The graduates, 16 teachers were were found to be highly satisfied with their percentage level of satisfaction being calculated as 64.0 and 9 teachers were found low satisfied with the percentage level of satisfaction being calculated as 36.0. Among the below graduates, 10 teachers were found to be highly satisfied and 4 teachers were low satisfied with a percentage level of satisfaction 71.4 and 28.5 respectively.

**Table 1.1 Shows Level of Satisfaction (Age- Wise)**

| Age | Number (N) | Highly Satisfied | | Low Satisfied | |
|---|---|---|---|---|---|
| | | N | % | N | % |
| 18-24 | 13 | 7 | 53.8 | 6 | 46.2 |
| 25-31 | 40 | 13 | 32.5 | 27 | 67.5 |
| 32-37 | 39 | 17 | 43.5 | 22 | 56.4 |
| 37 Above | 8 | 7 | 87.5 | 01 | 12.5 |

The table 1.1 reveals the age- wise level of satisfaction of teachers recruited in Primary and Middle schools under *"Rehbar-e- Taleem"* scheme. In the age group of 18-24 years, 13 teachers were taken as sample. out of these 13 teachers 7 were placed in high satisfied group and 6 were placed in low satisfied group with percentage level of satisfaction , being calculated as 53.8 and 46.2 respectively. In the age group of 25-31 years, 40 teachers were taken as sample out of which 13 teachers were placed under the high satisfied group and 27 teachers under low satisfied group, with the percentage level of satisfaction being calculated as 32.5 and 67.5 respectively. In the age group of 32-37 years, 39 teachers were taken as sample, out of which 17 were placed in the highly satisfied group and 22 were placed in the low satisfied group; with a percentage level of satisfaction for high and low group being scaled at 43.5 and 56.4 respectively. In the age group of 37 years above, 8 teachers were taken as sample, out of which 7 were placed in the high satisfied group and 1 teacher in the low satisfied group with a percentage level of satisfaction for high and low group being scaled at 87.5 and 12.5 respectively.

**Table 1.2 shows level of satisfaction ( Sex-Wise)**

| | Number | | Highly Satisfied | | Low Satisfied | |
|---|---|---|---|---|---|---|
| | (N) | % | N | % | N | % |
| Male | 71 | 71 | 28 | 39.4 | 43 | 60.5 |
| Female | 29 | 29 | 10 | 34.5 | 19 | 65.5 |

Table 1.2 shows the sex- wise level of job satisfaction of teachers recruited under *"Rehbar-e- Taleem"* scheme. From the overall sample of 100 teachers, 71 teachers were male and 29 teachers belonged to the female sex. Out of 71 male teachers 28 were placed in high satisfied category and 43 were placed in low satisfied category with a percentage level of satisfaction for two groups being fixed at 39.4 and 60.5 respectively. Out of 29 female teachers 10 were placed in high satisfied group and 19 were placed under low satisfied group with a percentage level of satisfaction

being calculated as 34.5 and 65.5 respectively.

**Table 1.3 Shows Significance of difference between mean scores for high satisfied and low satisfied group**

| Group | -N | Mean | Standard deviation | t- value | Level of significance |
|---|---|---|---|---|---|
| High satisfied | 43 | 166.16 | 6.52 | 13.75 | Significant at .01 level |
| Low satisfied | 57 | 144.11 | 9.52 | | |

The above table shows that the t- value has come out 13.75 which is significant beyond .01 level of confidence. This means that the two groups understudy, i.e. high satisfied and low satisfied differ significantly in their mean scores. The teachers placed in high satisfied group, have intrinsic liking for the job. The high satisfied group has better rapport with the students. Their relationship with their co-workers is built on the spirit of co-operation and fellow feeling. They are satisfied with salary component, promotional avenues and other service conditions. With respect to the physical facilities available in the school the teachers are satisfied.

The teachers placed in the low satisfied group are not satisfied with physical facilities and other infra-structure like library, school furniture and overall classroom climate. Regarding salary, they felt that with a small amount of Rs. 1500/- they were not in position to fulfill their basic needs. They felt that they were still, burden on their families. Being post graduates and with other professional qualifications, they could not adjust with primary school environment. They displayed adjustment problems in home, school, social and emotional areas. They are not getting such treatment what they expect. Regarding their goal discrepancy score, it rates high.

**Conclusions**

In the light of the Analysis and Interpretation, the following conclusions were drawn.

1. It has been found that among the teachers recruited under the "Rehbar-*e-Taleem*" scheme trained post-graduates, post-graduates and trained graduates were low satisfied. While the graduate and below graduate teachers were found to be highly satisfied with the job.
2. In the age group of 18-24 years and 37 years above, more teachers werefound highly satisfied with the job. In the age group of 25-31 years and 32-37 years, more teachers were found low satisfied with job.
3. A good number of teachers belonged to both male and female sex were found low satisfied with their job.

4. The teachers placed in high satisfied group have intrinsic liking with the job, better rapport with the students and good relationship with co-workers. They are satisfied with salary components, promotional avenues and other service conditions.
5. It was found that the teachers placed in low satisfied group are not satisfied with salary component, primary school environment and infrastructure facilities. They displayed adjustment problems; they are emotionally disturbed and the goal discrepancy score rates high.

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# Personality Profiles of High and Low Achievers

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*Abstract*

*The study was undertaken to study the personality factors of High and Low achievers of elementary level students. The sample for the study was 100 (50 high achievers and 50 low achievers), selected randomly from one educational zone (Soibugh) of District Budgam(J&K). Urdu adaptation of Jr. SR. High school personality questionnaire (14HSPQ) (Khan 1998) was employed for the collection of data and t-test was employed for the anlaysis of data. The result of the study highlight that i) High achievers are reserved, detached aloof, critical, stiff, more intelligent while as low achievers are warm hearted, outgoing, easy going, less intelligent, ii) High achievers are emotionally less stable, mature, face reality while as low achievers are emotionally unstable and affected by feelings.*

## Introduction

Academic achievement is of paramount importance particularly in present socio-economic & cultural contexts. Obviously in the school great emphasis is placed on achievement right from beginning of formal education. The school has its own systematic hierarchy which is largely based on achievement and performance rather than ascription or quality. Thus school tends to emphasize achievement which facilitates, among other things, the process of role of allocation for the social system. The school performs the function of selection and differentiation among students other attainments and opens out avenues for advancement, again primarily in terms of achievement.

Academic achievement is the end product of all educational endeovours. The main concern of all educational efforts is to see that the learner learns. Academic achievement of the student refers to the knowledge attained and skills developed with reference to the school subjects. Generally achievement refer to the scholastic or academic achievement of the student at the end of the educational programme.

Researches have been conducted on relationship of certain personality variables with achievement by authors like Hussian (1977), Goswami (1978), Shah (1978) , Kumar (1981), Gandhi (1982). Hussain (1977) using college

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students as samples concluded that anxiety was found to bear a curvilinear relationship with academic achievement. Shah & Goswami (1978) studied it as a major variable and looked into its relationship with achievement. Kumar (1981) considered the achievement of students through programmed instruction. Gandhi (1982) investigated the relationship of academic achievement with affiliation motive, power motive and achievement motive. Studies have been conducted on high scholastic performance goes with high intelligence, socio-economic status have a profound influence upon the academic achievement, Chopra (1982), Kapoor (1987), Panda (1999). Chopra (1982) has found that socio-economic background was a very important determinant for contamination of education & student belonging to higher socio-economic status/Classes had higher academic achievement & viceversa. The same was supported by Kapoor (1987). Panda (1999) also emphasized SES as the important factor in academic achievement. Studies have also been conducted on the high & low achievers in relation to different variables such as study habits self concept & need achievement by authors like Seetha 1975), Shivaapa (1980) , Sween (1984), Ghuman (1976), Seetha (1975) has found that study habits had a positive relationship with academic achievement. Shivaapa (1980) has found that study habits and educational aspiration are the positive correlates of academic achievement. Sween (1984) has found that students with high self concept achieved significantly higher scores in achievement than those with low self concept. Ghuman (1976) showed that over achievers & under achievers did not differ significantly on personality traits. However, it is important to note that hardly any study have been conducted on high & low achievers in relation to their personality profiles especially an a sample from rural background, where children are almost cutt off from modern society. With this background the present investigators decided to make a humble attempt to understand the personality profiles of high & low achievers.

**Statement of the Problem**

The problem proposed for the study was formulated as:

**"Personality Profiles of High & Low Achieves".**

**Objectives of the Study**

The following objectives have been formulated for the present study.

1. To identify high & low achievers.
2. To study personality profiles of high and low achievers.

**Hypotheses**

High and low achieves differ significantly on the fourteen factors of personality as measured by HSPQ.

## Operational Definition of Variables

*High Achievers:*

The subjects whose academic achievements scores (of class 8th) fall 75th percentile and above were considered as high achievers.

*Low Achieves:*

The subjects whose academic achievements scores (of class 8th) fall 25th percentile and below were considered as low achievers.

*Personality Profiles:*

Personality profiles will refer to the significantly clustering factors in terms of cattell's High school personality questionnaire (HSPQ).

## Method and Procedure

*Initial Sample:*

All the male students where selected randomly form all Govt. High and Higher Secondary Schools of the Soibugh Zone of district Budgam (J&K) for the proposed study private schools were not considered as sample unit because:

1. Their teacher recruitment is guided by their own recruitment policy.
2. The students of these institutions possess high socio-economic status which would have affected the criterion variable (Academic Achievement). The students of 9th class were selected with the understanding that they are mature to take decisions for themselves.

*Final Sample:*

The 8th class achievement of the 9th class students was considered as a criterion for identification of high and low achievers. Out of 206 (total sample) six students were dropped, because, their achievement was not available so the investigator was left with 200 students only. Subjects whose mean academic achievement score were 75th percentile and above were considered as high achievers and the subjects whose mean academic achievement scores were at 25th percentile and below were considered as low achievers. After implementing this criterion, the investigators were left with 50 subjects as high achievers and 50 subjects as low achievers.

### Tool

The following tool was used inorder to collect the required data:

1. Urdu Adaptation of Jr. Sr. High School personality questionnaire

(14 HSPQ)(Khan 1998).

**Analysis of the Data**

For the comparison between high (N=50) and low (N=50) achievers on all 14 factors of 14 HSQP, 't' test was employed. The information is presented in the following table.

*Table 01* Significance of the mean difference between high achievers (HA) (N=50) and low achievers (LA) (N=50) on all 14 factors of 14 HSPQ.

| Group | Factor | X | | t |
|---|---|---|---|---|
| High Achiever | A | 9.01 | 2.31 | 3.31** |
| Low Achiever | | 10.66 | 2.51 | |
| High Achiever | B | 5.24 | 1.53 | 6.0** |
| Low Achiever | | 3.74 | 1.32 | |
| High Achiever | C | 10.26 | 3.21 | 1.96* |
| Low Achiever | | 9.02 | 3.14 | |
| High Achiever | D | 9.94 | 2.78 | 1.56NS |
| Low Achiever | | 10.76 | 2.67 | |
| High Achiever | E | 9.96 | 2.80 | 0.10 NS |
| Low Achiever | | 10.02 | 2.77 | |
| High Achiever | F | 11.32 | 2.81 | 2.50* |
| Low Achiever | | 9.94 | 2.83 | |
| High Achiever | G | 9.76 | 2.76 | 0.14 NS |
| Low Achiever | | 9.68 | 2.76 | |
| High Achiever | H | 9.92 | 2.24 | 0.65 NS |
| Low Achiever | | 9.60 | 2.72 | |
| High Achiever | I | 10.02 | 2.26 | 0.22 NS |
| Low Achiever | | 9.92 | 2.30 | |
| High Achiever | J | 9.68 | 2.54 | 0.98 NS |
| Low Achiever | | 9.18 | 2.60 | |
| High Achiever | O | 9.82 | 2.35 | 0.18 NS |
| Low Achiever | | 9.92 | 3.06 | |
| High Achiever | $Q_2$ | 10.16 | 2.92 | 0.37 NS |
| Low Achiever | | 9.96 | 2.56 | |
| High Achiever | $Q_3$ | 9.16 | 3.04 | 0.66 NS |
| Low Achiever | | 9.56 | 3.03 | |
| High Achiever | $Q_4$ | 9.24 | 2.63 | 1.00 NS |
| Low Achiever | | 9.80 | 2.99 | |

Note: **= Significant at 0.01 level
*= Significant at 0.05 level
NS= Not significant

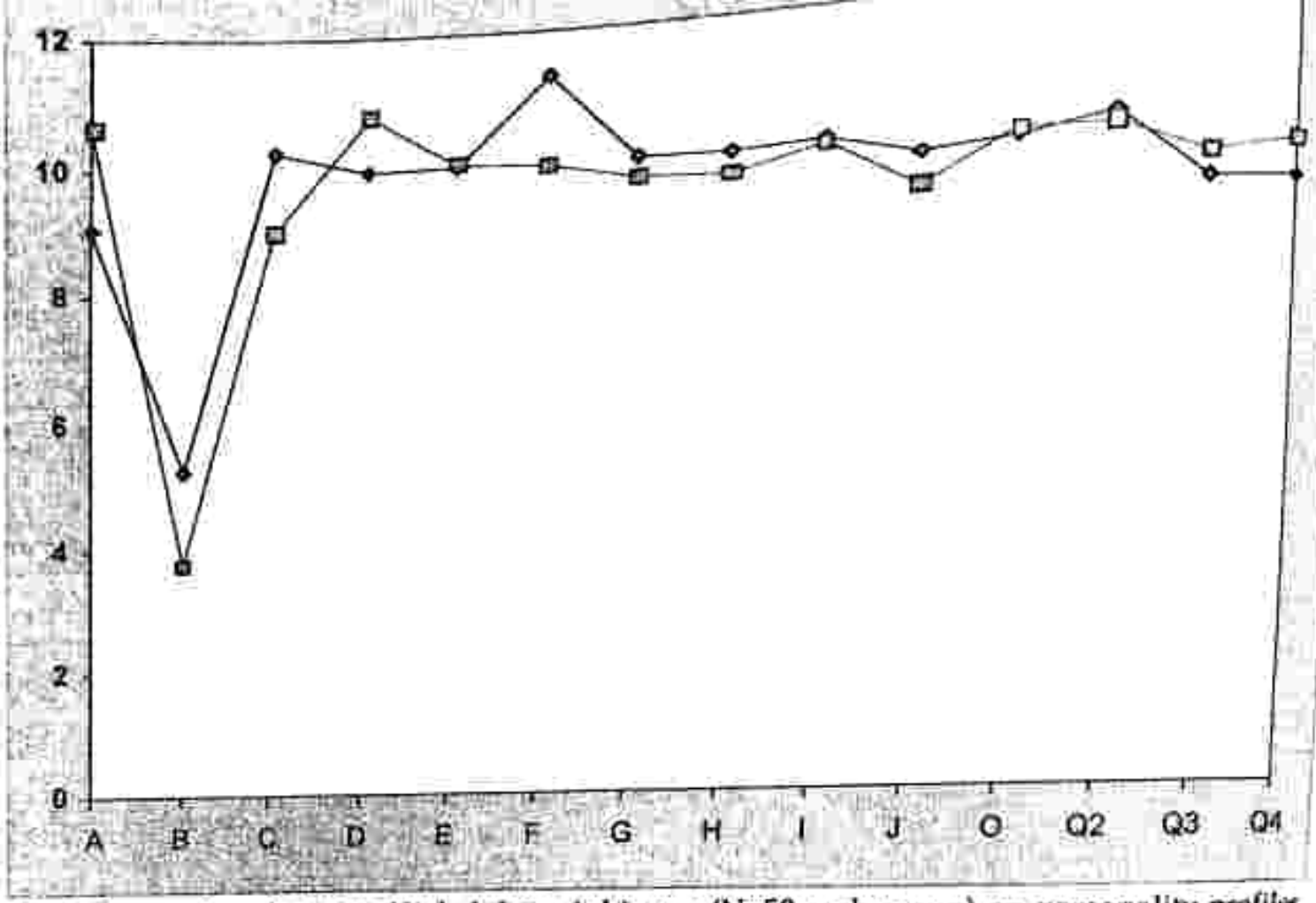


Fig.1 Comparison between High & Low Achievers (N=50 each group) on personality profiles

The perusal of table 01 makes it clear, that no significant difference has been found between High Achievers and low achievers on personality factors, Factor D, Factor E, Factor G, Factor H, Factor I, Factor J, Factor O, Factor $Q_2$ , Factor $Q_3$ , and Factor $Q_4$ . So no decisive decision can be made about above mentioned factors.

The perusal of table 1 makes it clear that on factor A, the mean of high achievers (9.1) is less than low achievers (10.66). The mean difference is statistically significant at 0.01 level. This means that the high achievers are reserved, detached, critical, aloof, stiff while as low achievers are warm hearted, outgoing, easy going and participating. From the results it becomes obvious that low achievers are easy going therefore it is expected that they are not taking their teaching learning process serious and are getting less achievement scores in comparison to high achievers who are critical and reserved. They take things serious and get good academic achievement scores.

On factor B the table depicts that the mean of low achievers which is (3.74) is lower than the mean scores of high achievers (5.42). The mean difference is statistically significant at 0.01 level. Therefore, it is obvious that high achievers possess more intelligence, abstract thinking, bright and have higher scholastic mental capacity while as low achievers possess less intelligence, concrete thinking and of lower scholastic mental capacity.

From the results it becomes obvious that high achievers are bright while as low achievers are average or below average so far as IQ is concernedThe results justify that the low ahievement of low achievers as their intelligence is low.

The mean difference between high achievers and low achievers on factor C of 14 HSPQ is statistically significant. The result confirm that high achievers are emotionally stable, mature, face reality are calm have higher ego strength while as low achievers are affected by feelings, emotionally less stable, easily upset, changeable and have lower ego strength. This result makes it clear that low achievers are emotionally less stable and have lower ego strength therefore getting low achievement scores is expected while as high achievers have higher ego strength and are emotionally stable therefore getting higher achievement scores is justified.

On factor F, the table 01 depicts that mean score of high achiever (11.32) is higher than the mean score of low achievers (9.94) which is statistically significant at 0.05 level. The results confirm that high achievers are enthusiastic, while as low achievers are sober and taciturn. The results justify the high achievement of high achievers as they are enthusiastic towards studies, therefore, achieves better.

The results as presented in table 01 on all the 14 factors of personality profiles are further substantiated by Fig 01. The difference between high and low achievers is significant at some factors while on some factors the difference is not significant. On the factor A (Reserved vs Warm hearted), B (Dull vs Bright), C (Emotionally less stable vs Emotionally stable) and F (Serious vs Happy-go-lucky), the figure shows lines are apart to each other but on other ten factors of 14 HSPQ i.e on Factors D, E, G, H, I, J, O, $Q_2$, $Q_3$, and $Q_4$ they donot show significant difference, where the lines run close to each other.

The results analysed and discussed in the above paragraph are in line with Agarwal Archana (2002), Jimerson (1999), Swarp (1989), Shah (1978), Hussain (1977), Abraham (1974), Saina Sundram (1980), Patel (1981). Agarwal Archana (2002) found a significant positive relationship between academic achievement and intelligence .Jimmerson (1999) found that child behaviour problems were related to deflections in achievement. George (1966) found that pupils with high intelligence were identified as better adjusted. The less neurotic were better adjusted in all areas.

Keeping in view the results of all the studies mentioned above, it can be accepted with confidence that high and low achievers differ significantly on some factors of 14 HSPQ. Therefore, the hypothesis.

"High and low achievers differ significantly on all the fourteen factors of personality dimensions measured by HSPQ" is partially accepted.

**Conclusions and Educational Implications**

The present investigators through different stages of investigations

reached to the following conclusion, which were the result of systematic statistical method as well as qualitative analysis of data.

1. High achievers are reserved, detached, aloof, critical, stiff, more intelligent, have abstract thinking, bright and have high scholastic mental capacity while as low achievers are warm hearted outgoing, easy going, are less intelligent, have concrete thinking and of lower scholastic mental capacity and are dull.
2. High achievers are emotionally less stable, mature, face reality and enthusiastic while as low achievers are emotionally unstable and affected by feelings and are sober.
3. High and low achievers should be identified in early years of their schooling through intelligence tests and some other non cognitive measures and should be treated as the situation demands.
4. Precautions should be taken before hand by teachers, parents and counsellers so that personality of both categories do not get disturbed.
5. Acceptance of low achievers should be ascertained both through parents and teachers.
6. Emotional help can be provided to low achievers by mentors and parents so that they get to the normal state of being.
7. Parents and teachers should not force low achievers to achieve high instead they should adequately help them to overcome their weakness.
8. In the absence of guidance and counseling worker, teacher should act as 'go between' the school and family so as to bring about desired changes in behaviour of low achievers.
9. Individual counseling, making use of proper intervention techniques should be used in order to strengthen the factors associated with achievement.
10. The parents need to be concerned towards the needs of their wards, not only in terms of physical comfort but also in terms of intellectual and personal need, Subjects in the school need emotional support, stimulating atmosphere and encouragement.

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# A Study of Mental Health and Academic Achievement of Rural and Urban Students

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The modern Scientific age represents- human ingenuity interms of an advanced knowledge of Technology and Physical Sciences. The concept of time and space has completely changed, due to highly mechanized transport and communicative system. But Rapid industrialization, Though a boon to mankind, has not helped to bring men nearer to one another than before so far as their interpersonal relations are concerned. It has rather created desperate needs which interm cause Personal Stresses. There is ample evidence to indicate that an eviroment full of stress and strains affects one's mental health adversely and that it goes to the extent of causing mental illness. This fact has been fully substantiated through the experiments of Psychiatrists in war and Peace.

In order the remove or reduce the social or environmental stresses, our Chief Social Problems must be of Psychiatry, Psychology and other Social Science which study how men think, feel and behave. Psychiatry has explained why man is aggressive towards his environment and toward himself. It also tells us how the environment affects the growth of the Personality and leads to a social behaviour which satisfies important Psychological needs. Every individual unfolds his Personality from day to day while struggling, within his own limitations against the dynamic world around him. He adjust himself within the limits of his own Personality, when he finds direct and indirect means of obtaining Security and satisfaction. He is confronted with minor and major emergencies and crisis. Most of us are chiefly concerned with our own problems i.e., financial stringency, events in love life, health of family, employers hostility and so on. Such problem cause emotional stresses and shake the individual equilibrium, resulting in Personality disorders. The capacity to with stand stresses is directionally Proportional to our handling of similar stresses in infancy. The greater the emotional and intectual maturity, the lesser are the stresses.

How environments cause serious stresses is best illustrated by the fact that a very large number of men from military services are discharged, because of Personality Problems. In the majority of these men, the problems

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are either created or aggravated by war experiences. These men are not mentally ill but they cannot with stand serve stresses caused by war conditions and they are better able to adjust themselves to civilian life. In order to maintain health, firstly the sources of stresses are to be discovered and secondly action has to be taken towards reducing or removing them or strengthening people sufficiently to meet them. This would involve education about Mental health, which would teach the individual how to be a part of the Social group and how to Participate constructively in social living. Such education would bring about Psychological maturity which results from successful adjustment to earlier development and knowledge of its mature person lies in giving, creating, loving and sharing. If we as individuals wish to enjoy mental health, many drastic reforms are needed in almost every area of social life which can only be done in our democratic culture, through the collective efforts of enlightened, determined, intectually and emotionally mature individuals.

So there is a great need for a programme of mental hygiene. A well planned out course in mental hygiene can help an individual to prevent the incidence of mental troubles and will further strengthen his Personality qualities by giving him an insight into the understanding of his Psychological reactions and adjustment Problems. It will enable him to maintain a whole some attitude towards life. It will help him attain the goal which he seeks. It will enable him to derive satisfaction from his many activities. Further, it will help him to keeps his wants with in the limits of social approval and to adjust easily to new environment.

**Objectives of the study:-**

1. To study the mental health of rural students.
2. To study the mental health of Urban students.
3. To study the academic achievement of rural and urban students.
4. To compare rural and urban students on their academic achievement and mental health status.

**Sample**

The sample for the present study consists of 100- students - 50 rural and 50 urban students of 11$^{th}$, 12$^{th}$ and graduate level, selected randomly from various private and govt. secondary schools and colleges from district Srinagar and Anantanag.

**Description of Tools:-**

For the collection of the relevant data, the investigators used the Mental Health Battery by A.K. Singh and Sen Gupta.

**Statistical Treatment:-**

The data collected was subjected to the following statistical treatment.

i. Mean.
ii. S.D.
iii. T- test.

**Analysis and Interpretation of the data**

In order to achieve the objectives formulated for the present study. The data collected was statistically analyzed by employing t-test and correlation statistics.

**Table:- 1.0 Showing mean comparisons of rural and urban students on emotional stability dimension of Mental Health Battery.**

| Group | N | Mean | S.D | T. value | Level of Significance |
|---|---|---|---|---|---|
| Rural | 50 | 8.14 | 2.12 | 0.61 | Not Significance |
| Urban | 50 | 7.88 | 2.20 | | |

The persual of above table shows that the two groups do not differ significantly on emotional stability dimension of Mental health Battery. It is evident from the above the table, that the two groups does not differ significantly and both the groups have stable feelings.

Table:-1.1 Showing mean comparison of rural and urban students on autonomy component of Mental health Battery.

| Group | N | Mean | S.D | T. value | Level of Significance |
|---|---|---|---|---|---|
| Rural | 50 | 9.83 | 1.64 | 0.83 | Not Significance |
| Urban | 50 | 10.16 | 1.97 | | |

The persual of above table indicates that the two groups do not differ significantly on autonomy component. Therefore, the mean score of one group do not differ significantly with mean score of other group, both group share similar type of independence and self determination thinking.

Table :-1.2 Showing mean comparison of rural and urban students on security- insecurity component of Mental Health Battery.

| Group | N | Mean | S.D | T. value | Level of Significance |
|---|---|---|---|---|---|
| Rural | 50 | 9.26 | 1.99 | 0.70 | Not Significance |
| Urban | 50 | 9.00 | 1.72 | | |

The above table reveals that the two groups do not differ significantly on security- insecurity component of Mental Health Battery. The mean score of one group do not differ significantly from the other group, therefore, both the groups have similar sense of safety, confidence, freedom from fear, apprehension or anxiety particularly with respect to full filling the persons present or future needs.

Table :- 1.3 Showing mean comparison of rural and urban students on self concept component of Mental Health Battery.

| Group | N | Mean | S.D | T. value | Level of Significance |
|---|---|---|---|---|---|
| Rural | 50 | 8.86 | 1.91 | 2.49 | Significant at |
| Urban | 50 | 9.72 | 1.58 | | .05 Level |

The above table shows that the two group differ significantly at .05 level on self concept component of Mental Health. The mean score favour urban students which validates that the urban students differ significantly on self concepts than their counter parts.

Table :-1.4 Showing mean comparison of rural and urban students on Intelligence component of Mental health Battery.

| Group | N | Mean | S.D | T. value | Level of Significance |
|---|---|---|---|---|---|
| Rural | 50 | 20.18 | 2.36 | 3.20 | Significant at |
| Urban | 50 | 18.48 | 2.86 | | 0.1 level |

The above table shows that the two groups differ significantly at .01 level on intelligence component of Mental health. The mean score favour Rural students while as rural students have high mental ability than their counter parts.

Table:- 1.5 Showing mean comparison of rural and urban students on overall adjustment of Mental Health battery.

| Group | N | Mean | S.D | T. value | Level of Significance |
|---|---|---|---|---|---|
| Rural | 50 | 24.56 | 3.73 | 0.44 | Non-Significant |
| Urban | 50 | 24.32 | 3.81 | | |

The above table reveals that the two groups do not differ significantly on over all dimension of Mental Health Battery. It is evident from the above table that mean score of two groups do not differ significantly which validates that the both the groups display similar adjustment on total

dimension of Mental Health Battery.

Table :- 2.0 Showing comparison of Rural and Urban on academic achievement.

| Group | N | Mean | S.D | T. value | Level of Significance |
|---|---|---|---|---|---|
| Rural | 50 | 58.0 | 9.79 | 1.07 | Non-Significant |
| Urban | 50 | 60.9 | 16.21 | | |

The persual of above table shows that the two groups do not differ significantly on differ dimension of academic achievement.

**Major Finding**

i. Rural and urban students have stable feelings i.e., emotional stable.
ii. Both groups share similar type of independence and self determination in thinking.
iii. Both groups have similar sense of safety, confidence freedom from fear and anxiety.
iv. Two groups have different attitudes and knowledge.
v. Two groups have different level of general mental ability.

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# Personality Characteristics and Values of Female Adolescents of Nuclear, Joint and Extended Families

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## Introduction

Educationists and Psychologists are busy in building wholesome of harmonious personality of the individuals. Personality is at the apex and crux of psychology and education. All knowledge of psychology is ultimately related to the understanding or development of personality. In popular, everyday psychology, we use the term "Personality" to describe those traits which make people attractive or unattractive to other people. We like or admire the individual who possesses personality and describe him variously i.e. dynamic, forceful, friendly or pleasant and individual living in one family groups differs from the other family group by showing quite distractive personality characteristics which is evident from even slight acquaintance with the person that belongs to other family group. Variation in personality may be derived from different sources.

On one hand, we have original nature of personality including its modification. These include both physical and psychological components. There are a number of important factors here. These are the variations in neuromuscular glandular make-up of individuals so too there, are differences in bodily build or physique, as a result of heredity as well as maturation, diet and disease. Moreover, there are the biological foundations of age and six differences which are important in all societies. Different family groups provide however, the content and direction which they will take as they operate in the interact-coral matrix.

Personality has physical as well as biological implications social factor cannot be ignored. The outer dimensions of personality include his physique talents, abilities, temperament, disposition etc. Inner dimensions include an individual's drive, emotional tendencies, aspiration level, attitudes and self; concept. Outer dimensions can be observe d by others and inner dimensions are difficult to judge from outside and better known to the person himself.

However, personality is frequently used in our present day terminology to refer to man's behaviour and characteristics. Although personality is generally regarded as a functioning, interrelated whole there are significant differences in the manifestations of the characteristics, traits

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or factors that comprise the whole personality pattern. Behaviour can be described in terms on the functioning of the various traits that make up personality. Traits are some particular qualities of behaviour which so characterize the individual. Personality traits reveal themselves at a very early age and remain constant throughout our entire lives. They direct the way we act, how we think, and they establish our learned personality characteristics or traits create our involuntary habits that determine the course our lives will take. They decide our preferred way of gathering information and how we draw conclusions from the information we take in. personality traits influence the choice of words we use to communicate with others, as well as how we learn.

On the other side, values form the empirical element of personality of the individuals, influence their thought and behaviour. They are normative standards by which human beings are influence in the choice among alternative courses of action. Value is one of those basic terms which cannot be fully defined. Values do not come as a gift. Right from the dawn of human civilization on this planet, man has perpetually found himself in the midst of change, i.e. from childhood to adolescence. This change experienced by man is not confined to change in cultural modes of behaviour, mores and social norms but embraces all psycho-social aspects of human behaviour which regulate and determine the normal behaviour of an man is his society. Concept of values is recent development in the field of social Psychology.

Values are very general, transcendental, relatively enduring beliefs wherein some mean end of action is judged to be personality or socially desirable in relation to its opposite or converse. Values are guiding principles of life which are conductive to all round development. Value is the measure of all good things in life, that which is essential, that is abiding that which is intrinsic and ennobling. In adolescents and youth the growth pattern is centered round the conservation of interpersonal-relation, yielding the moral values of loyalty and the cardinal virtues of love, equality and justice. Man through his value experiences, develops complex and elaborate system of social and Psychological habits, skills, techniques, commitments and imperatives that lead him to an intricate system of future oriented and symbolic interpersonal strivings.

Every individuals arranges his values in a set pattern by preferring one over the other, indicating his value preference. Values are culturally weighted preferences for person, institution or some kind of behaviour. (Kluckhon 1952) ( Kerlinger 1967) Spranger (1928) described values as the basic interests or motives in personality of an individual. According to him the mental character of man is principally determined through the values organs by means of which he lives and shapes his own life. Spranger classified values into six form viz. the economic, the theoretical, the

aesthetic, the social the political and the religious values.

Values are acquired by the child which becomes part of his personality, as he grows up. A child develops the values of the society of which he is a member, all the time striving to maintain the positive values and discarding the negative ones from his personality pattern. As he steps into adolescence, he faces various changes in his environment and has to face a turbulent phase. This turmoil is aggravated by his struggle with his own values, his parents and his society. The upsurge of his drives at this age is the key cause of this struggle because these put his previously developed values to a severe test.

**Need and Importance:**

The importance of the knowledge of student's personality for the educator can hardly be exaggerated. In fact it is now held a part of his duty to assess the personality or each of the pupils and to enter his testimony in the school records. But it is still more important for him to know, as precisely as possible, the exact nature of the relationship between personality and value system of adolescents. Such knowledge will enable the educator to locate more easily the specific factors that go into the formation of various traits and to map out the situations through to reform particular traits. The identification of these factors will also enable him to determine the Educational objectives in a manner which is contributive to the development of the traits that are more approved. Recent research induces in to believe that personality characteristics have a way of interacting differently between themselves and reacting differently with different social situations. This would hearten us to go about creating a better society by paying more attention to exploring the hither to greatly neglected areas of personality.

The knowledge of the nature of relationship between personality and values system can help us to identify the young people and establish diagnostic descriptions of more successful personality in cause effect terms and chalk out behavioral changes needed for better adjustment and development. The report of the Secondary Education Commission (1952-53), admits the importance of personality in relation to individual development and has made several recommendations to introduce new methods of personality assessment in our educational system.

The present study, being merely an explanatory inquiry, is intended offer a mite contribution in the direction of fulfilling a genuine need in the country of setting up from unbiased research in actual conditions, basic hypotheses, which could be tested by large scale research later on, and then could serve as guidelines for the teacher, the educational administrations and the guidance and counsellor's.

**Statement of the Problem:**

The problem for the present investigation has been taken as under:

**"Personality Characteristics and Values of Female Adolescents of Nuclear, Joint and Extended Families"**

**Operational Definition of Terms and Variables:**

***Personality characteristics:***

Personality characteristics for the present study refers to dominant set of personality traits as measured by Cattell's High School Personality Questionnaire (HSPQ).

***Values:***

Values for the present investigation have been assessed through N.Y. Reddy's Indian adaptation Value Scale. It consists of six types of Values (Theoretic, Economic, Social, Aesthetic, Politic and Religious)

***Nuclear Families:***

It means just the parents and children living together in one household.

***Joint Families:***

A type of extended family composed of parents their Children and children's spouse and offspring is one household.

***Extended Families:***

A kinship group consisting of a family nucleus, and various relatives, as Grand Parents, usually living in one household and functioning as a larger unit.

***Adolescence:***

Adolescence refers to the age group of 16-18 year's.

**Objectives of the Study:**

The following objectives have been formulated for the present study:

1. To study the personality characteristics of female adolescents of Nuclear and joint families.
2. To study the personality characteristics of female adolescents of Nuclear and extended families.
3. To study the personality characteristics of female adolescents of joint and extended families.
4. To study the values of female adolescents of nuclear and joint families.
5. To study the values of female adolescents of nuclear and extended families.

6. To study the values of female adolescents of joint and extended families.
7. To compare female adolescents of nuclear and joint families on personality characteristics.
8. To compare the female adolescents of nuclear and extended families on Personality Characteristics.
9. To compare the female adolescents of joint and extended families on Personality Characteristics.
10. To compare the female adolescents of nuclear and joint families on Values.
11. To compare the female adolescents of nuclear and extended families on values
12. To compare the female adolescents of joint and extended families on Values.

**Hypotheses:**

The following hypotheses have been formulated for the present investigation:-

1. Female adolescents of nuclear and joint families differ significantly on their personality characteristics.
2. Female adolescents of nuclear and extended families differ significantly on their personality characteristics.
3. Female adolescents of joint and Extended families differ significantly on their personality characteristics.
4. Female adolescents of Nuclear and Joint families differ significantly on their values.
5. Female adolescents of Nuclear and Extended families differ significantly on their values.
6. Female adolescents of Joint and Extended families differ significantly on their values.

a) **Method and Procedure:**

170 female adolescents (70) female adolescents of nuclear families, seventy (70) female adolescents of Joint families and thirty (30) female adolescents of extended families consists the sample for the present study. The sample has been drawn from 10th class students various Secondary and Higher Secondary Institutions of District Srinagar. The female adolescents of nuclear and joint families were drawn randomly from the Secondary and Higher Secondary Institutions.

b) **Selection and Description of Tools:-**

The investigator, selected the following tools to collect the

relevant data:

i) The junior senior High School Personality Questionnaire (14 HSPQ).

ii) N.Y. Reddy'a Indian Adaptation Value Scale.

Interpretation and discussion of the results:-

**Table 1.0:- Mean comparison of female adolescents of Nuclear and Joint families on 14 Personality Factors. No= 70 Each Group**

| S.No | Factors | Groups | Mean\S.D | t-test | Levels of significance |
|---|---|---|---|---|---|
| 1 | A | Nuclear Joint | 5.78/1.38<br>5.84/1.49 | 0.25 | Not Significant |
| 2 | B | Nuclear Joint | 4.74/1.63<br>5.34/1.71 | 2.22 | Significant at 0.05 Level |
| 3 | C | Nuclear Joint | 6.84/1.26<br>7.95/1.98 | 4.11 | Significant at 0.01 Level |
| 4 | D | Nuclear Joint | 7.1/1.51<br>5.88/1.47 | 4.88 | Significant at 0.01 Level |
| 5 | E | Nuclear Joint | 6.0/1.87<br>7.32/1.84 | 4.4 | Significant at 0.01 Level |
| 6 | F | Nuclear Joint | 6.52/1.47<br>5.34/1.84 | 4.37 | Significant at 0.01 Level |
| 7 | G | Nuclear Joint | 5.52/1.64<br>6.68/1.79 | 4.14 | Significant at 0.01 Level |
| 8 | H | Nuclear Joint | 5.57/1.62<br>7.34/1.68 | 6.55 | Significant at 0.01 Level |
| 9 | I | Nuclear Joint | 6.7/1.89<br>5.38/1.65 | 4.55 | Significant at 0.01 Level |
| 10 | J | Nuclear Joint | 7.21/1.64<br>5,98/1.61 | 4.55 | Significant at 0.01 Level |
| 11 | Q1 | Nuclear Joint | 5.28/1.89<br>6.55/1.71 | 4.23 | Significant at 0.01 Level |
| 12 | Q2 | Nuclear Joint | 8.25/1.33<br>7.21/1.56 | 4.33 | Significant at 0.01 Level |
| 13 | Q3 | Nuclear Joint | 7.6/1.77<br>6.47/1.88 | 3.76 | Significant at 0.01 Level |
| 14 | Q4 | Nuclear Joint | 5.38/1.66<br>6.61/1.56 | 4.55 | Significant at 0.01 Level |

The table 1.0, mean comparison of female adolescents of Nuclear and Joint families reveal that on factors B,C,D,E,F,G,H,I,J, Q1,Q2,Q3 and Q4 Significant difference have been found between both the group on 14 personality factors. The difference have been found at point 0.01 level on all the above factors except factor B, where significant difference have been found at 0.05 level. It is evident that the female adolescents of joint families have been found, More -Intelligent, Emotionally -Stable, Undemonstrative Assertive, Sober, Conscientious, Adventurous, tough-Minded Likes Group Action, Apprehensive, Socially Group Dependent, Uncontrolled, and Tense, than the female adolescents of nuclear families whereas, female adolescents of nuclear families have been found to be Less-Intelligent, Affected By Feelings, Excitable, Obedient, Enthusiastic, Disregards Rules, Shy, Tender-Minded, internally Restrained, Self-assured, Self-Sufficient, Controlled, Relaxed than the female adolescents of joint families. On factor A, no significant difference has been found between female adolescents of nuclear and joint families.

**Table 1.1:- Mean comparison of female adolescents of Nuclear and Extended families on 14 Personality Factors. Nuclear= 70, Extended=30**

| S.No | Factors | Groups | Mean\S.D | t-test | Levels of significance |
|---|---|---|---|---|---|
| 1 | A | Nuclear Joint | 5.78/1.38<br>4.53/1.30 | 4.46 | Not Significant at 0.01 Level |
| 2 | B | Nuclear Joint | 4.74/1.63<br>6.8/1.98 | 5.15 | Significant at 0.01 Level |
| 3 | C | Nuclear Joint | 6.84/1.26<br>6.73/1.61 | 0.34 | Not Significant |
| 4 | D | Nuclear Joint | 7.1/1.51<br>7.5/1.29 | 0.68 | Not Significant |
| 5 | E | Nuclear Joint | 6.0/1.87<br>7.5/1.82 | 3.84 | Significant at 0.01 Level |
| 6 | F | Nuclear Joint | 6.52/1.47<br>4.83/1.46 | 5.45 | Significant at 0.01 Level |
| 7 | G | Nuclear Joint | 5.52/1.64<br>6.83/1.08 | 4.85 | Significant at 0.01 Level |
| 8 | H | Nuclear Joint | 5.57/1.62<br>7.3/2.11 | 4.02 | Significant at 0.01 Level |
| 9 | I | Nuclear Joint | 6.7/1.89<br>4.93/1.87 | 4.42 | Significant at 0.01 Level |
| 10 | J | Nuclear Joint | 7.21/1.64<br>7.86/1.94 | 1.62 | Not Significant |

| | | | | | |
|---|---|---|---|---|---|
| 11 | Q1 | Nuclear Joint | 5.28/1.89<br>6.83/1.40 | 4.55 | Significant at 0.01 Level |
| 12 | Q2 | Nuclear Joint | 8.25/1.33<br>8.73/1.56 | 1.5 | Not Significant |
| 13 | Q3 | Nuclear Joint | 7.6/1.77<br>6.56/1.54 | 2.97 | Significant at 0.01 Level |
| 14 | Q4 | Nuclear Joint | 5.38/1.66<br>6.76/1.74 | 3.72 | Significant at 0.01 Level |

The table 1.1, mean comparison of female adolescents of Nuclear and Extended families reveal that on factors A,B,E,F,G,H,I,Q1,Q3 and Q4 Significant difference has been found between both the groups on 14 personality factors. The difference has been found at 0.01 Level on all the above factors except factors Q3 where significant difference has been found More-Intelligent, Assertive, Conscientious, Adventurous, Apprehensive and Tense than the female adolescents of nuclear families, where as female adolescents of nuclear families have been found Warm-Hearted, Enthusiastic, Tender-Minded, and Controlled than the female adolescents of extent families. No significant difference have been found on factors C,D, J and Q2 between female adolescents of nuclear and extended families. Female adolescents of nuclear families when compared to female adolescents of extended families have been found to be similar on 4 factors (C,D, J and Q2) and different on 10 factors (A, B,E,F, G,H,I,Q1, Q3 and A4). Therefore, hypotheses number 2, which reads as "Female adolescents of nuclear and extended families differ significantly on their Personality Characteristics" have been partially accepted.

**Table 1.2:- Mean comparison of female adolescents of Joint and extended families on 14 personality factors. Joint= 70, Extended= 30.**

| S.No | Factors | Groups | Mean\S.D | t-test | Levels of significance |
|---|---|---|---|---|---|
| 1 | A | Nuclear Joint | 5.84/1.33<br>4.53/1.30 | 4.67 | Significant at0.01 Level |
| 2 | B | Nuclear Joint | 5.34/1.71<br>6.8/1.98 | 3.56 | Significant at 0.01 Level |
| 3 | C | Nuclear Joint | 7.95/1.36<br>6.73/1.61 | 3.69 | Significant at 0.01 Level |
| 4 | D | Nuclear Joint | 5.88/1.47<br>7.3/1.29 | 4.89 | Significant at 0.01 Level |
| 5 | E | Nuclear Joint | 7.32/1.99<br>7.5/1.82 | 0.45 | NotSignificant |

| | | | | | |
|---|---|---|---|---|---|
| 6 | F | Nuclear Joint | 5.34/1.84<br>4.83/1.46 | 1.5 | NotSignificant |
| 7 | G | Nuclear Joint | 6.68/1.79<br>6.83/1.08 | 0.53 | NotSignificant |
| 8 | H | Nuclear Joint | 7.34/1.68<br>7.3/2.11 | 0.09 | NotSignificant |
| 9 | I | Nuclear Joint | 5.38/1.65<br>4.93/1.87 | 1.15 | NotSignificant |
| 10 | J | Nuclear Joint | 5.98/1.61<br>7.86/1.94 | 4.7 | Significant at 0.01 level |
| 11 | Q1 | Nuclear Joint | 6.55/1.71<br>6.83/1.40 | 0.87 | NotSignificant |
| 12 | Q2 | Nuclear Joint | 7.21/1.56<br>8.73/1.56 | 4.60 | Significant at 0.01 level |
| 13 | Q3 | Nuclear Joint | 6.47/1.88<br>6.56/1.54 | 0.25 | NotSignificant |
| 14 | Q4 | Nuclear Joint | 6.61/1.64<br>6.74/1.72 | 0.36 | NotSignificant |

The tables 1.2, Mean comparison of female adolescents of Joint and extended families reveal that on factors A, D, C, J, and Q2 significant difference have been found between both the groups on 14 personality factors. The differences have been found at 0.01 Level on all the above factors. The female adolescents of extendned and Self-Sufficient than the female adolescents of joint families. It is evident that the female adolescents of joint families have been found Warm-hearted and Emotionally-Stable than the female adolescents of extended families. However, no significant difference has been found on found E,F,G,H,I,Q1, and Q4 between female adolescents of joint and extended families. Female adolescents of joint and extended families are similar on 8 factors (E,F,G,H,I, Q1, A3, and Q4) and significantly different on 6 factors (A, B, C, D, J, and Q2). Thus hypotheses no 3 which reads as "Female adolescents of joint and extended families differ significantly only on 6 Personality Characteristics" stands partially accepted.

The interpretation of data regarding personality characteristics of nuclear, joint and extended families in each group has revealed that on some factors there exists significant difference in factor comparison. Female adolescents of nuclear and joint families differ significantly on 13 factors out of 14 personality factors. Similarly female adolescent of nuclear and extended families differ significantly on 9 out of 14 personality factors and

female adolescents of joint and extended families, differed significantly from each other on 6 out of 14 factors in their personality characteristics.

**Table 1.3:- Mean comparison of female adolescents of nuclear and joint families on Values N=70 Each Group**

| S.No | Values | Groups | Mean\S.D | t-test | Levels of significance |
|---|---|---|---|---|---|
| 1 | Theoretical | Nuclear Joint | 42.5/4.95<br>44.45/4.95 | 2.34 | Significant at0.05 Level |
| 2 | Economic | Nuclear Joint | 36/4.34<br>37.51/4.24 | 2.09 | Significant at 0.05 Level |
| 3 | Aesthetic | Nuclear Joint | 49.84/5.34<br>48.00/5.14 | 2.09 | Significant at 0.05 Level |
| 4 | Social | Nuclear Joint | 42.72/6.65<br>45.94/4.85 | 3.28 | Significant at 0.01 Level |
| 5 | Political | Nuclear Joint | 33.5/2.97<br>32.24/4.14 | 2.1 | Significant at 0.05 Level |
| 6 | Religious | Nuclear Joint | 35.6/5.11<br>38.01/5.11 | 2.43 | Significant at 0.05 Level |

The table 1.3 mean comparison of female adolescents of nuclear and joint families shows that on Theoretical, Economics, Aesthetic, Political and Religious values significant difference have been found at 0.05 Level, whereas on Social values significant difference have been found at 0.01 level between both the groups. It is evident that the female adolescents of joint families have high Theoretical, Economic, Social, and Religious values than the female adolescents of nuclear families whereas female adolescents of nuclear families have high Aesthetic and Political values than the female adolescents of joint families. Therefore hypothesis no 4 which reads as "Female adolescents of Nuclear and joint families differ significantly on Values" stands almost accepted.

**Table 1.4:- Mean comparison of female adolescents of Nuclear and extended families on values. Nuclear=70, Extended=30**

| S.No | Values | Groups | Mean\S.D | t-test | Levels of significance |
|---|---|---|---|---|---|
| 1 | Theoretical | Nuclear Joint | 44.5/4.95<br>45.8/5.09 | 2.40 | Significant at0.05 Level |
| 2 | Economic | Nuclear Joint | 36/4.34<br>39.23/4.99 | 3.10 | Significant at 0.01 Level |
| 3 | Aesthetic | Nuclear Joint | 49.84/5.34<br>47.53/3.74 | 2.48 | Significant at 0.05 Level |

| | | | | | |
|---|---|---|---|---|---|
| 4 | Social | Nuclear Joint | 42.72/6.65<br>48.86/4.33 | 5.48 | Significant at 0.01 Level |
| 5 | Political | Nuclear Joint | 33.5/2.97<br>32.46/3.70 | 1.36 | Not significant |
| 6 | Religious | Nuclear Joint | 35.6/5.11<br>40.16/4.84 | 4.26 | Significant at 0.01 Level |

The table1.4 mean comparison of female adolescents of Nuclear and extended families shows that on Theoretical and Aesthetic values significant difference have been found at 0.05 Level, and on Economic, Social and Religious values significant difference have been found at 0.01 Level between both the groups. It is evident that the female adolescents of extended families have high Theoretical, Economic, Social and Religious values than the female adolescents of nuclear families, whereas female adolescents of nuclear families have high Aesthetic values than the female adolescents of extended families. No significant difference has been found on Political values between female adolescents of nuclear and extended families. Therefore hypothesis no 5 which reads as "Female adolescents of Nuclear and extended families differ significantly on Values" stands almost accepted.

**Table 1.5:- Mean comparison of female adolescents of joint and extended families on values. Joint =70 Extended=30**

| S.No | Values | Groups | Mean\S.D | t-test | Levels of significance |
|---|---|---|---|---|---|
| 1 | Theoretical | Joint Extended | 44.45/4.96<br>45.8/5.09 | 1.22 | Not significant |
| 2 | Economic | Joint Extended | 37.51/4.24<br>39.23/4.99 | 1.65 | Not significant |
| 3 | Aesthetic | Joint Extended | 48.00/5.14<br>47.53/3.74 | 0.51 | Not significant |
| 4 | Social | Joint Extended | 45.94/4.85<br>48.86/4.33 | 3.01 | Significant at 0.01 Level |
| 5 | Political | Joint Extended | 32.24/4.14<br>32.46/3.70 | 0.26 | Not significant |
| 6 | Religious | Joint Extended | 38.01/5.11<br>40.16/4.84 | 2.00 | Significant at 0.05 Level |

The table 1.5 mean comparison of female adolescents of joint and extended families shows that on Social Values significant difference have been found at 0.01 Level, where as in religious value significant difference

has been found at 0.05 Level between both the groups. It is evident that the female adolescents of Extended families have high Social and religious values, than the female adolescents of joint families. No significant have been found on Theoretical, Economic, Aesthetic and Political values between the female adolescents of Joint and extended families. Therefore hypothesis no. 6 which reads as "Female adolescents of joint and extended families do not differ significantly on Values" stands rejected.

**A) Personality Characteristics:**

The comparison of the three groups has revealed that female adolescents of nuclear families in comparison to female adolescents of Joint families are Excitable, Enthusiastic, Tender-Minded, Internally Restrained, Self-sufficient, and Controlled. The female adolescents of joint families in turn are more-intelligent, Emotionally-Stable, Assertive-Competitive, Conscientious-Moralistic, Adventurous Socially-Bold Apprehensive - Insecure and Tense. The two groups however are similar on the factor A (Reserved-Warm-Hearted).

The female adolescents of nuclear families in comparison to female adolescents' of extended families have been found Warm-Hearted, Enthusiastic, Tender-Minded and Tough-Minded. The female adolescents of extended families have been found to be More-Intelligent, Assertive, Conscientious, Adventurous, Apprehensive, and Tense. However, the two groups i.e. Nuclear and extended have found to be similar on factors Affected by Feelings, Emotionally Stable, Demonstrative-Excitable, Zestful-internally Restrained, Uncontrolled and Controlled.

The comparison of female adolescents of joint and extended families has revealed that female adolescents of joint families are Warm-Hearted and Emotionally-Stable than the female adolescents of extended families. The female adolescents of extended families on the other hand have been found to be More-Intelligent, Excitable, Reflective, Internally Restrained, and Self-Sufficient than the female adolescents of joint families. The two groups i.e. female adolescents of joint and extended families, however, were found similar on the factors (E,F,G,H,I, Q1, Q3 and Q4) Obedient-Tough- Minded, Self-Apprehensive, Uncontrolled-Controlled and Relaxed- Tense.

**a) Values:**

The present study was carried on female adolescents, of nuclear, joint and extended families to see, do they differ in their values

The female adolescents of nuclear families have higher Aesthetic and Political values than the female adolescents of joint families while as female adolescents of joint families higher Theoretical , Economic,

Social and religious values than the female adolescents of nuclear families.

The female adolescents of nuclear families have higher Aesthetic values than the female adolescents extended families. The female adolescents of extended families have higher Theoretical, Economic, Social and Religious. No significant difference was found on political values between female adolescents of nuclear and extended families.

The Female adolescents of extended families have higher Religious and Social values than the female adolescents of joint families. No significant differences have been found of Theoretical, Economic, Aesthetic, and Political values between female adolescents of joint and extended families.

**Conclusions:**

On the basis of analysis, interpretation and discussion of the results, the following conclusions have been drawn.

1. Female adolescents of nuclear families in comparison to female adolescents of joint families were Excitable, Enthusiastic, Tender-minded, Reflective, self-sufficient and Controlled. But on the other hand, female adolescents of joint families have been found to be higher on the factor B,C,E,G,H,Q1, and Q4, which implies that female adolescents of joint families are More-Intelligent, Emotionally-stable Assertive, Conscientious, Adventurous, Appreshesve and Tense than the female adolescents of joint families. However, two groups do not differ significantly on factor A, which means that the two groups are somewhat similar on the continuum of reserved-outgoing.
2. Female adolescents of nuclear families were high on factors A,C,F,1, and Q3 which implies that female adolescents of nuclear families were found to be Warm-Hearted Emotionally Stable, Enthusiastic, Tender-mined and Controlled. On the other hand, female adolescents of extended families have been found higher on factors B,E, G,H,Q1 and Q3, which means that female adolescents of extended families are More-Intelligent, Assertive, Conscientious, Adventurous, Apprehensive and Tense, However the two groups i.e. Female adolescents of Nuclear and extended families do not differ significantly on factors C, D, J and Q2, which means that the two groups are somewhat similar on the continuum of Emotionally Less Stable-emotionally Stable, Undemonstrative- Excitable, Zestful-Internally Restrained, Controlled and Uncontrolled.
3. Female adolescents of joint families were found to be Warm-

Hearted and Emotionally Stable, while as female adolescents of extended to be Warm-Hearted and Intelligent, Excitable, Reflective and Self-Sufficient. No significant difference was found between both the groups in factors E,F,G,H,I,Q3 and Q4.

4. Female adolescents of nuclear families were higher on Aesthetic political values than the female adolescents of joint families, on the other hand female adolescents of joint families have higher Theoretical, Economic, Social and religious values than the female adolescents of nuclear families.
5. Female adolescents of extended families have higher Theoretical, Economic, Social and Religious values than the female adolescents of nuclear families where as female adolescents of nuclear families have high Aesthetic values than the female adolescents of extended females. However, there was no significant difference between both the groups on political values.
6. Female adolescents of extended families have higher social and religious values than the female adolescents of joint families. However there was no significant difference between female adolescents of joint and extended families on Theoretical, Economic, Aesthetic, and Political values.

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# Factors Associated with Science Achievement among High School Students

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**Abstract**

*The present study aims to investigate if there is, and to what extent, a relation between certain factors such as gender, participation in extra-curricular activities such sports, computer and internet surfing, single-sex and co-educational schools and their science achievement. A science achievement test was developed by the investigators for the present study. The focus population for this study was 15-year old students from two districts of U.P. The results revealed a number of factors like participation in extra-curricular activities were found to be positively correlated with science achievement, but factors like gender and single-sex schools have no correlation with science achievement.*

## Introduction

Students' educational and psychological developments have been the subject of many studies for a long period of time; these areas of development are important aspects of educational development for students themselves, the student's family and educational authorities. Science achievement is dependent on many variables such as demographic, environmental and institutional factors. Therefore, studying these variables and their effects on science achievement of the students can help educators to consider some antecedents to science achievement and possible modifications to their teaching strategies where they might be appropriate.

Evidence abounds in the literature to suggest that student backgroumd factors such as gender, race, ethnicity, home environment, attitudes and the like have significant influence on their achievement in school science (Peterson & Carlson, 1979; Schibeci & Riley, 1986; Taiwo et al., 1999; Taiwo & Tyolo, 2001). There is, however, no unanimity about the direction of the influence of some of the variables. For example, most researches in the field opined that student attitude towards science impacts one way or another on science achievement.

Different activities, in which students participate, both inside and outside the school itself, are among the multiple situations that can have an effect on science achievement. Extra-scholastic activities have been associated with an improved educational level, more interpersonal competencies, higher aspirations and better attention level (Mahoney, Cairos & Farwer, 2003). Much

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of the research carried out that examines computer use and student achievement, seems to emphasise that there is a positive correlation between these variables. There is plenty of evidence to indicate a positive relationship between computer technology and student achievement (James & Lamb, 2000; Sivin-Kachala, 1998; Weaver, 2000; Weller, 1996; Wenglinsky, 1998). Type of schools (single-sex/co-educational schools) influence attitude towards and achievement in science of male and female students in single-sex schools and students in co-educational schools (Dhindsa & Chung, 2003).

**Emperical Studies:**

The differences between boys and girls in relation to science achievement have received a lot of attention in recent years. The rich information provided by the sources has generally confirmed findings of many other studies which indicate that in general boys achieve better (Esquivel & Brenes, 1988; Gipps, 1994; Wang & Staver, 1995; O' Connor, 2001), either no gender difference (Al-Methen & Wilkinson, 1988; Ventura, 1992; Calsambis, 1995) or girls outperform (Young & Fraser, 1990; Forrest, 1993; Calsambis, 1995; Zeegers & Giles, 1996; Soyibo, 1999). Usually the differences are smallest at age 10 and greatest at age 17. An increase in the gap with age is reported also by Johnson & Murphy (1986). However, in all cases and in all ages the longest difference in achievement is in physics and the smallest, if at all, is in biology.

Studies conducted within the last decade looked at possible effects of sports participation on academic and social development (Braddock, Royster, Winfield, & Hawkins, 1991; Silliker & Quirk, 1997). Most research on extracurricular activities (sports, games, debates, etc.) shows that participation in these kinds of activities is associated to positive outcomes as academic achievement (Holland & Andre, 1987; Marsh, 1992; Silliker & Quirk, 1997; Cooper et al., 1999; Eccles & Barber, 1999). Moriana et al., (2006) reported that group involved in activities outside the school yielded better academic performance, especially those that participated in study related activities and those that participated in mixed activities (both sports & academic). The findings are supported by Darling et al. (2005), whose study showed that students who participated in school-based extracurricular activities had higher grades, higher academic aspirations and better academic attitudes than those who were not involved.

In today's increasingly technology driven world it would seem to be a given that students who have had access to computers in their home or in classrooms would do better on science and mathematics achievement than those who had not (Berger et al., 1994; Shaw,1998; Papanastasiou,2003; Papanastasiou & Ferdig, 2003;Papanastasiou, Zembylas & Vrasidas, 2003). However, there are still occasions, where computer use in schools associated with lower levels of achievement (Papanastasiou, Zacharia, Zembylas, 2004

& Ravitz et.al 2002).

Most studies reported in the literature have been conducted in co-educational schools, but it is not well understood how science achievement is influenced when male and female students are taught separately in single-sex schools. A limited number of studies show that girls do better in single-sex schools and boys in co-educational settings (Ormerod, 1975; Fraser-Abder, 1990). Young & Fraser (1990) found no significant differences in overall achievement of boys and girls attending co-educational government, catholic and private schools. However, girls in single-sex schools achieved higher than girls in co-educational schools, and boys in single-sex schools achieved higher than boys in co-educational schools. There were no significant differences between boys and girls attending either single-sex or co-educational schools. Fraser-Abder (1990) found that girls scored significantly higher than boys on the science test.

**Research Questions:**

The research questions for the study include the following:

1) Do students' gender explain differences in science achievement scores?
2) Do students' participation in extra-curricular activities (such as sports, computer and internet surfing) explain differences in science achievement scores?
3) Do students' of single-sex and co-educational schools explain differences in science achievement scores?

**Hypotheses of the Study:**

The hypotheses that will guide the present study are stated in null form as under:

1) There is no significant difference in science achievement in relation to gender of high school students.
2) There is no significant difference in science achievement in relation to participation in extra-curricular of high school students.
3) There is no significant difference in science achievement in relation to single-sex and co-educational high school students.

**Sample:**

The main sampling technique in this study was stratified random sampling with geographical location (urban/rural) of the schools as the basis of stratification. The sample consisted of 1500 secondary school students (9th standard) selected from 30 schools of two districts of Western U.P., (India), in which 813 were boys and 687 were girl students. The average age of the study sample was 15 years. Within the group that performed different activities, students were divided into two groups; those

who carry out sports (cricket, football, basketball, badminton and volleyball) related activities and academic (access to computer and internet) related activities. In what concerns participation in extracurricular activities, 321 participated in sports activities and 1179 didn't participate in such activities; 1110 participate in computer related activities and 390 didn't participate in this activity; 711 participated in internet surfing activities and 789 didn't participate in such activities.

**Tools Used:**

**I) Science Achievement Test:**

Science achievement refers to students' scores on the science test administered to secondary school students. The data concerning students' achievement in science were gathered by administering to sample, a standardized instrument developed by the investigators. The test consists of 50 items multiple choice type, is made up of 16 items in the area of physics, 19 items in the area of chemistry and 15 items in the area of biology. The split-half method was used to determine the reliability of the test. The reliability coefficient of the instrument was found to be 0.87 after the application of Spearman-Brown Formula.

**II) Information Sheet:**

Information sheet was provided to collect basic information about factors like gender; participation in sports, computer and internet surfing and about the school type such as single-sex girls school, single-sex boys school and co-educational schools.

**Results and Analysis:**

The statistical method used in testing the hypotheses was the t-test for the differences between the mean science achievement scores of two groups using two-tailed test.

When t-test was applied to see the significant difference between science achievement scores of male and female students, it was found that gender do not contribute significantly to the prediction of science achievement as t-value came out 0.79 (table 1)

Further t-test was employed to determine whether there were significant differences in the students' achievement marks, comparing the group that participates in sports related activities with the one that does not. Result is summarized in table 2, and indicates that students who participated in sports related activity group obtained significantly better results ($t=8.34$, $P < .001$ with 1498 df).

The number of students having access and not having access to computer and internet were 1110 & 390, 711& 789 respectively. This shows only 74% and 52% secondary school students know how to access computer and internet

respectively. It is highly surprising that 26 % of the students are so ignorant that they have no idea how to access computer. The data in table2 also show that the achievement in science of students having access to computer was significantly better (t=11.66, P<.001, df=1498) with the one that does not. Similarly the students having access to internet have significantly better science achievement than those who have not access to internet (t=10.49, P<.001, df=1498). Thus, both second and third hypotheses are rejected at .001 level.

The achievement of boys in the single-sex school, girls in the single-sex school and the students in co-educational schools were compared using t-test. The data in table 3 show that the achievement in science of boys and girls in single-sex schools were not comparable indicating no significant difference between boys and girls as t-value came out 0.21. Result reported in table 3 show that the mean achievement scores in science for students of co-educational schools were significantly better (t=8.64, df=1213) than those of boys in the single-sex schools and also girls in the single-sex schools (t=9.98, df=1300). These results demonstrated that, the science achievement of students in co-educational schools were significantly higher than that of boys as well as of girls student in single-sex schools.

The data in table 4 also shows that the achievement in science of boys and girls in co-educational schools, were comparable indicating gender difference and girls perform better than the boys (t=3.47, df =1015) which is contrary to the finding in single-sex schools, where boys and girls perform equally good. Further, it was found that boys of co-educational schools have significantly higher achievement in science than the boys of single-sex schools and also girls of co-educational schools have significantly higher achievement in science than the girls of single-sex schools (t=7.12, P< .001, df=811 and t=10.59, P< .001, df=685 respectively)

**Table 1: Comparison of mean achievement scores on the basis of gender**

| Groups | | N | Mean | SD | t | Sig/ NSig |
|---|---|---|---|---|---|---|
| Gender | Male | 813 | 28.08 | 7.40 | 0.79 | NSig |
| | Female | 687 | 28.39 | 7.45 | | |

**Table 2: Comparison of mean achievement scores on the basis of extra-curricular activities**

| Groups | | N | Mean | SD | t | Sig/ NSig |
|---|---|---|---|---|---|---|
| Sports related Activities | Participation | 321 | 29.04 | 7.27 | 8.34 | Sig |
| | No participation | 1179 | 25.25 | 6.97 | | |
| Computer related Activities | Participation | 1110 | 29.43 | 7.53 | 11.66 | Sig |
| | No participation | 390 | 24.50 | 6.10 | | |
| Internet surfing Activities | Participation | 711 | 30.19 | 7.37 | 10.49 | Sig. |
| | No participation | 789 | 26.320 | 6.93 | | |

**Table 3: Comparison of mean achievement scores for boys and girls in single-sex and co-educational schools**

| School Type | No. of schools | N | Mean | SD | t | | |
|---|---|---|---|---|---|---|---|
| | | | | | B | G | C |
| Single sex-B (Boys) | 5 | 198 | 24.88 | 7.24 | | | |
| Single sex-G (Girls) | 7 | 285 | 25.01 | 6.43 | 0.21 | | |
| Coeducation-C (Both) | 18 | 1017 | 29.73 | 7.21 | 8.64* | 9.98** | |

*Significant at < 0.001 level with1213 df
** Significant at < 0.001 level with 1300 df

**Table 4: Sex-wise comparison of mean achievement scores of co-educational, single-sex boys' and single-sex girls' schools**

| School Type | N | Mean | SD | t | |
|---|---|---|---|---|---|
| | | | | Co-education (Boys) | Co-education (Girls) |
| Co-education(Boys) | 615 | 29.06 | 7.17 | | |
| Co-education(Girls) | 402 | 30.66 | 7.20 | 3.47* | |
| Single-sex(Boys) | 198 | 24.88 | 7.24 | 7.12** | |
| Single-sex(Girls) | 285 | 25.01 | 6.43 | | 10.59*** |

*Significant at < 0.001 level with 1015 df
**Significant at < 0.001 level with 811 df
*** Significant at < 0.001 level with 685 df

**Discussion:**

The results of t-test of students' science achievement scores on various factors are reported in table1, 2, 3 & 4. There were no significant difference between the science achievement scores and gender. The finding of this study is supported by Patnaik, 1986; Jovanovic & Shavelson, 1995; Neathery, 1997, but which is contrary to most of previous findings claimed boys performed better than the girls in science (Tamir, 1988; Comber & Keeves, 1973), girls performed better than the boys. Research by AAUW (1992) reveals that although female students receive equal or sometimes better grades in science courses, the females exhibit less interest in science subjects than male students.

The results presented support the idea that participation in extracurricular activities proves beneficial to the students as it in turn affects their educational outcomes. The students who participate in sports related activities present significantly better academic achievement in science. Along these lines, there were considerably significant differences in performance in favour of the group involved in academic type extracurricular activities and that such differences did not appear for those

involved only in sports (Moriana et al., 2006). According to Peixoto (2004), students who participate in extracurricular activities present higher values on some dimensions of self-concept and better academic achievement. The findings are further supported by Darling et al. (2005), whose study showed that students who participated in school-based extracurricular activities had higher grades, higher academic aspirations and better academic attitudes than those who were not involved in extracurricular activities. Research conducted by Broh (2002) neither completely contradicts, nor completely supports these findings. He reported that participation in some activities improves academic achievement, while participation in others diminishes academic achievement. Contrary to this result Narang (1987), reported that no academic programme of the school (participation of co-curricular activities) was related to higher achievers.

The results further show that students with computer and internet access have significantly better achievement in science than those who never access to computer or internet. Improved access to technology is a pivotal feature of almost all information technology plans. While there is immense interest in the use of technology in schools and rapid growth in the presence of technology, many students in secondary schools still have limited access to computers. The result shows that 26% of the students who indicated that they never have a computer available for them to use anywhere, neither at home or in school. According to Mangione (1995) all students must have equal opportunity to learn with and about computers to ensure equity, although few schools have achieved the levels of access necessary to provide students with an equitable experience.

The data in table 3 show that the mean achievement scores in science of boys (single-sex schools) and girls (single-sex schools) were not comparable indicating no gender difference, but which is contrary to most of western previous findings that claimed in unisex schools boys performed better than the girls (Calsambis, 1995; Forrest, 1993; Klainin & Fensham, 1987; Soyibo, 1999; Zeegers & Giles, 1996; Young & Fraser, 1990) and in some cases girls performed better than boys in science (Tamir, 1988; Wang & Staver, 1995; Dhindsa & Chung, 2003).

The students of co-educational schools also achieved significantly higher achievement in science than the boys as well as girls in the single-sex schools which is contrary to the findings of Young & Fraser, (1990); Dhindsa & Chung, (2003); Hariharan et al., (1987). It is clear that in India co-educational schools are privately managed and high status english medium schools where high SES students are able to study. This shows high SES school and SES of student influences the achievement in science of the students. This is the reason that students of co-educational schools were found to be academically competent than those of unisex schools in India.

The data in table 4 show that the mean achievement score in science of boys and girls of co-educational schools were comparable indicating gender difference. Girls of co-educational schools achieve significantly higher in science than their boys counterparts. Further, the mean achievement scores in science for boys in co-educational schools were significantly better than those of boys of single-sex schools and the mean achievement scores in science for girls in co-educational schools were significantly better than those of girls of single-sex schools. But which is contrary to this Emmanuel & Lockheed (1988) reported that girls in single-sex schools do significantly better than their co-educational school counterparts while boys in co-educational schools do better.

**Conclusion:**

This study found that certain factors such as participation extra-curricular activities, single-sex and co-educational schools have positive influence on the students' science achievement. Economic status is also important, particularly having use of computer and internet. At the end it may be added that findings of the present study are mostly corroborated by the earlier studies. It appears that this phenomenon is not affected by the socio-cultural and other differences which characterized the students of this country and the western countries.

The generalisability of the findings of the study is limited, in view of the fact intended as an exploratory study; it was conducted on a comparatively small sample of 9th standard students, selected from only two districts of western U.P. (India). A replication of it with large and more representative sample of students of different classes and subjects from wider region and with more rigorous design is likely to prove quite rewarding in shading more light on difference of mean science achievement in relation to certain factors.

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# A Study of Stress Management among Working Women

**Arti Durani***

**Abstract**

*Stress is emotionally disruptive or upsetting condition of mind, which occurs in response to adverse external influences. Stress refers to pressures or tensions people feel in life. Stress has become a major concern of modern times as it can cause harm to employee's health and performance. The present age has been called as the age of stress and strain. Some people are more vulnerable to the effects of stress than others. Women are more prone to stress especially the working women. In the present study the study was carried out on the nurses, bank clerks and teachers. It was found that due to the difficult working conditions nurses were found to have more stress than teachers and clerks. In the stress level the bank clerks were graded at 2nd number and the teachers were having least stress. It was found that the least stress in teachers is due to their better job conditions. Teachers can easily manage their domestic and job affairs together very easily. It the present study also the factors which were leading to stress were studied. It was found that environmental conditions are more adding to the stress of the working women. Lastly it was found that mental stress level techniques are more effective in controlling stress among the working women than the physical stress management technique.*

Stress is an emotionally disruptive or upsetting condition of mind, which occurs in response to adverse external influences. Stress refers to pressures or tension people feel in life. Stress has become a major concern of the modern times as it can cause harm to the employee's health and performance. It is simply pressures or tensions people feel in life. The present age has been called the age of stress and strain. Some people are more vulnerable to the effects of stress than others. The blind race for achieving economic and career goals without caring for means is indeed a wide spread phenomena of contemporary life and is causing much difficulty to the women who have to take care of her family also. Economic deprivation also contributes a good deal in human stress. Terrorism and other natural happenings have made great contributions in breeding stressful situations. Consequently the civil society especially the women find itself in disarray as a woman who has to bear its consequences all the time. The growing magnitude of violence, display of aggression by youth

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of today, and the declining standards of tolerance and patience obviously breed stress situations. Deve (1998), found that female subjects had significantly more stress and anxiety than the male subjects.

Problem further intensifies in case of working women as they have to cope up with all pressures of a worker as well as of a housewife (Bolger et. al. 1989). Pearlin and Schooler (1978), reported that the concept of stressors not only refers to major life events but also encompasses ongoing minor events like electricity failure, maid not turned up, unexpected guests and child's misbehaviour. Panda (1983), concluded a study on Indian organization and found that mental overload is a prominent factor in producing stress among organizational workers. Aulja et. al. (2004), concluded that working women were significantly more stressed. Highest ranking social pressure was 'unexpected guests' (as felt by working women) followed by 'compulsory socialization' as disclosed by both the categories of respondents. All the respondents agreed that husband's stress was also the major factor contributing to their own stress followed by stress due to modification of their personal goals. Main stress point related to their children's future was also agreed upon by both the groups of respondents

Hasnain and others (2000), in their study "Role of stress and coping strategies in different occupational groups" - explained that stress hinders the development of personality of the individuals. Stress also blocks the paths of appropriate performance of duty, work or job.

Seaward (1975), defined "Stress as the inability to cope with the perceived or real situation threat to ones mental, physical, emotional and spiritual well being which results in a series of physiological responses and adaptations" Newman (1983), was of opinion that "Stress is a dynamic condition in which an individual is confronted with an opportunity, constraint or demand related to what he/ she desires and for which the outcome is perceived to be both uncertain and important." The term stress has been used by some psychologists as "A state of psychological upset or disequilibrium in an individual." and "a class of stimuli which threaten the individual and to produce disturbance in behaviour and inner experience." Stress may be defined as the triangular relationship between demands of people, feelings about those demands and ability to cope with them. Stress is most likely to occur in situations where, demands are high and there is limited support available. Generally people have high demands from women. Women have to come to the expectation of the family and at the same time they have to work in offices.

Stress is an evitable part of modern life, where at every step the individual has to face cut throat competitions in the society. It is an unseen ailment which disturbs the equilibrium of our life. Stress leads to anger, boredom and even frustration. Older adults; women in general, especially working mothers and pregnant women; less-educated people; divorced or

widowed people; people experiencing financial strains such as long-term unemployment; people who are the targets of discrimination; uninsured and underinsured people; and people who simply live in cities all seem to be susceptible to stress problems.

### Job Stress

Job stress results from the interaction of the worker and the conditions of work. One of the important causes of job stress is worker characteristics versus working conditions. Differences in individual characteristics - personality make up and coping style are most important in predicting whether certain job conditions will result in stress or not.

According to United States National Institute of Occupational Safety and Health (1999), "Job stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury." According to European Commission (1999) "The emotional, cognitive, behavioural and physiological reaction to aversive and noxious aspects of work, working environments and work organisations. It is a state characterised by high levels of arousal and distress and often by feelings of not coping." According to United Kingdom Health and Safety Commission (1999): "Stress is the reaction people have to excessive pressures or other types of demand placed on them."

### Causes of Job Stress

Various causes of job stress are continuous unreasonable performance demands, lack of effective communication and conflict resolution, lack of job security, long working hours, excessive time away from home and family, office politics and conflict among staff, a feeling that one's reward is not commensurate with one's responsibility and working hours, responsibilities and pressures disrupting life (balance diet, exercise, sleep and rest, play, family-time, etc). Omer (1985), conducted a study to examine the relationship between stressor and stress that considered organizational characteristics as stressor and job characteristics arousing tension in the individual as perceived stress. The results showed that job stress phenomenon consisted of three factors namely, interpersonal relationship and job feedback tension, role clarity and career growth tension and personal inadequate tension.

On the basis of experience and research, Niosh (1988), favours the view that working conditions play a primary role in causing job stress and the effect is much more on the women because she has to balance between work and family or personal life and for that she gets least support from network of friends and co-workers. Sethi and Chand (1997), conducted a study to examine the organizational factors as predictors of job related

strain. Respondents were 150 junior management scale I officers working in various baking institutions in the state of Himachal Pradesh. The findings show significant positive relationship between jobs related strain and role overload, role conflicts and strenuous working conditions. Manpreet (2000), conducted a study to examine the stress among workers with lower level, middle level and upper level of wages. Data were collected from 60 employees of an organization, the finding shows that workers are stressed due to working hours and overload work. Most of them were stressed due to remunerations. Srivastava (1990), studied occupational stress, job involvement and mental health of the employees in public and private organizations and found that stress affects the occupation, work or job and mental health of the individual to a great extent. It also affects the mental health of the individual in private sector especially among the women.

**Stress Among Working Women**

Family responsibilities are raising the stress level with which individuals have to contend. This is particularly true in families in which both parents work, as well as in single-parent families. A number of factors make it difficult to achieve a harmonious balance between work and family life. These include abrupt changes in work schedules, time-pressure work, unsympathetic treatment by management and co-workers, and lack of control over the content and organization of work. Shift work and irregular working hours are particularly difficult to reconcile with family routines and events. Home workers and teleworkers often find it difficult to adapt their work to the requirements of their family life. Jayshree and Sengupta (1994), in their research highlighted the fact that women holding the family work suffer less amount of stress than women holding the office work but office holders are well adjusted than family holders

**Objectives**

1. To study the level of stress among women working in schools as teachers.
2. To study the level of stress among women working in banks as clerks.
3. To study the level of stress among the women working in hospitals as nurses.
4. To compare the level of stress among the women working as teachers, nurses and clerks.
5. To study the major stressors among working women.
6. To compare stressors among working women.
7. To study the impact of different stress management techniques.
8. To compare the impact of physical and mental stress management techniques.

## Hypotheses

1. There will be no significant difference in stress level among the women working as teachers, nurses and clerks.
2. There will be no significant difference in stressors among working women.
3. There will no significant difference in impact of physical stress management techniques and mental stress management techniques.

## Method and Procedure

In the present study the women working in education, health and banks as teachers, nurses and clerks respectively serving in the state of Jammu and Kashmir form the universe. The present study comprises of a sample of 450 working women. The details are given in Table-1.

**Table-1**
**Showing the Distribution of Employees selected from various Organisations for Sample Pool**

| Name of Bank | No.of Clerks | Name of School | No.of Teachers | Name of Hospital | No. of Nurses |
|---|---|---|---|---|---|
| J & K Bank Link Road | 05 | GGHSS Mubark Mandi | 15 | Govt Medical Colleage and Hospital Bakshi Nagar | 15 |
| J &K Bank Janipur | 05 | GGHSS Shashtri Nagar | 15 | | |
| J &K Bank Rail Head | 15 | GGHSS Canal Road | 15 | Govt SMGS Hospital | 15 |
| J & KBank Canal Road | 10 | GHS Muthi | 10 | Govt Hospital Gandhi Nagar | 15 |
| SBI Janipur | 05 | GHSS Paloura | 15 | Govt. Hospital Sarwal | 15 |
| SBI Kachi Chowni | 10 | GHS City Chowk | 10 | ASCOMS | 15 |
| SBI Canal Road | 10 | GHS Sarwal | 10 | Govt. Dental Hospital Amphalla | 15 |
| ICICIBank Resendency Road | 15 | GGHS Bakshi Nagar | 10 | Govt. Chest Disease Hospital Jammu | 15 |
| SBI Hari Market | 10 | GHS Domana | 10 | Govt Psychiatric Hospital Amphalla | 15 |
| SBI Shalamar Road | 10 | GGHSS Purkhoo | 10 | Govt. Hospital Akhnoor | 15 |
| HDFC Bank Bahu Palaza | 15 | GHS Railway Station | 10 | Govt. Hospital Bishna | 15 |
| SBI Gandhi nagar | 10 | GGHSS Nowabad | 15 | | |
| J &K Bank Shalamar | 15 | GHS Bahwal | 05 | | |
| SBI Rail Head | 15 | | | | |

## Tools Used

1. Stress Personality Scale by R.S. Eliot-1994.
2. Self prepared questionnaire to study the stressors for working women.
3. Self prepared questionnaire to study various physical and mental stress management techniques.

## Scoring

The response of stress personality scale was scored according to the instructions provided in the manual. Each item of the scale is having the value according to the responses. The scores for twenty items are added and the total value which comes after adding the twenty responses by the respondents are considered as the raw scores for each subject under study.

The questionnaires of stressors and the stress management technique were scored on the five point scale. For each positive statement 5,4,3,2,1 score was assigned to strongly agreed, agreed, neutral, disagreed and strongly disagreed respectively and for each negative statement 1,2,3,4,5 score was assigned to strongly agreed, agreed, neutral, disagreed and strongly disagreed respectively. The maximum score for stressors means that the stressor is causing minimum stress and the minimum score for the stressor depicts that stressor is causing maximum stress. Where as in case of stress management techniques maximum score means the technique is more effective and the minimum score means that the technique is least effective.

### Statistical techniques used

Keeping in view various objectives of the study and to test the hypotheses framed on the basis of objectives the following statistical techniques were employed:

i) t-test was used to compare the mean difference of stress among women working as teachers, nurses and clerks.

ii) t-test was also used to compare the mean difference of physical stress management techniques with mental stress management techniques.

iii) Percentage was used to calculate the level of stress among women working as teachers, nurses and clerks. Percentage was also used to find the major stressors among the working women

### Analysis and Interpretation of Data

**Table-2: Percentage and Frequency Distribution of Stress among Working Women (N=150 in each case)**

| S.No | Level | Stress Score | Teachers | | Nurses | | Clerks | |
|---|---|---|---|---|---|---|---|---|
| | | | Frequency | %age | Frequency | %age | Frequency | %age |
| 01 | No Stress | 20-29 | 12 | 8 | 00 | 0 | 6 | 4 |
| 02 | Very Low Stress | 30-39 | 8 | 5 | 2 | 2 | 6 | 4 |
| 03 | Low Stress | 40-49 | 58 | 39 | 00 | 0 | 30 | 20 |
| 04 | Average Stress | 50-59 | 22 | 15 | 4 | 3 | 18 | 12 |
| 05 | High Stress | 60-69 | 30 | 20 | 62 | 41 | 50 | 33 |
| 06 | Very High Stress | 70-79 | 20 | 13 | 82 | 54 | 40 | 27 |
| 07 | Abnormal | 80-89 | 0 | 0 | 00 | 0 | 00 | 0 |

The calculated percentage and frequency in Table-2 clearly indicates that 39% of women working as teachers were having low stress, 20% were having high stress, 15% were having average stress, 13% were having very high stress, 8% of the respondents were having no stress, and 5% were having very low stress and none was abnormal.

Table-2 further indicates that 54% nurses were having very high stress, 41% were having high stress, 3% were having average stress, 2% were having very low stress.

The calculated percentage and the frequencies in Ttable-2 further shows that 33% of the women working in banks as clerks were having high stress, 27% were having very high stress, 20% were having low stress, 12% of the respondents were having average stress, 4% were having very low stress, 4% were having no stress and none was abnormal.

From the Table-2 it is clear that 54% of nurses, 27% of clerks and 13% of teachers is having very high stress. The higher percentage of stress in nurses is due to the fact that nurses have to work continuously for much longer time. In addition to it they have also to perform odd hours job, whereas the stress in clerks is also due to long working hours but the fact is that they have not to work during the odd hours. There is least percentage of stress among the teachers since their working hours are less, they have to perform slight easier jobs, they enjoy all the holidays.

**Table-3**
**Means, Standard Deviations and t-values for Stress of Women Teachers, Nurses and Clerks**

| S.No. | Occupation | Mean | SD | t |
|---|---|---|---|---|
| 1 | Teachers | 51.6 | 11.6 | 7.38* |
| 2 | Nurses | 69.85 | 7.15 | 3.25** |
| 3 | Clerks | 58.93 | 14.19 | 11.63*** |

* Teachers and Nurses
** Nurses and Clerk
*** Clerks and Teachers

The calculated t-value for mean score of teachers and nurses comes out to be 7.3 which is significant at 0.01 level. The significant t-value indicates that there is real difference between the stresses of the two groups i.e. teachers and nurses. The calculated value of the mean of teachers is 51.6 and nurses is 69.85 which indicate that there is more stress among nurses than teachers because of their job conditions.

The calculated t-value for mean score of nurses and clerks comes out to be 3.25 which is significant at 0.01 level. The significant t-value indicates that there is real difference between the stresses of the two groups i.e. nurses

and clerks. The mean of nurses is 69.85 and clerks is 58.93 which indicate that there is more stress among nurses than clerks because of comparatively adverse job conditions.

The calculated t-value for mean score of teachers and clerks comes out to be 1.63 which is insignificant at 0.01 level. The insignificant t-value indicates that there is no real difference between the stresses of the two groups i.e. teachers and clerks.

**Table-4**

**Means, Standard Deviations and t-Values for Job, Family and Environment as a Stressor for Women Working as Teachers, Nurses and Clerks**

| S.No. | Occupation | Job | | | Family | | | Environment | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Mean | SD | t | Mean | SD | t | Mean | SD | t |
| 1 | Teachers | 56.32 | 18.83 | 6.53* | 28.69 | 11.71 | 0.29* | 52.10 | 17.87 | 0.57* |
| 2 | Nurses | 47.05 | 18.80 | 5.43** | 44.17 | 18.09 | 0.56** | 51.45 | 17.11 | 0.44** |
| 3 | Clerks | 58.54 | 13.51 | 4.34*** | 42.69 | 21.74 | 0.64*** | 48.08 | 19.21 | 0.48*** |

* Teachers and Nurses
** Nurses and Clerks
*** Clerks and Teachers

The calculated t-value for teachers and nurses comes out to be 6.53 which is significant at 0.01 level. It indicates that there is real difference between the job stressor of the two groups i.e. teachers and nurses. The calculated t-value for nurses and clerks comes out to be 5.43 which is significant at 0.01 level. The significant t-value indicates that there is real difference between the job stressor of the two groups i.e. nurses and clerks. The calculated t-value for teachers and clerks comes out to be 4.34 which is again significant at 0.01 level. The significant t-value indicates that there is real difference between the job stressor of the two groups i.e. teachers and clerks.

The calculated t-value for mean score of teachers and nurses comes out to be 0.29 which is insignificant even at 0.05 level. The insignificant t-value indicates that there is no real difference between the family stressor of the two groups i.e. teachers and nurses.

The calculated t-value for mean scores of nurses and clerks comes out to be 0.56 which is insignificant even at 0.05 level. The insignificant t-value indicates that there is no real difference between the family stressor of the two groups i.e. nurses and clerks.

The calculated t-value for mean score of teachers and clerks comes out to be 0.64 which is again insignificant at 0.05 levels. The insignificant t-value indicates that there is no real difference between the family stressor

of the two groups i.e. teachers and clerks.

The calculated t-value for mean score of teachers and nurses comes out to be 0.57 which is insignificant even at 0.05 level. The insignificant t-value indicates that there is no real difference between the social and environmental stressor of the two groups i.e. teachers and nurses.

The calculated t-value for nurses and clerks comes out to be 0.44 which is insignificant even at 0.05 level. The insignificant t-value indicates that there is no difference between the social and environmental stressor of the two groups i.e. nurses and clerks.

The calculated t-value for mean score of teachers and clerks comes out to be 0.48 which is insignificant even at 0.05 level. The insignificant t-value indicates that there is no real difference between the social and environmental stressor of the two groups i.e. teachers and clerks.

**Table-5**

**Showing Means, Standard Deviations and t-Values for Physical and Mental Stress Management Techniques for Women Working as Teachers, Nurses and Clerks**

| S.No. | Occupation | Physical Techniques | | | Mental Techniques | | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | T | Mean | SD | t |
| 1 | Teachers | 42.86 | 21.74 | 0.60* | 42.86 | 19.3 | 0.45* |
| 2 | Nurses | 34.70 | 17.73 | 0.46** | 34.70 | 21.3 | 0.59** |
| 3 | Clerks | 33.58 | 17.82 | 0.40*** | 33.58 | 17.73 | 0.45*** |

* Teachers and Nurses
** Nurses and Clerks
*** Clerks and Teachers

The calculated t-value for mean score of teachers and nurses comes out to be 0.60 which is insignificant even at 0.05 level. The insignificant t-value indicates that there is no impact of physical stress management techniques on the stress level of two groups i.e. teachers and nurses.

The calculated t-value for mean score of nurses and clerks is 0.46 which is insignificant even at 0.05 level. The insignificant t-value indicates that there is no impact of physical stress management techniques on the stress levels of the two groups i.e. nurses and clerks.

The calculated t-value for teachers and clerks comes out to be 0.40 which is insignificant even at 0.05 level. The insignificant t-value indicates that there is no impact of physical stress management techniques on the stress levels of the two groups i.e. teachers and clerks.

The calculated t-value for teachers and nurses comes out to be 0.45 which is insignificant at 0.05 level. The insignificant t-value indicates that

there is no impact of the mental stress management techniques on the stress levels of the two groups i.e. teachers and nurses.

The calculated t-value for nurses and clerks comes out to be 0.46 which is insignificant at 0.05 level. The insignificant t-value indicates that there is no impact of mental stress management techniques on the stress levels of the two groups i.e. nurses and clerks.

The calculated t-value for teachers and clerks comes out to be 0.40 which is insignificant at 0.05 level. The insignificant t-value indicates that there is no impact of the mental stress management techniques on the stress of the two groups i.e. teachers and clerks.

Since the mean of mental stress management techniques is more than the physical stress management techniques therefore mental stress management techniques are more effective than physical stress management techniques for reducing the stress levels among the working women.

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# A Study of Health Awareness Among the Students Belonging to Rural and Urban Areas of Jammu District

**Ravi Ji Thaploo***

## Introduction

One of the most important aims of education is to help the individuals in making adjustment with the present environment. In order to achieve good health, which is an essential condition for a purposeful existence and have a balanced personality, which help the individual in making adjustments with the society as a whole. Health is essential in every walk of life and plays an important role in effective learning, adjustment and development of all faculties of the student, his happiness and success in life, Health is not only freedom from sickness and disease but also freedom from anxiety, social and psychological tension. According to World Health Organization (1948) health is defined as "A state of complete physical, mental and social well being and not merely the absence of a disease of infirmity". According to Williams (1978), "Health is the quality of life that enables an individual to live most and to serve best". Rajput (2000) has stressed that health education has to be concerned with total health of the learner at all stages of education. According to a report of the School Health Committee (1960) on Terminology in School Health Education in America, the school health programme is defined as "The school procedures that contribute to the maintenance and improvement of the health of pupils and school personal including health services, healthful living and health education", like other programmes of intellectual development, school health programme must be integral part of the school programme. It is very important to have a well thought-out and skillfully implemented school health programme. The National Policy on Education (1986) demands that the health education should be integral part of education. Health Awareness is the process of promoting, understanding and observing desirable health practices. It is needs to acquaint an individual with scientific basis of health protection and promotion to remain free from all diseases as they are of two types (i) Congenital disease (ii) Acquired disease. Congenital disease are present at the time of birth and are not curable while as Acquired diseases develop after birth, they are further classified as communicable and non-communicable diseases.

Communicable disease passes from person to person through water, air, food, physical contact, insects and germs. There is a need to understand

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the spread of these communicable diseases like Cholera, Typhoid, Tuberculosis, Malaria, Influenza, Jaundice, Rabies, Hepatitis. There is also a need to understand the serious nature of the diseases like Acquired Immuno Deficiency Syndrome (AIDS) /Sexually Transmitted Diseases (STD) and its consequences on society. As AIDS is a condition caused by a virus. AIDS is such a deadly disease in which the body's immune system breaks down as a result of infection with HIV (Human imuno deficiency virus). The word syndrome is used to emphasize that AIDS present itself as a group of signs and symptoms and not a single disease. As reported by Global Aids (1990) United Nations, World Health Organization 600 people are infected by HIV virus, every hour and more than 60 children die of the virus. A strategy of Health Awareness Programme is to prevent and to control HIV infections and AIDS among the students. So it id important to make awareness among the students about the deadly diseases by imparting health education through curricular and co curricular activities, so that the students remain free from these diseases and to maintain good health.

In view of the rapid changes in the society in al areas of life, organization of school health programme is badly needed to make awareness among the students. As reported by Dhanasekaran (1998) who studied the role of 10 teachers and 305 students in developing school health programme, it was found that there was no significant mean difference in health awareness level of students with respect of their parental educational level, occupation and economic status. Whereas, there was a significant improvement in the level of health awareness among teachers.

Kansal (1995) studied the profile of inputs and outputs of institutions imparting instructions in health education. The existing scenario of general health education is based on extremely non uniform curriculum. There is a need to integrate health education training courses by introducing four year integrated programme after 10+2 stages.

The role of the school would assume responsibility to have Health Awareness among the students. Despite the Global trends of the past decade, barriers and controversies on health awareness among the students. Keeping in view that no worth while attempt has been made by any researcher to explore the effectiveness of health awareness programme organized in school and also to know the effectiveness supplementing these programmes through curricular and co-curricular activities especially in Jammu district. The researcher thought it worth while to study the level of Health Awareness at different levels of sex, locality and types of institutions.

## Objectives of the Study

The objectives of the study are as under:

1. To study the level of health awareness among high school

stud[illegible]

2. To study the level of health awareness among the students studying in rural and urban areas.
3. To study the level of health awareness among boys and girls studying various schools of Jammu.
4. To study the level of health awareness among the students studying in government and private schools.
5. To compare the health awareness on the basis of gender, location and type of schools i.e. government and private schools.

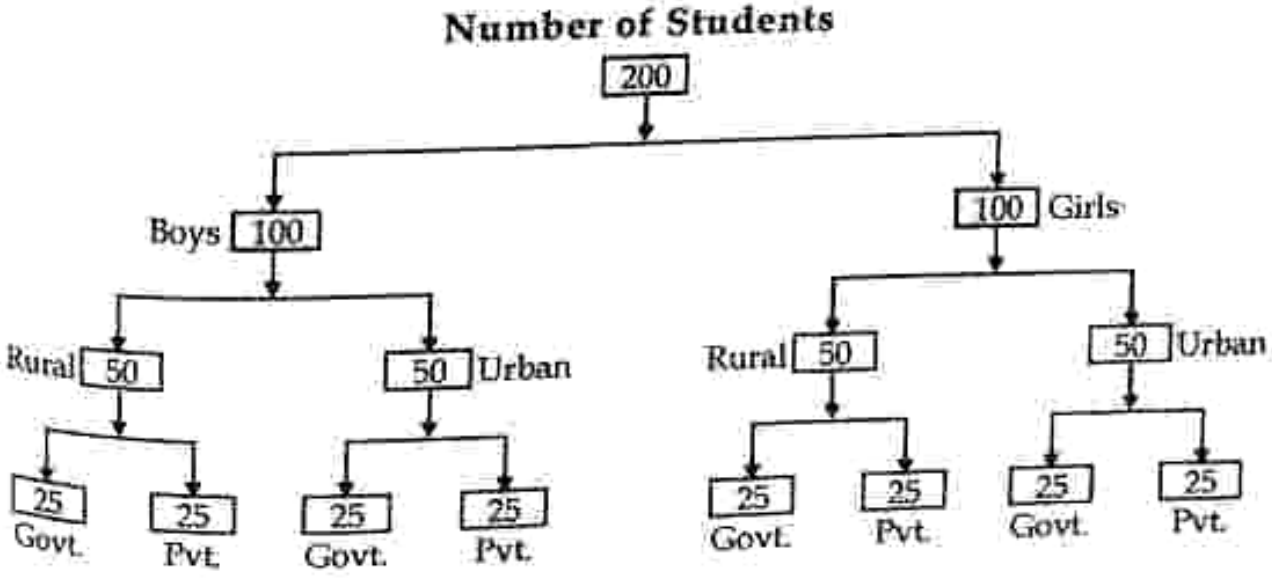
**Hypotheses**

The hypotheses formulated and tested in the present study are as follows:

1. To ascertain the level of health awareness among school going students.
2. To ascertain the level of a health awareness, among students studying in schools located in rural and urban areas.
3. To ascertain the level of health awareness among boys and girls.
4. To ascertain the level of health awareness among the students studying in government and private schools.
5. There will be no significant in health awareness between boys and girls.
6. There will be no significant differences in health awareness among the students of rural and urban areas.
7. There will be no significant difference in health awareness among the students studying in government and private schools.

## METHOD AND PROCEDURE

### Design of the study



**Sampling**

For the present study a sample 200 students from various schools located in rural and urban areas of Jammu7 district were selected. Out of which 100 were boys and 100 were girls. 50 boys each were selected from rural and urban areas. Further, 25 boys each were taken from government and private schools situated in rural areas. Whereas, 25 boys each were taken from government and private schools situated in urban areas. Same way 25 girls each were taken from government and private schools located in rural area and 25 Girls each were taken from government and private schools (each) located in urban areas as given in the table-1

**Table-1**

**Sample selected from various Schools located in Jammu District**

| S.No | Name of the Institution | Location | Number of Boys | Number of Girls |
|---|---|---|---|---|
| 1 | Govt. High School, Muthir | R | -- | 25 |
| 2 | Govt. High School, Domana | R | 25 | -- |
| 3 | V. B. High School, Akalpur | R | 25 | 25 |
| 4 | Govt. High School, Bakshi Nagar(B) | U | 25 | -- |
| 5 | Govt. High School, Bakshi Nagar(G) | U | -- | 25 |
| 6 | Model Academy, B.C. Road Jammu | U | 25 | 25 |
| | **Total** | | **100** | **100** |

**Tool Uses**

In the present study a self prepared questionnaire was used to get the information regarding the Health Awareness among the students. The questionnaire consists of 40 items having the responses as grouped on five point scale as Strongly Agree (SA), Agree (A),Indifferent(I). Disagree (DA) and Strongly Disagree (SDA) out of which one response was to be tick marked. The maximum score obtained would be 200 and the minimum score would be 40.

**Scoring of the Tool**

There are two types of questions negative questions and positive questions. The positive questions in which the scoring order is decreasing as 5,4,3,2,1 whereas, in negative questions the scoring by using five point scale and the relevant information was obtained. The percentage of scores on health awareness among students is given in Table-2

**Table-2**

**Health Awareness Among Students in Percentage**

| Response | Boys | Girls | Students in Rural Area | Students in Urban Area | Students in Pvt. Schools | Students in Govt. Schools | Total Students |
|---|---|---|---|---|---|---|---|
| High Awareness | 42 | 38 | 26 | 26 | 62 | 42 | 41 |
| Low Awareness | 48 | 40 | 24 | 22 | 42 | 32 | 47 |
| Total | 200 | 200 | 200 | 200 | 200 | 200 | 200 |

## Analysis of Data and Interpretation

In the present study of health awareness among the students Table clearly indicates that 47% of the total respondents are having low health awareness, whereas 41% of the total respondents have high health awareness. 42% of the boys have high health awareness as comapred to the girls which is 38%. Whereas, rural and urban area students have 26% health awareness. 62% students in privates schools have high health awareness as compared to students studying in government school which is 42%.

This is suggestive of the fact that private school students have more exposure and more knowledge and are having more health awareness. Whereas, government school students have less exposure and less knowledge and are having less health awareness. Jammu district is educationally backward area due to which individuals do not have proper facilities and exposure to the health awareness.

**The graphical representation percentage versus high and low health awareness is given in Figure 1**

Graph

The mean of the scores, standard deviation, standard error of mean abd t-ratios, between boys and girls of different type of schools of rural and urban areas of Jammu district are shown inTable-3

The calculated value of 't' between boys and girls is 0.06 which isles than 1.96indicating that the mean difference is insignificant at 0.05 level, which infers that there is no real difference between boys and girls, studying in government schools located in urban areas of Jammu district. The calculated value of 't' boys and girls is 2.9 which is more than 2.58 indicating that the mean difference is significant at 0.01 level, which infers that there is real difference between the two groups rural boys and girls studying in government schools. The mean value for boys is 97.7 which is higher than the mean values of girls which is 93.1. This indicates that the boys have more exposure than the girls studying in rural areas. This is because the parents of girls are more conservative, being from rural areas have less knowledge and exposure to the new educational setup due to which they do not allow their daughters to have free contact and exposure to the present knowledge.

The calculated value of 't' between boys and girls studying in privately managed schools is 1.91 which is less than 1.96 indicating that the mean difference is insignificant at 0.05 level, which indicates that there is no significant difference between boys and girls studying in privately managed schools located in urban areas of Jammu district.

The calculated value of 't' between boys and girls studying in rural areas is 1.76 which is less than 1.96 indicating that the mean difference is insignificant at 0.05 level, which indicates that there is no real difference between boys and girls studying in schools located in rural areas.

**Educational Implication**

The global health picture today shows that communicable diseases primarily affects an individual, especially those who are between the age of 14 to 19. There are diseases which passes from diseased person to healthy person through blood transfusion, sex, air, water and food. This phenomenon has and will continue to have grave consequences on the productivity and survival of the families. This is merely having the limited knowledge of health education at high school level. Since there is need for health awareness among the students, which is one of the important parameters in our rapidly changing societies. An attempt should be made on experimental basis to provide sex education to the students at secondary level so that students remain free from sexually transmitted diseases and AIDS. Therefore, Health Awareness Programme must be included in the curriculum at School, College and University levels. The quality and quantity of health services in the schools have a great bearing on the development of health of students. All efforts must be made to ensure that

## Table - 3
## Mean, Sd, SEM and t-Ratio of Gender, Locations and Types of Schools

| S. No. | Sex | Means | | | | Sd | | | | SEM | | | | t-Ratio | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Govt Urban | Govt Rural | Pri Urban | Pri Rural | Govt Urban | Govt Rural | Pri Urban | Pri Rural | Govt Urban | Govt Rural | Pri Urban | Pri Rural | Govt Urban | Govt Rural | Pri Urban | Pri Rural |
| 1 | Boys | 110.8 | 97.7 | 106.5 | 87.2 | 7.78 | 3.16 | 3.2 | 3.94 | 2.59 | 1.05 | 1.06 | 1.31 | *** | * | ** | ** |
| 2 | Girls | 110.7 | 93.1 | 103.7 | 90.1 | 5.95 | 4.39 | 2.1 | 3.36 | 1.98 | 1.46 | 0.7 | 1.12 | 0.06 | 2.9 | 1.91 | 1.75 |

* Significant at 0.01 level
** Insignificant at 0.05 level

the students do not become victims of any disease. The protective measures must be taken on large scale to maintain health of the students. The school must establish good quality health services to ensure a sound healthful environment. The Educational planners, curriculum framers, teachers and administrators should try to introduce health education programme in curriculum should try to introduce health education programme in curriculum and make Health Awareness among the adolescents about their good health and help to uplift the society as a whole.

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# A Comparative Study of Scientific Temper of Government and Private School Students in Kashmir

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**Shabir Ahmad Bhat****
**Firdous Ahmad Sofal*****

**Abstract**

*Science education came to be recognized around the world as an independent field of research. The concerns of this research are distinct from the concerns of science and those of general education. Its methods and techniques were initially borrowed from the science but new methods are being developed to the research questions. It has being an illuminating and rewarding experience to travel through the glimpses of world history and discovery of India and deriving rich inputs about scientific temper. Jawaharlal Nehru feels that scientific approach, the adventurous and get critical temper of science. The search for truth and new knowledge, the refusal to accept anything without testing and trial, the capacity to change previous conclusions in the face of the new evidence, the reliance on observed facts and not on pre-conceived theory, the hard discipline of the mind are not only the attributes necessary for application of science but for human application over life and its problem. The scientific approach should be a way of life, a process of thinking, a method of acting and associating with our fellowmen.*

**Key Words:** Science Education, Scientific Temper, Private School Students, Govt.School Students.

The scientific temper points out the way along which the man should travel. Questioning and supplicating by understanding is a Prerequisite of any method that is advisable in all walks of life. There is a general agreement among investigators that a person who has scientific temper (i) looks for the casual cause of events (ii) is open minded towards the work and opinion of others and towards information related the work and opinion of others and towards information related to his problem. (iii) bases opinions and conclusions on adequate evidence. In the world of today where knowledge is being multiplied exponentially, science education will not

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be able to justify itself by remaining merely contented with the objective of imparting a certain question of scientific knowledge, it is essential that the emphasis of science education should be on the development of abilities and disposition of mind rather than the transfer of dead subject matter. Research in science education should be urgently addressed to the problem of developing a scientific temper in the educant.

Scientific temper means a value frame, an outlook for the world and approach to ones world of deeds and actions. Scientific Temper is a value as well as a method of attaining human rights under humanism as the only value worth striving for in the trouble torn social formations from domestic to International levels. In our culturally plural society education should foster universal and eternal values, oriented towards the unity and integration of our people. Such education should eliminate obscurantism, religious fanaticism, violence, superstition and fatalism.

**Objectives of the study**

i. To compare the scientific temper of govt. school boys with govt. school girls on composite score of scientific temper scale.
ii. To compare the scientific temper of private school boys with private school girls on composite score of scientific temper scale.
iii. To compare the scientific temper of govt. school boys with private school boys on composite score of scientific temper scale.
iv. To compare the scientific temper of govt. school girls with private school girls on composite score of scientific temper scale.

**Hypothesis**

i. There is a significant mean difference between govt. school boys and govt. school girls on composite score of scientific temper scale.
ii. There is significant mean difference between private school boys and Private school girls on composite score of scientific temper scale.
iii. There is significant mean difference between govt. school boys and private school boys on composite score of scientific temper scale.
iv. There is significant mean difference between govt. school girls and private school girls on composite score of scientific temper scale.

**Sample**

The sample for the present study was collected from different govt. and private schools of Kashmir Valley. 120 [N=60 students (30 boys and 30

girls) reading in govt. schools in class 10th were selected randomly. [N=60 students (30 boys and 30 girls) reading in private school in class 10th were selected as a sample for the present study.

## Data Gathering Tools

To measure scientific temper, Nadeem's scientific temper scale constructed and standardized by Prof. N. A. Nadeem was used to collect the data.

## Statistical Treatment

i. Mean/S. D.
ii. t-test

## Analysis and Interpretation

In order to achieve the objectives formulated for the present study, the data collected has been tabulated as under.

**Table 1.0: Showing the comparison of mean difference between Govt. schools boys and govt. school girls on composite score of scientific temper**

| Group | N | M | S. D | t-value | Level of significance |
|---|---|---|---|---|---|
| Govt. Schools Boys | 30 | 18.03 | 2.00 | 1.6 | Not Significant |
| Govt. School Girls | 30 | 17.23 | 1.89 | | |

The perusal of table 1.0 shows that there is no significant mean difference between govt. school boys and govt. schools girls on 'composite score' of scientific temper scale. The calculated t-value (1.6) is less than the tabulated t-value at .05 and .01 level. Thus the hypothesis which reads as, there is a significant mean difference between govt. school boys and govt. school girls on composite score of scientific temper scale stands rejected.

**Table 1.1: Showing the comparison of mean difference between private school boys and private school girls on composite score of scientific temper**

| Group | N | M | S. D | t-value | Level of significance |
|---|---|---|---|---|---|
| Private School Boys | 30 | 28.53 | 2.24 | 3.08 | Significant at .01 level |
| Private School Girls | 30 | 26.46 | 2.96 | | |

The perusal of table 1.1 shows that there is a significant mean difference between private school boys and private school girls on composite score of scientific temper scale. The calculated t-value (3.08) is greater than the tabulated t-value at .05 and .01 level of significance. Thus the second hypothesis which reads as, there is a significant mean difference between private school boys and private school girls on composite score of scientific temper scale stands accepted.

**Table 1.2: Showing the comparison of mean difference between govt. school boys and Private School boys on composite score of scientific temper scale**

| Group | N | M | S. D | t-value | Level of significance |
|---|---|---|---|---|---|
| Govt. School boys | 30 | 18.03 | 2.00 | 15.61 | Significant at .01 level |
| Private school boys | 30 | 26.46 | 2.24 | | |

The perusal of table 1.2 shows that there is a significant difference between govt. school boys and private school boys on composite score of scientific temper scale. Since the calculated t-value 15.61 is greater than the tabulated t-value at .05 and .01 level of significance. Thus the hypothesis which reads as there is a significant mean difference between govt. school boys and private school boys on composite score of scientific temper scale stands accepted.

**Table 1.3:Showing the comparison of mean difference between govt. school girls and private school girls on composite score of scientific temper scale**

| Group | N | M | S. D | t-value | Level of significance |
|---|---|---|---|---|---|
| Govt. School girls | 30 | 17.23 | 1.89 | 17.65 | Significant at .01 level |
| Private school grils | 30 | 28.53 | 2.96 | | |

The table 1.3 shows that there is a significant mean difference between govt. school girls and private school girls on composite score of scientific temper scale. The calculated t-value (11.65) is greater than the tabulated t-value at .05 and .01 level of significance. Thus the fourth hypothesis which reads as, there is a significant mean difference between govt. school girls and private school girls on composite score of scientific temper scale stands accepted.

## Conclusion

1. It was found that there is no significant mean difference between govt. school boys and govt. school girls on composite score of scientific temper scale. Thus the hypothesis which reads that there is significant mean difference between govt. school boys and govt. school girls on composite score of scientific temper scale stands rejected.
2. It has been found that there is a significant mean difference between private school boys and private school girls on composite score of scientific temper scale. The mean difference favour private school boys. Thus the hypothesis which reads as there is a significant mean difference between private school boys and private school girls on composite score of scientific temper scale stands accepted.
3. It was found that there is a significant mean difference between govt. school boys and private school boys on composite score of scientific temper scale. The mean difference favours privat school boys. Thus the hypothesis which reads as there is a significant mean difference between govt. school boys and private school boys on composite score of scientific temper scale stands accepted.
4. It has been found that there is a significant mean difference between govt. school girls and private school girls. The mean difference favour private school girls. Thus, the hypothesis which reads as there is a significant mean difference between govt. school girls and private school girls stands accepted.

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# A Study of Adjustment of Male and Female Secondary School Teachers

**Najmah Peerzada***

The candid and courageous facing of reality, facing the actual conditions in one's own environment and being aware of the quality of one's own existing, capacities, is a prime characteristics of adequate personal adjustment. Adjustment processes concerning human beings have hand in glove relationship with human nature. It is adjustment, which is responsible for the organization of behaviour of life situations at home, at school and at work. We are deeply influenced by adjustment whether it is good or bad. Through out the world it has been the constant attempt of humans to adjust themselves with the changing circumstances. However, the concept of adjustment has attracted the attention of psychologists. They agree that a well adjustment person is very much a need because he is the one whose needs and satisfaction of life are integrated with the sense or social feeling and acceptance of social responsibility.

Adjustment is a process which helps the individual in bringing about harmony, stability and satisfaction in his environment viz, home, health, social, emotional and vocational conditions. It helps him to satisfy his needs and desires.

No discussion of the present educational scenario can be complete unless we focuss upon the teacher, the central figure in the whole field of education. The role of teachers at present in changing. Teacher has a distinguished position in the tripolar process of education. It is no exaggeration to repeat that it is the teacher around whom the whole educational process revolves.

The education commission (1964-66) remarks, of all different factors which influence the quality of education, the quality, competence and character of teachers are undoubtedly most significant. Therefore, collective and planned efforts should be undertaken to inculcate in the teachers the positive attitude towards their profession. It has been seen that positive attitudes and good personality make the task of a teacher more satisfying and rewarding. A teacher in the classroom creates an emotional climate just by being friendly or unfriendly, tolerant or critical, humble or sever. This affects students because they learn mostly by behaviour. A teacher who is himself fearful and tense and above all hostile towards his students can create worry and insecurity in the students. The learning is also influenced by the behaviour and personality of the teacher. The assessment of teaching success greatly interest the present day researches in the field

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of teacher education, and they are eager to find out the factors which influence the day to day performance of a teacher in the teaching-learning process. In addition to the factors responsible for teaching success, the other contingent variables which matter area product of the environment, and there are home, health, social and emotional conditions of the teachers or would-be teachers.

As far as the adjustment problems of the teacher are concerned, it is difficult establish whether one or the other area of adjustment is directly or indirectly responsible for their adjustment. It will be a tall claim to day that the heart of adjustment problems is precisely found either in home conditions, health situations, social position and emotional set up or occupational involvement.

**Need and importance**

The influence of adjustment on the life of the individual is tremendous. Infact adjustment has much in common in meaning and usage with the terms like theoretical, economical, aesthetical, social and religious values employed in several departments of human activity.

The education commission (1964-66) after reviewing the status and ser vice conditions of teachers have pointed out, of all the different factors which influence the quality of education and its contributed to national development, the quality, competence, personality and character of teachers are undoubtedly the most significant. Nothing is more important than securing a sufficient supply to high quality recruits to the teaching profession, providing them with the best possible professional preparation and creating satisfactory conditions of work in which they can be fully effective. We are, however, convinced that the most importance factor in the contemplated educational reconstruction is the teacher, his personal qualities, his educational qualifications, his professional training and the place that he occupied in the school as well as in the community. The reputation of a school and its influence on the life of the community invariably depends on the kind of teachers working in it. "Priority of consideration must therefore, be given to the various problems connected with the improvement of their status.

It is necessary to make an intensive and continuous effort to raise the economic social and professional status of teachers in order to attract young men and women of ability to the professional and to retain them in it as dedicated, enthusiastic and contented workers.

**Statement of the Problem**

"A study of adjustment of male and female secondary school teachers"

**Objectives of the Study.**

The following objectives have been formulated for the present study.

1. To study the adjustment of male and female secondary school teachers.
2. To compare male and female teachers on home adjustment.
3. To compare male and female teachers on health adjustment.
4. To compare male and female teachers on social adjustment.
5. To compare male and female teachers on emotional adjustment.
6. To compare male and female teachers on occupational adjustment.
7. To compare male and female teachers on over all adjustment.

**Hypotheses**

The hypothesis for the present study have been formulated as under:

1. Male and female secondary school teachers differ significantly on home adjustment.
2. Male and female secondary school teachers differ significantly on health adjustment.
3. Male and female secondary school teachers differ significantly on social adjustment.
4. Male and female secondary school teachers differ significantly on occupational adjustment.
5. Male and female secondary school teachers differ significantly on over all adjustment.

**Method and Procedure**

*Sample:*

100 secondary school teachers (50 male and 50 female) have been taken as sample subjects for the present study. The samples were taken randomly from their respective schools in district Srinagar.

*Procedure:*

In order to collect sample for the present study Bell's Adjustment Iventory (adult form) was administered. The Inventory was administered to the sample subjects in the respective institutions. The sample was collected from the various secondary schools of district Srinagar. The data was collected by applying random sampling technique.

*Statistical Treatment;*

The data was analyzed by applying 't' test for testing the differences between male and female secondary school teachers on the various areas of adjustment.

## Analysis and Interpretation of Data

**Table:I**

Mean comparison of male and female secondary school teachers on home adjustment (N=50 in each group)

| | Male | Female | 't' value | Level of significance |
|---|---|---|---|---|
| Mean | 6.98 | 7.11 | 0.36 | Not significant |
| S.D | 1.75 | 1.73 | | |

**Table: I**

Shows mean comparison of male and female secondary school teachers on their home adjustment. It is evident from the table that male and female secondary school teachers do not differ significantly on their home adjustment.

**Table: II**

Mean comparison of male and female secondary school teachers on health adjustment (N= 50 in each group)

| | Male | Female | 't' value | Level of significance |
|---|---|---|---|---|
| Mean | 6.88 | 7.84 | 2.5 | Significant at 0.05 |
| S.D | 1.38 | 2.45 | | |

**Table: II**

Shows mean comparison of male and female secondary school teachers on their health adjustment. It is obvious from the table that the two groups male and female differ significantly at 0.05 levels on their health adjustment. The table reveals that female teachers have more health problems than male teachers.

**Table: III**

Mean comparison of male and female secondary school teachers on Social adjustment (N= 50 in each group)

| | Male | Female | 't' value | Level of significance |
|---|---|---|---|---|
| Mean | 7.1 | 7.4 | 0.6 | Not significant |
| S.D | 2.13 | 2.13 | | |

**Table: III**

Reveals that the mean comparison of male and female secondary school teachers on their social adjustment. It is evident from the table that male and female secondary teachers do not differ significantly on their social adjustment.

Table: IV

Mean comparison of male and female secondary school teachers on emotional adjustment (N=50 in each group)

| | Male | Female | 't' value | Level of significance |
|---|---|---|---|---|
| Mean | 6.48 | 6.7 | 0.5 | Notsignificant |
| S.D | 2.20 | 1.62 | | |

**Table: IV**

Shows the mean comparison of male and female secondary school teachers on their emotional adjustment. It is evident from the table that male and female secondary school teachers do not differ significantly on their emotional adjustment.

Table: V

Mean comparison of male and female secondary school teachers on occupational adjustment (N=50 in each group)

| | Male | Female | 't' value | Level of significance |
|---|---|---|---|---|
| Mean | 6.92 | 7.1 | 0.2 | Notsignificant |
| S.D | 1.34 | 1.65 | | |

**Table: V**

Shows mean comparison of male and female secondary schoolteachers on their occupational adjustment. It is obvious from the table that two groups male and female do not differ significantly on their occupational adjustment.

Table: VI

Mean comparison of male and female secondary school teachers on over-all adjustment (N=50 in each group)

| | Male | Female | 't' value | Level of significance |
|---|---|---|---|---|
| Mean | 34.36 | 36.15 | 0.97 | Notsignificant |
| S.D | 8.8 | 9.58 | | |

**Table : VI**

Shows mean comparison of male and female secondary school teachers on their over-all adjustment. It is evident from the table that male and female secondary school teachers do not differ significantly on their over-all adjustment.

**Conclusion:**

The following conclusions were drawn for the present study:

1. There is not significant difference between the two groups male & female secondary school teachers on home adjustment.

2. Female secondary school teachers have more health problems than the male secondary school teachers.
3. Male and female secondary school teachers do not differ significantly on social adjustment.
4. There is no significant difference between male and female secondary school teachers on emotional adjustment.
5. There is no significant difference between male and female secondary school teachers on occupational adjustment.

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# Adjustment Problems of Male & Female Post Graduate Student

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## Introduction

Adjustment implies the process by which a person changes his behaviour to achieve a harmonious relationship between himself and his environment. The process by which the individual maintains a level of psychological and physiological balance between his needs and the circumstances that influence the satisfaction may be termed as adjustment.

Some psychologists regard adjustment as behaviour directed towards the reduction of tension. This means it is a matter of interaction between the individual and his environment. The adjustment thus means that characteristic way in which individual perceives, reacts to and satisfies the major problems of his life.

## Need and Importance

Since adjustment has a profound effect on the over all behaviour of individual whether male or female, it was decided to study the adjustment problems of the P.G students of Kashmir university .

Adjustment here has a special connotation representing its four aspects viz, HOME ,SOCIAL ,EDUCATIONAL and EMOTIONAL conditions as given in D.N.Srivastava and Govind Tiwari Adjustment Inventory .

The purpose of present study was to compare two groups of postgraduate students (male and female students of social science & science departments) on adjustment .

## Statement of Problem

"Adjustment problems of male and female postgraduate students – A comparative study"

## Objectives

1. To compare P.G boys and girls of faculties of science and social science on HOME, SOCIAL, EDUCATIONAL and EMTOINAL dimensions of adjustment and in aggregate .

## HYPOTHESIS

1. There is a significant mean difference between P.G boys and girls of

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faculty of science on HOME, SOCIAL, EDUCATIONAL, and EMOTIONAL dimensions of adjustment.

2. There is a significant mean difference between P.G boys and girls of faculty of social science on HOME, SOCIAL, EDUCATIONAL, and EMOTIONAL dimemsions of adjustment.

3. There is a significant mean difference between P.G boys and girls of faculty of science and social science in aggregate on various dimensions of scale viz.HOME, SOCIAL, EDUCATIONAL, EMTIONAL.

**Tool:**

Adjustment Inventory by D.N .Srivastava and Govind Tiwari.

**Statistical Analysis:**

For this purpose the data was subjected to [t] test and for establishing the adjustment problems of students , the collected information was properly arranged and was put into the following tables.

**Table-1.0**

**Showing the significance of mean difference between the PG boys and PG girls of Faculty of Science on Home dimension of adjustment**

| Group | N | MEAN | S.D | t value | Level of significance |
|---|---|---|---|---|---|
| P.G Boys | 40 | 11.3 | 0.158 | 1.16 | Not significant |
| P.G Girls | 40 | 11.85 | 2.15 | | |

**Table-1.1**

**Showing the significance of mean difference between the PG boys and PG girls of Faculty of Science on Social dimension of adjustment.**

| Group | N | MEAN | S.D | ' t' value | Level of Significance |
|---|---|---|---|---|---|
| P.G boys | 40 | 14.875 | 3.12 | 0.36 | Not significant |
| P.G girls | 40 | 15.125 | 3.04 | | |

**Table-1.2**

**Showing the significance of mean difference between the PG boys and PG girls of Faculty of Science on Educational dimension of adjustment.**

| Group | N | MEAN | S.D | 't' value | Level of significance |
|---|---|---|---|---|---|
| P.G boys | 40 | 5.2 | 1.876 | 0.38 | Not significant |
| P.G girls | 40 | 5.05 | 1.579 | | |

Table 1.3

Showing the significance of mean difference between the PG boys and PG girls of Faculty of Science on Emotional dimension of adjustment.

| Group | N | MEAN | S.D | 't' value | Level of significance |
|---|---|---|---|---|---|
| P.G boys | 40 | 21.8 | 4.91 | 0.49 | Not significant |
| P.G girls | 40 | 22.3 | 4.13 | | |

Table 1.4

Showing the significance of mean difference between the PG boys and PG girls of Faculty of Science on Total dimension of adjustment

| Group | N | MEAN | S.D | 't' value | Level of significance |
|---|---|---|---|---|---|
| P.G boys | 40 | 53.275 | 8.78 | 0.46 | Not significant |
| P.G girls | 40 | 54.125 | 7.54 | | |

Table 2.0

Showing the significance of mean difference between the PG boys and PG girls of Faculty of Social Sciences on Home dimension of adjustment.

| Group | N | MEAN | S.D | 't' value | Level of significance |
|---|---|---|---|---|---|
| P.G boys | 40 | 11.8 | 2.325 | 0.42 | Not significant |
| P.G girls | 40 | 12.05 | 1.766 | | |

Table 2.1

Showing the significance of mean difference between the PG boys and PG girls of Faculty of Social Sciences on Social dimension of adjustment.

| Group | N | MEAN | S.D | 't' value | Level of significance |
|---|---|---|---|---|---|
| P.G boys | 40 | 16.325 | 2.978 | 0.039 | Not significant |
| P.G girls | 40 | 16.3 | 2.714 | | |

Table 2.2

Showing the significance of mean difference between the PG boys and PG girls of Faculty of Social Sciences on Educational dimension of adjustment.

| Group | N | MEAN | S.D | 't' value | Level of significance |
|---|---|---|---|---|---|
| P.G boys | 40 | 5.7 | 2.002 | 0.76 | Not significant |
| P.G girls | 40 | 5.375 | 1.82 | | |

**Table 2.3**

**Showing the significance of mean difference between the PG boys and PG girls of Faculty of Social Sciences on Emotional dimension of adjustment.**

| Group | N | MEAN | S.D | 't' value | Level of significance |
|---|---|---|---|---|---|
| P.G boys | 40 | 21.975 | 4.748 | 0.97 | Not significant |
| P.G girls | 40 | 22.95 | 4.26 | | |

**Table 2.4**

**Showing the significance of mean difference between the PG boys and PG girls of Faculty of Social Sciences on Total dimension of adjustment.**

| Group | N | MEAN | S.D | 't' value | Level of significance |
|---|---|---|---|---|---|
| P.G boys | 40 | 56.35 | 8.976 | 0.09 | Not significant |
| P.G girls | 40 | 55.32 | 7.51 | | |

**Table 3.0**

**Showing the significance of mean difference between Science and Social Science students on various dimensions of adjustment.**

| Dimension | Group | N | MEAN | S.D | 't'value | Level of significance |
|---|---|---|---|---|---|---|
| Home | Science | 80 | 11.58 | 2.03 | 1.09 | Not significant |
| | Social Science | 80 | 11.93 | 2.06 | | |
| Social | Science | 80 | 15.0 | 3.08 | 2.83 | Significant at .01 level |
| | SocialScience | 80 | 16.31 | 2.85 | | |
| Educational | Science | 80 | 5.13 | 1.73 | 1.4 | Not significant |
| | SocialScience | 80 | 5.54 | 1.92 | | |
| Emotional | Science | 80 | 22.05 | 4.54 | .57 | Not significant |
| | SocialScience | 80 | 22.46 | 4.51 | | |
| Composite | Science | 80 | 53.70 | 8.18 | 1.65 | Not significant |
| | SocialScience | 80 | 55.84 | 8.27 | | |

**Interpretation and Discussion:**

The perusal of tables-1.0,1.1,1.2,1.3.show the significance of mean difference between postgraduate boys and girls of faculty of science on Home, social, educational, emotional dimensions of adjustment .Since the calculated 't' values [1.16], [0.36],[0.38], and [0.49] are less than the tabulated value at .01 and .05 level of significance. So the above tables reveal that

there is no difference between P.G boys and girls of faculty of science on Home, Social, Educational, and Emotional dimensions of adjustment. Therefore Hypothesis no.1 which reads as there is significance mean difference between postgraduate boys and girls of faculty of science on Home, Social, Educational and Emotional dimensions of adjustment stands rejected.

The perusal of tables-2.0,2.1,2.2,2.3.shows the significance of mean difference between postgraduate boys and girls of faculty of social science on Home, Social, Educational and Emotional dimension of adjustment. Since the calculated [t] values [0.42], [0.039], [0.76] and [0.97] are less than tabulated value at .01 and .05 level of significance. So the above tables reveal that there is no difference between p.g boys and girls of faculty of social science on Home, Social, Educational, and Emotional dimensions. Therefore Hypothesis no.2 which reads as there is significant mean difference between postgraduate boys and girls of faculty of social science on Home, Social, Educational, and Emotional dimension of adjustment stands rejected.

The perusal of table 3.0 shows the significance of mean difference between science and social science students on various dimensions of adjustment. viz Home- dimension of adjustment the mean difference is insignificant as the calculated t value [1.09] is less than tabulated [t] value at .05 and .01 level of significance. On Social dimension of adjustment the mean difference is significant as calculated t value [2.83] is greater than the tabulated [t] value at .01 level of significance. On Educational dimension of adjustment the mean difference is insignificant as calculated t value [1.4] is less than the tabulated [t] value at .05 level and .01 level of significance. On Emotional dimensional of adjustment the mean difference is insignificant as the calculated t value [.57] is less than the tabulated [t] value at .05 and.01 level of significance. Therefore the Hypothesis no.3 which reads as there is a significant mean difference between p.g boys and girls of faculty of science and social science in aggregate on various dimensions of scale viz Home, Social, Educational, and Emotional ,stands accepted for social dimension of adjustment and is rejected for Home, Educational, and Emotional dimensions of adjustment .

**Discussion:**

Post graduate male and female students of faculty of science and social science of university of Kashmir were found equally adjusted on different dimensions of adjustment viz HOME, SOCIAL, EDUCATIONAL and EMOTIONAL .But in aggregate the students of science and social science were found differently adjusted .

**Conclusion:**

1. No significant difference was found between postgraduate boys and

girls of faculty of science home, social, educational, and emotional dimension of adjustment.

2. No significant difference was found between postgraduate male and female students of faculty of social science on home, social, educational and emotional dimension of adjustment.
3. No significant difference was found between postgraduate male and female student in aggregate of faculties of science and social science on home, educational, and emotional dimensions, but there is a significant difference between postgraduate boys and girls in aggregate of faculties of science and social science on SOCIAL dimension.

**Suggestions for Further Research:**

1. For better adjustment of postgraduate students in the University of Kashmir, proper guidance should be provided to the students right from the school up to the university level.
2. In view of times and resources the study was limited to a small sample of students at postgraduate level in the university of Kashmir.
3. A comparative study of male and female students would be worthwhile for establishing adjustment problems which are common among both sexes. it would also highlight in what type of adjustment problems both sexes differ.
4. Comparative study on adjustment problems should be taken among various other faculties of the university of Kashmir.
5. Study may be repeated on a large sample.

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# Haunting Problems of Education among Gujjars and Bakarwals of Kashmir

**Mohd Sayid Bhat***

The state of Jammu and Kashmir is diverse and different in geographical and socio-religions and ethnic composition. It is an established fact that the developmental level of all the comprising sections of our state, submit a quite contrary picture. There are sections with sound economic base on the one side and on the other there is no dearth of social groups, hardly living hand to mouth.

Gujjars are one of the beautiful components of our social fabric who live sparsely throughout Jammu and Kashmir mostly in hilly areas. Physically robust and attitudinally hard worker, religious orthodox, economically backward and straight forward in dealings, simple in living and look and unfortunately far far behind in education. How can a progressive society come into existence if any of its planks is fragile? While discussing the various tribes of Kashmir, Sir Walter Lawrence, in his book *The valley of Kashmir* refers to Gujjars as:

> "They are all Musalman by religion; they are a fine race of man, with rather stupid faces and large prominent teeth. Their one thought is the welfare of the buffaloes. They are an ignorant, inoffensive and in their relation with the state are indefinitely very honest."

Gujjar and Bakarwal is a deprived and under privileged community of Jammu and Kashmir state. The community got Schedule Tribe status in 1991 in the state. More than 11 percent population of the stat belongs to this community. The literacy rate of Jammu and Kashmir State in 2008 is more than 65 percent but in Gujjar and Bakarwal community it is only 32 percent. Government of India with state governments is fighting very hard for universalisation of education to enhance 100 percent literacy rate but the target can not be achieved unless this community gets various special provisions of education in the state as this community is still living a *Stone Age* life. Effective steps should be taken to transform this community with their attitude, outlook and approach toward education.

Gujjar and Bakarwal Education in Jammu and Kashmir State is beset with a multiplicity of problems some of which are really complex and need a deliberate, concerted, systematic and immediate approach for their solution. But one is pained to see what is actually being done to solve some of them. The real issue is not touched upon, rather the complex problems

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are over simplified and solutions offered which are only palliatives with out dealing with underlying causes.

The government seems determined to do some thing concrete in the direction of universalisation of education. When we consider it, it implies education of every educable child. It is significant for the Gujjar and Bakarwal community for among them the problem is more acute. National Policy of Education 1986 has stated that, "In our national perception EDUCATION is essentially for all. This is fundamental to our all round development, material and spiritual." This emphasises the equity in education. It must be accessible to every section of the community without any distinction. It may imply that hither to educationally disadvantaged section such as Gujjar and Bakarwal community has an assurance that it would be available and accessible to them. The NPE 1986 has given special place to education to SC's and ST's. Besides general policy enunciating measures and directives to rejuvenate education in general, it states some special measures for the education of disadvantaged when it stated the following measures to bring immediate, positive and fruitful changes in backward sections of our population:

- Priority shall be given to open new primary schools in tribal areas under Tribal Welfare Schemes.
- The socio cultural milieu of ST's has its distinctive characteristics including their own spoken languages. This underlies the need to develop the curricula and devise instructional materials in their own languages at the initial stages with arrangements for switching over to the regional language.
- Educated and promising youth shall be encouraged and trained to take up teaching in tribal areas.
- Residential schools shall be established on large schools to admit more tribal children in schools.
- Incentive schemes shall be formulated for the tribal people keeping in view their special need and life style. Scholarships for higher education shall emphasize technical, professional and Para professional courses. Special remedial courses and other programmes to remove psycho social impediments shall be provided to improve their performance in various courses.
- Anganwadi and adult education canters shall be opened on priority basis in areas predominantly inhabited by ST population.

Keeping in view the above recommendations of NPE 1986, it is clear that educational advancement of Gujjar and Bakarwal children is undoubtedly an important pre-requisite of the general welfare and upliftment of the entire state of Jammu and Kashmir. Education promotes a better understanding and appreciation of the problems and relations affecting them. It enables them to adopt a modern and better way of living

with their full participation in the government plans and programmes for economic, social, political and cultural progress that the society as a whole is making. Amongst all the schemes for the tribal welfare in the stat of Jammu and Kashmir, Gujjar and Bakarwal education should remain topmost priority.

Since independence, the problems of development of the tribal communities especially the problems of Gujjar and Bakarwal community have been seriously taken into consideration for the upliftment and amelioration of their conditions. It is significant that our constitution has given due care while protecting the various rights of this community. It has taken care of the educational, economic and political aspects of this community. These constitutional provisions have mutually reinforced Tribal Panch Sheel approach. However, it is little unfortunate that certain important consideration like developing Gujjars and Bakarwals along with their own lines of genius and optimum utilization of available natural resources in the form of land and forest as not given due consideration. These are nodoubt the people who are educationally and economically very weak but they are living in the richest areas of the world [in forest areas]. The emphasis is more on giving monetary help rather that using their traditional skills at available natural resources.

With this realisation, Article 46 of the Indian constitution under the Directive Principles of State Policy, enjoins upon the government both state and central for promoting with special care the educational and economic interests of the weaker sections of the people and in particular of the Schedule Castes and Schedule Tribes. In order to translate into actions the spirit of the constitution, increased provisions have been especially made in successive plans for the educational development of the tribal people. But it is felt by all the concerned that the Gujjar and Bakarwal tribe of Jammu and Kashmir state has not been able to take full advantage of the opportunities for which educational progress among this tribe has not been possible up to our expectation .

No doubt, the state government provides assistance to this section of population in the form of free uniforms, mid day meals, reading and writing material, scholarships, hostels and other facilities. There is reservation of seats both in academic as well as in employment side. But in spite of these provisions this community is still groping in darkness of age old apathy and inertia towards education. The reasons deserve immediate considerations. Some of them as found by the investigator while doing his study are poverty, superstition, geographical location, superiority complex of non tribals and so on. But it was also found that the most important hurdles in the direction of Gujjar and Bakarwal education in the state are:

1. Language difficulty [medium of instruction] and textbooks.
2. Want of right type of teachers [teachers with in the community].

If suitable steps are taken to eradicate above two difficulties considerable improvement in the sphere of education of Gujjars and Bakarwals could be achieved.

Mother tongue plays an important role in the life of an individual. It has number less emotional attachments and cultural ties with the people. Due to its importance, this factor should be given due cognizance in the planning and execution of educational programmes. But owning to the following difficulties it is not so easy and practicable in case of Gujjars and Bakarwals of Jammu and Kashmir.

- The vocabulary of Gujjari Language is not as rich as other languages in the state.
- This section of population is scattered thinly through out the state.
- They are residing in hilly areas.
- They constitute only 11 to 12 percent of state population.
- Gujjari language has no authentic scripts.
- This language is not equipped to provide technical, scientific and advanced education. And
- Imparting education in Gujjari Language would incur a huge expenditure which government may ill effort.

However, there is considerable thinking that the Gujjar and Bakarwal children should be imparted education in nursery classes in Gujjari language.

But this has not been possible due to the above handicaps and it is widely felt that on account of the drawbacks existing in primary education which is the gateway of all types of education, Gujjar and Bakarwal tribe is lagging behind in education.

Under these circumstances, Article 350-A of Indian Constitution lays down that, "It shall be the endeavour of every state and of every local authority with in the state to use the mother tongue as a medium of instruction for the students at the primary education level." Dhebar Commission has suggested the policy that, "A possible compromise seems to use to be that in the first two years, lessons should be imparted invariably in tribal dialect so as to make them understandable to the tribal children, we have found during our tour that the tribal children pick up their subjects much more easily when the subjects are taught even verbally in their own dialect." Since preparation and publication of text books in such language is difficult, the maximum that can be done in this line is to bring out *primers* in those languages which have direct concern with Gujjari language like Punjabi, Urdu, Phadi, Postoo, Awani and others to write in Gujjari scripts. But it should be so prepared as to enable the Gujjar and Bakarwal children to learn the Gujjari language with ease. Though a good percentage of their words, idioms and phrases may be used and materials for texts should be

adopted from their own environment and culture. This will slowly introduce modern and scientific civilization and to facilitate a slow and steady switch over the Gujjari medium of instruction. Recently Tribal Research and Cultural Foundation [TRCF] in Jammu and Kashmir has shown that person having technical know-how and proficiency in the dialects along with phonetic and philosophical knowledge in the Gujjari language are very few. Hence, the better method for approaching this crucial problem would be preparation of hand books in this language. These hand books on the latest linguistic and phonetic principles are to be shaped in such manner that they can be immensely helpful in using the nationalized text books successfully and effectively by our teachers. There may be two kinds of guide books:

- For overcoming language difficulties. And,
- For making the attitude of teachers favourable and sympathetic towards Gujjar and Bakarwal life and culture.

Some times it is found that teachers, workers and officers maintain their supremacy over the Gujjars and Bakarwals and show themselves as self appointed benefactors. These do not help the situation. Thus, in order to bring about the fostering clear understanding, friendly spirit, fellow feeling and better appreciation of tribal culture among the teachers and field workers, suitable hand books should be brought out for them by the Tribal Welfare Department in this state without any delay.

Teachers are pivotal and catalytic agents in the process of transformation of Gujjar and Bakarwal education. All efforts for bringing about desirable changes in this community may go in vain if teachers are not appointed within the Gujjar and Bakarwal community. It was observed that in Gujjar and Bakarwal schools only 15 to 20 percent teachers are from this community and among which more than 76 percent are untrained. If qualified persons are not found within this community then right type of teachers [who have positive and favourable attitude towards this community] should be posted in Gujjar and Bakarwal Basties. With the existing conditions, it would be useful if after undergoing general training for teaching, teachers with favourable attitude towards Gujjar and Bakarwal life and culture are selected to learn their dialect and then they be deployed in those schools where Gujjar and Bakarwal students are enrolled. This orientation training should be organised as inductive courses for them before they enter into a new and different type of life. This will provide rudimentary knowledge of Gujjari language, customs and ethnography for sympathetic understanding and appreciation of Gujjar and Bakarwal way of life and their problems. The teachers appointed and deployed in the Gujjar and Bakarwal Basties should be given special incentives and facilities like special allowances, free residential quarters which may go long way in promoting education in Gujjar and Bakarwal areas of Jammu and

Kashmir.

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# Role of Teacher in the Light of Sri Aurobindo Gosh's Educational Philosophy

**Prof. G. M. Malik***
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*"Good teachers are costly, but bad teachers cost more"*
*Bob Talbert*

"Of all modern Indian writers Aurobindo – successive poet, critic, scholar, thinker, nationalist, humanist – is the most significant and perphaps the most interesting ... In fact, he is a new type of thinker, one who combines in his vision the alacrity of the West with the illumination of the East. To study his writings is to enlarge the boundries of one's knowledge... He is a Yogi who writes as though he were standing among the stars, with the constellations for his companions".[1]

Born in Calcutta, then the capital of British India on 15 August 1872, Aurobindo Ackroyd Ghose – the Western middle name was given to him by his father at birth – was the third son of his parents – Dr.Krishnadhan Ghose and Swarnalata Devi. The honorific 'Sri' was traditionally used as a mark of respect or worship forming an integral part of his name. In Sanskrit, the word Aurobindo means 'lotus'. Lotus grows on the swampy soil, but the mud or dirt does not stick to it. Aurobindo's father chose this name for him, thinking that it was unique, but he little suspected that in the language of occultism, the lotus is the symbol of divine consciousness.

Sri Aurobindo Ghosh has made the most significant contribution to the world of knowledge through his integral approach. He was as much as man of action as a man of thought. His Integral approach finds place for thought as well as for action.The worst evil in human life, according to him,is onesidedness.

Integral or true education, according to Sri Aurobindo Ghosh, is not only spiritual but also rational, vital and physical. To quote Sri Aurobindo Ghosh, "That alone will be true and living education which helps to bring out full advantage, makes ready for the full purpose and scope of human life, all that is in the individual man, and which at the sametime helps him to enter into the right relation with the life, mind and soul of the people to which he belongs and with the great total life, mind and soul of the humanity of which he himself is a unit and his people or nation a living, a separate and yet inseparate members".[2]

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Sri Aurobindo Ghosh engaged himself for [illegible] years out of his seventy-eight years in the practice of yoga and developed a philosophy of complete affirmation, affirming the reality of the world from the ultimate standpoint and the meaningfulness of socio-political action from the spiritual standpoint. He was sovereignly aware of the significance of variations in the concept of man, his life and destiny, of the nation and of humanity and the life of human race, which get reflected in the respective philosophies of education, and developed his scheme of integral education rooted in "The developing soul of India, to her future need, to the greatness of her coming self creation, to her eternal spirit".[3] India, according to Sri Aurobindo, has seen always in man, the individual a soul, a portion of the Divinity enwrapped in mind and body, a conscious manifestation in Nature of the universal self and spirit.[4] In his educational philosophy, Sri Aurobindo upheld the basic but commonly forgotten principle that it is the spirit, the living and vital issue that we have to do with, and there the question is not between modernism and antiquity, but between an imported civilization and the greater possibilities of the Indian mind and nature, not between the present and the past, but between the present and the future.[5] In devising a true and living education, three things according to Sri Aurobindo—the man, the individual in his commonness and his uniqueness, the nation or people and universal humanity—should be taken into account. Accordingly, Aurobindo conceived of education as an instrument for the real working of the spirit in the mind and body of the individual and the nation. His thought of education for the individual will make its one central object the growth of the soul and its powers and possibilities, for the nation will keep first in view the preservation, strengthening and enrichment of the nation—soul and its Dharma (virtue), and raise both into powers of the life and ascending mind and soul of humanity. And at no time will it lose sight of man's highest object, the awakening and development of his spiritual being.[6] A concept underlying the true and living integral education.

Integral education is conceived as a process of organic growth, and the way in which various faculties could be developed and integrated is dependent upon each child's inclination, rhythm of progression and law of development, *Swabhava* (inherent disposition) and *Swadharma* (inner nature). Integral education is not conceived as a juxtaposition of a number of subjects and even juxtaposition of varieties of faculties. The idea is to provide facilities for varieties of faculties, varieties of subjects and various combinations of pursuits of Knowledge, Power, Harmony and Skill in works. These facilities are so provided that they could be made use of by each student and the teacher so that a natural process of harmonious

development could be encouraged.

Sri Aurobindo Ghosh speaks the three principles of true teaching that provide a sound basis of a system of natural organization of the highest processes and movements of which the human nature is capable. These principles are formed on the basis of the theory and practice of integral education. These are:

The first principle of true education is that 'nothing can be taught'. The teacher is not an instructor or taskmaster, he is a helper and a guide. His business is to suggest and not to impose. He does not actually train the pupil's mind, he only shows him how to perfect his instruments of knowledge and helps and encourages him in the process. He does not impart knowledge to him; he shows him how to acquire knowledge for himself. He does not call for the knowledge that is within, he only shows him where it lies and how it can be habituated to rise to the surface.

The second principle is that 'the mind has to be consulted in its own growth'. The idea of hammering then child into the shape desired by the parent or teacher is a barbarous and ignorant superstition. It is he himself who must be introduced to expand in accordance with his own nature. There can be no greater error than for the parent to arrange beforehand that his son shall develop particular qualities, capacities, ideas, virtues or be prepared for a prearranged career. To force the nature to abandon its own dharma is to do it permanent harm, mutilate its growth and defence its perfection. It is a tyranny over a human soul and a wound to the nation, which loses the benefit of the best that a man could have given it and is forced to accept instead something imperfect and artificial, second role perfunctory and common. Each one has in him something divine something his own, a chance of perfection and strength in, however, small a sphere which enables him to take or refuse. The task is to explore it, develop it and use it. The chief aim of education should be to help the growing soul to draw out which is best and make it perfect for a noble use.

The third principle of education is to 'work from the near to far', from that which is and which shall be. The basis of a man's nature is almost always, in addition to his soul's past, his heredity, his culture, the soul from which he draws sustenance, the aim which he breathes, the sight he sounds, habits to which he is accustomed. It is God's arrangement that should belong to particular nation, age, society, that they should be children of the past, possessors of the present, creators of the future. The past is our foundation, the present our material, the future our aim and summit.[7]

Sri Aurobindo Ghosh laid great stress on the 'initiative power'. He considered that teacher is an ideal or liberal who encourages the development of this power by "Eliminating the admixture of the error, caprice and biased fancifulness", and follow the child "To grow into the way of his own perfections".[8] According to him, the teachers "First work is

to interest the child in life, work and knowledge, to develop the instrument of knowledge with the utmost thoroughness, to give him the key of the medium he must use. After words, the rapidity with which he will learn will make up for any delay in taking up regular studies, and it will be found that where now he learns a few things badly, then he will learn many things thoroughly well".[9]

Sri Aurobindo Ghosh believed that the teacher is not an instructor or task-master, he is a helper and a guide. His business is to suggest and not to impose. He does't actually train the pupils mind, he only shows him how to perfect his instruments of knowledge and helps him and encourages him in this process. He does't impart knowledge to him, he shows how to acquire knowledge that is written, and he shows him where it lies and habituated to rise to the surface. Teacher is the ultimate guide and yet the teacher plays an important role in arousing the educand towards the God within. Sri Aurobindo Ghosh emphasizes an inner relationship between the educator and the educant.

Sri Aurobindo Ghosh aspired that the teacher should be able to eliminate his ego, master his mind, develop an insight into human nature and to progress in impersonalisation. The most important thing in a teacher is not only the knowledge but also the attitude, competence, character and commitment. An intellectual excellence is not sufficient without or development of other aspects of personality. The teacher should have the capacity to project himself to the educand. He should be absolutely disciplined and posses an integrated personality. According to him the teacher is expected not only to inculcate knowledge but also to encourage creative thinking. He has to become more of an advisor, a partner to talked to. He has to help seek out conflicting arguments rather than handout readymade truths. For this, he will have to devote more time and energy to productive and creative activities.

Thus, the teacher is the most important element in the entire educational system. By coming into the contact with the teacher, student can develop a set of desirable and useful social habits, attitudes and interests. Teacher can help this process by constantly observing the student and devising new ways and means of solving the various problems that afflict the child. The teacher should always concentrate on motivating the students to use their own intelligence thereby enabling them to solve their own problems. It is essential for the teacher to present a good model in his own behavior to create an atmosphere of cooperation and brotherhood. The teacher should examine the child's habits and the characteristics of his personality and simultaneously he must try to discover the conditions under which the child can be usefully influenced. The intelligent and devoted teacher make use of such methods by which he can successfully teach various subjects to the students. He realizes that many things unconsciously

influence the students in the school. Therefore, the school and the teacher must aim at creating a desirable social environment and at evolving proper educational techniques.

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# Curriculum Frameworks in Shaping Student's Assessment

Dr. Y Sreekanth*

**Abstract**

*Education being a subsystem of Society has to be dynamic in order to keep pace with rapid emerging globalization. In spite of the Socio-economic, Cultural, Linguistic and Religious diversities, India has come up with four National Curriculum Frameworks in the last 30 years, which reflect its ethos and concerns over different periods of time. While the first three Curriculum Frameworks emphasized on behaviouristc approach to learning the Curriculum Framework 2005 has come up with Constructive Philosophy, which may bring in sea change in students assessment.*

*In a country where student evaluation determines teaching and learning, whether this change will bring in a paradigm shift is to be seen. As the earlier Curriculum Frameworks met with little success, whether Curriculum Framework 2005 will remain a rhetoric or reality depends on how it is received in schools. In this context a critical analysis of the Curriculum Framework in shaping students assessment is made.*

**Introduction**

Education is a dynamic activity and it and it has to undergo constant changes from time to time in line with the changes in the society, as it is a sub-system catering to the needs of the system. While the Country's human resources are plying to the needs of not only domestic, but also international markets, it is highly imperative that the changing approaches towards education must also become integral and relevant practices in the country.

In spite of the diverse languages, cultures and traditions the Country came up with its first ever National Curriculum in the form Framework "The Curriculum for the Ten-Year School -A Framework" in the year 1975. This was followed by three Curriculum frameworks, National Curriculum Framework for Elementary and Secondary Education -A Framework, 1988, National Curriculum Framework for School Education, 2000 and National Curriculum Framework, 2005.

The National Curriculum Frameworks play a crucial role in providing direction to the system as outlined in the first Framework "The School Curriculum of a Country, like its Constitution, reflects the ethos of that Country as also its Chief concerns". In the present paper a detailed

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discussion is made on the changing student evaluation of strategies through successive Curriculum Frameworks, the need for equipping the teachers, the growing expectations of Policy markets from teachers as evaluators and the prevailing system of evaluation.

**The Curriculum for the Ten-Year School –A Framework (1975)**

The first Curriculum for School Education focused on the problem of examination as it states, "In the present system either there is promotion for all students without examination or there is an annual examination covering the courses inducing the child to cram a large mass of half-digested information in a short time and thereafter forget it conveniently". This mainly highlights that whether the evaluation is not done or if done it is highly a stereotyped one. The concern is also expressed over the inability of the system to prepare the teachers in enabling on the right evaluation practices in internal evaluation to ascertain the progress of students. On the other hand the annual public examination are considered as a magical solution to the learning assessment, and considering cramming of information as equal to performance.

In also provided solution to this problem in the form of "bringing out clearly the specific goals of education in the form of expected outcomes of learning at each stage and then in relation to these outcomes, after courses of studies in the form of sequences of units. So the emphasis was laid on product assessment, through processes were also considered relevant through employing variety of tools and techniques. The main philosophy that governed the evaluation at this juncture was behaviorism and taxonomic analysis of learning behaviors by Bloom and his colleagues and this had a tremendous impact.

The NCERT played a stellar role in this campaign and so did some of the school boards. Workshops were held all over the country to re-train a large number of paper setters, evaluators, and moderators (Amrik Singh et. at, 1997). On the whole, it can be safely said that the objective of remodeling question papers was achieved to a substantial extent. After a few years when it was recognized that by and large the new style of setting question papers had been internalized by the school system, it was no longer found necessary to go on with these training programmes. Even a cursory look at the question papers set in most school boards makes it clear that both teachers and students- this sequencing is not without a deeper meaning - have accepted the new system and it is here to stay.

Even one can go to the extent of saying that if there is one examination reform, which has succeeded during recent decades, it was the attempt to redesign question papers at the secondary level so as to make them more balanced, more valid and reliable. The Ramamurthy committee, which reported in 1990-91, went into this question in some detail and gave data

in regard to the status of implementation of examination reforms at the school level.

The teachers and paper setters were expected to prepare questions on all above-mentioned instructional objectives to enable the students to attain different competencies in the cognitive domain. They were supposed to train the students on different instructional objectives through internal evaluation, so that they would also perform well in Public Examination. However, this was not fulfilled due to many reasons.

1. The textbook were not prepared to elicit response on higher-level instructional objectives.
2. The textbook did not consist of good exemplary material on higher-level instructions objectives in the form of questions.
3. The rigidity established in the system through which questions were always required to be posed from the textbooks only and not beyond, constrained for preparing questions on higher order questions such as understanding and application.
4. The Preparation of questions of knowledge level (under Bloom's taxonomy knowledge represents only information seeking through recall and recognition) is very easy compared to preparation of other types of questions, and often teachers resorted to this.
5. The training provided by Organizations such as NCERT did not prove to be effective as the short duration training programmes to teachers educators without proper follow up was a half hearted attempt.
6. There was no percolation downwards as the teacher trainers who obtained training from National Level Organization such as NCERT, could not get down this to the level of practicing teachers, due to inadequate attention paid by educational administrators and inability of the teacher trainers to carry the training forward.
7. Excessive emphasis on external examination leading to little or no internal assessment lead to loss of familiarization with the evaluation processes of the teachers.
8. Students' performance was mainly towards obtaining high scores/ marks and for this many students and sometimes even teachers resorted to guide books. These books provided readymade question-answers, and as a result this, it lead to disempowerment of teachers in preparing higher order questions.
9. The negligence of evaluation aspects in pre-service and in-service training programmes was prominent. In pre-service programmes there is less practice on preparation of items/questions and more of theoretical exposition. The in-service training programmes

were not conducted at mass level and if conducted they failed to be effective.

For all the reasons mentioned above the rote memorization factor became quite rampant in the system of education, leading deterioration in the quality. Though the Curriculum Framework (1975) laid emphasis on internal assessment "as it takes root, and personal biases leading to the lowering of standards are brought under check, the external public examination even at the end of Class X will be become redundant and should be abolished."

The caution expressed in the above statement about "personal biases of the teachers" from the point of view of educational administrators and policy makers did not make the scheme of internal evaluation on par with the public examination, as they were not reported in the year-end public examinations. As a consequence of this the ideal of abolishing public examination at the end of class X never got fulfilled to this day.

Further in the Curriculum Framework (1975) as outlined, "evaluation in order to be useful, should have the following characteristics.

1. It should gradually cover a number of objectives and the entire course of studies.
2. Evaluation should be done with a variety of tools and techniques.
3. Evaluation should be at several points of time.

All the above characteristics have however failed to realize the objective of bringing about a transformation in student evaluation as highlighted earlier in decreasing the impact of rote memorization. The emphasis on reliable and concrete evidence of the student attainment meant that whatever was taught needed to be precisely responded. This is possible with items/questions on knowledge than other higher-level objectives.

The coverage of number of instructional objectives was neglected for the reasons mentioned earlier the coverage of entire course of studies lead to considering textbook as a soul document of knowledge (here nor used mere information). This further encouraged from partial to complete rote memorization. Students evaluation to have various tools and techniques and at several points of time were never fulfilled as excessive importance was given to written public examination at the year-end.

**The National Curriculum for Elementary and Secondary Education (1998)**

This framework recognized the drawbacks of the National Curriculum (1975), as the implementation remained uneven among states and due to lack of comprehensive plan to link the curriculum changes with the processes of teaching and learning, teacher training and examination reform. It also explains about mismatch between the curricular objectives and the actual transaction of the curricular in the classroom that led to widespread disparities in the levels of attainment of pupils and in the

classroom of pupils and in the standard of education among schools in different parts of the Country.

The curriculum Framework (1988) reiterated many aspects of evaluation enunciated in the early document and introduced the term continuous and comprehensive evaluation by including scholastic and non-scholastic aspects of education, and considered assessment as a valid and reliable measure of student development and a powerful instrument for improving teaching and learning. Outcomes (MLOs) for each area of learning at all stages of education. It also provided for applicability of the Curriculum to all learners, irrespective of their modes/channels of learning in order to ensure comparability of attainment and to facilitate horizontal and vertical mobility of the learners.

The Minimum Learning Outcomes was not a new concept and it was highlight even in the report of Education Commission (1964-66), which envisaged the need to "define National Standards at three levels-end of the Primary Stage (Class VII), end of lower Secondary Stage (Class X) and at the end of the Higher Secondary stage (Class XII). Further it advised that "each State Government should prescribe the standards to be attainted at each of these three levels in view of local conditions and stage of development reached". This was further accentuated by NPE- 1986 through the need for "defining minimum levels of learning at all stages of education....and establishing an appropriate machinery for paving the way for the emergence of norms of comparable competence across the Nation".

The Minimum Levels of Learning that was introduced continued to influence the teaching-learning process for the next two decades. This is again focusing more on the end outcomes of learning attainment. It was an ambitious initiative to identify "a range of Mastery level attainment in each area of learning defined in an empirical manner through empirical distribution of marks and range of marks were to differ from subject to subject".

What is more arbitrary is considering minimum levels of learning outcomes relating to scholastic (cognitive) areas of learning as aspects comprising hierarchical levels of mental processes appropriate to age levels and abilities of the learners. This is nothing but to view that learning is a goal directed activity and the environmental aspects have very little influence on learning outcomes and age as a primary criterion for identifying the learning outcomes.

The Common Core component was necessary initiative to maintain the physical, socio-cultural, economic and emotional integrity of the Nation. But many States in the Country adopted/adapted the textbooks prepared at the National Level by NCERT. As a result of this, the necessity to include local elements was also largely neglected or missing. The objective of "evaluating the attainment of the learner in each area of learning at each

stage of school education" could also be not realized to the extent as it was enshrined, as scholastic aspects continued to dominate the scene of education due to insufficient measures taken up for implementing the scheme whole heartedly.

Also the Curriculum Framework (1988) considered that "Evaluation should be used as an effective mechanism for the benefit of the learners, teachers and parents so that timely corrective and remedial measures could be taken to ensure that the minimum levels of learning laid down are attained by one and all learners. But the problem of learning occurs due to inability of learning to obtain the minimum levels is a gross misconception and often learning doest not take place in the desired direction due to reasons other than that of students inability. These may be physical facilities, teaching methods and environmental condition etc. before all these are made available adequately, trying to do remediation will be merely finding fault with the fruits of a tree rather than tracing them from roots.

Another drawback of the issues raised in the document of National Framework (1988) is that informal means of evaluation need to be adopted in order to reduce the anxiety and fear experienced by the learners arises only at implementation stage. As for example the Non-detention policy that was given so much importance, prescribing that till the completion of Primary, no child should be detained was not well received by the teachers. Often teachers considered Non-detention as no teaching and as a result of this when the child went to Class VI from Class V, very low learning forced for detention, as Non-detention did no exist at this level. This makes it clear that unless proper implementation strategies are evolved the well laid out policies would also not succeeded.

The need for introduction of grades as highlighted in Curriculum Framework (1988) is still the more important. But viewing this as Grades Vs Marks is bringing a dichotomy between theses two. This could have been explained through an approach wherein convincing that both are based on a scale and what is required is a shorter scale, with letter grades/ alpha-numeric of a system and performance descriptors through which the assessment of the performance of a student could be better expressed. As the teachers and general public would not accept sudden changes, it is necessary to inform them that grading which is no different from making is only acceptance of the failure of the system to measure the performance of students precisely and that is why they are put under broad categories.

The document's observation that design of paper(s) will have to be improved for elimination of excessive elements of choice factor and subjectivity and the de-emphasis of memorization is mutually self-contradictory. Though elimination of chance factor through posing questions from a particular portion of text need to be discouraged, the

subjectivity also stems from providing different kind of answers for the same question by the students all of which can hold good. When uniform kinds of answers are expected from students, it can come only from rote memorization of text, rather than under subjective interpretation of the facts.

The reform with regard to the introduction of credits for inclusion in the cumulative certification and provision for improvement in grades (Curriculum Framework, 1988) is another exceptional measures of this framework. It also suggested for introduction of semester system from the secondary stage. The system failed to implement this, though the textbooks were prepared at Higher Secondary Level for half-yearly term, they were taken very routinely without implementing them with the essence for which they were formulated.

The Curriculum Framework (1988) also spoke about establishing Education Testing Service at the district level with the primary objective of technically assisting the school administration to compare the achievement level of different Institutions. This was also intended to mainly to determine the learning achievements of pupils at different levels, to make inter-group comparison, and to identify disparities in performance by schools in a district and to gather feedback for designing remedial measures. However this particular argument defeats the very purpose of education, which should aim at bringing excellence out of each individual rather than providing a competitive environment not only among students but also among educational Institutions. This situation is not only peculiar to India but prevalent in a highly developed Country such as USA. A retired Teacher of USA had this to say, with for a question asked in a discussion forum by the author with regard to the status of evaluation.

Our National Government has created what is called, "NCLB," (No Child Left Behind). Which is explained in great detail to every state government, which in turn is explained to every superintendent of every school in our USA and then it's the principal's job to explain the importance of it to his/her teachers, until every teacher in the USA understands that Federal Funding will not continue unless the public school's end of year CRT tests have passing results. Every school has a scale or score they are graded on and the test results are a major part of that score.

The examinations are the most important according to the Federal Government, but I retired from teaching 2 years ago because I was watching teachers have nervous breakdowns over the stress of teaching of the tests, and not teaching kids. I believe an education is what we all need to make this world a better place to live in, but until the tide turns and teachers are not made to feel like they will be fired of their kids don't pass the CRT tests, the pressure will continue. I was born in 1946 and I didn't have to take an end of year test every year which very soon every child in school

from kindergarten up will be taking an end of year test. I did fine, am not illiterate can write okay, read okay, take care of myself and my family, drive and follow the laws, worked for 30 years as a teacher of many grades, and yet I never had an end of year test. Perhaps in time it will be discovered that tests don't make the child, and that children still need recess like I had when I was growing up. You asked a very good question and since I am so passionate about this topic, I was eager to answer!

**The National Curriculum Framework for School Education (2000)**

This framework reaffirmed the major concerns raised in NPE 1986 and National Curriculum for Elementary and Secondary Education" A Framework, 1988. It starts with the statement of Mahatma Gandhi from Harijan that "Real education has to draw out the best from the boys and girls to be educated. This can never be done by patching ill-assorted and unwanted information into the heads of the students. It becomes a dead weight crushing all originality in them and turning them into mere automata". Though it makes a good beginning by stating the fundamental problem facing the system of educational system at school level, the addressing of the problem is no different from what has been stated in the earlier documents.

It also makes a reference with regard to Child as a constructor of knowledge and it says "In constructivist setting, the learners have autonomy for their own learning, opportunities for peer collaboration and support, occasions for the learner generated problems that drive the curriculum, time for self-observation and evaluation and outlets for reflection". The constructivist teacher it says "follows no rigid prescriptions for successful teaching, acts as a facilitator of meaning-making rather than leader of all learning, adapts to a variety of contexts affecting schooling, and is deeply involved in the processes related to the purpose of education".

However it stops here, and does not recommend for any specific measures for implementation of the constructivist philosophy. The basic assumptions of constructivism (Merrill, 1991) are as follows:

- Knowledge is constructed from experience
- Learning is a personal interpretation of the world
- Learning is an active process in which meaning is developed on the basis of experience.
- Conceptual growth comes from the negotiation of meaning, the sharing of multiple perspectives and the changing of our internal representations through collaborative learning
- Learning should be situated in realistic settings. Testing should be integrated with the task and not a separate activity.

All these assumptions are negated when the NCFSE 2000 also says "the quality of a school or educational system, in real sense has to be defined

in terms of the performance capabilities of its students". These kinds of contradictions which put teachers in dilemma as to whether they should strive for bringing about uniform standards or try to base the learning on realistic settings nullifies the impact of each other. It also considers assessment as synonymous with evaluation. However they are not the same as outlined by Binghamton University, State University of New York, which say that while assessment is ongoing, improvement to learning, evaluation is final, to gauge quality.

So what is required under constructivist approach is assessment and not evaluation. Also while at one place the document says that inter-learner comparison should be minimized at another place it talks about analysis and interpretation of evidences through all the three different modes i.e., self referenced, criterion reference and norm referenced. Other important change that could be seem in the NCFSE 2000 are viewing non-scholastic aspects as crucial for the development of child and it comes them as con-scholastic aspects. There was not much deviation in evaluation procedures and it reiterates of what the earlier curriculums have spoken about, except for a reference of constructivism.

**The National Curriculum Framework (2005)**

In the above backdrop of evaluation practices the National Curriculum Framework 2005 must be viewed so as to see what significant changes it proposes in the teaching-learning processes and how the system of assessment is different from the earlier ones and what is expected of teachers ion students assessment. In the foreword itself, the Chairman of the Steering Committee of NCF 2005, Yash Pal refers to the Curriculum transaction process as the basis of student assessment as "we have bartered away understanding for memory bases, short term information accumulation..... They (Students) would not be traumatized by the excessive burden of information that is required merely for a short time before the hurdle race we call examination".

Like all the earlier curriculum, NCFSE 2005 also strongly speaks about rote memorization, curriculum load and making examination more flexible. It questions quality becoming synonymous with performance in examination. It also highlights social context of learning and learning as an activity, which is largely influenced by the environment or surroundings. It says that Curricular needs to emphasize the processes of constructing knowledge. But how different this curriculum framework is in bringing about the much-enunciated reforms must be clearly delineated through various measures it has suggested for improving functionality of the system.

The basic philosophy at the very beginning it speaks about is that of tagorian. Under this more than that of competition with one another to

development of individual to full potential is given primacy. The NCFSE 2005 says that the implies to teach everything arises from lack of faith in children's own creative instinct and their capacity to construct knowledge out of their experience. It conceives education as a mutual endeavor in genuine construction of knowledge, where in teachers and students are partakers. The earlier assumption of students as passive receivers of information is to be done away with and their ability to contribute to the knowledge development is considered as vital.

At the very outset all its five guiding principles for curriculum development to remove the burden and stress in learning are directed to bring changes in the very assessment procedures and practices. These are

1. Connecting knowledge to life outside the school
2. Ensuring that learning shifts away from rote methods
3. Enriching the curriculum so that it goes beyond textbooks
4. Making examinations more flexible and integrating them with classroom life and
5. Nurturing an overriding identity informed by caring concerns within the democratic polity of the Country.

The first principle leads to learning and assessment, which has relation with immediate surrounding, rather than making the students aware of certain concepts, facts and figures. This makes the teaching easier, but assessment difficult, as the student has to be assessed in varied conditions and varied methods rather than the prescribed ones as outlined in the earlier curriculum largely. The success of this kind of teaching learning depends on teachers who will now have to grapple with new paradigm shift, and mend their very attitude to learning and assessment procedures and practices.

The second principle, which tries to do away with rote methods, was also highlighted earlier, but what makes this different is a shift in the approach from behaviorist to constructivist approach. Though NCFSE 2000 also made a reference to this approach, what makes this curriculum different is that is based completely on the constructivist approach. However its implementation at what stage of school education is not clear in NCF 2005 and whether child should be equipped with the social understanding before he can embark on recreating his knowledge or child should be allowed to have his own construction of knowledge from the beginning. If the first method is to be adopted then learning and assessment will be no different from what it is till now, and if the second methods is to be followed then it may go against the fundamental philosophy of constructivism, which says that knowledge construction is only possible after the student is acquainted with minimum level of information and understanding.

The third principle of going beyond curriculum has been emphasized

earlier also, but for this again there is resistance from various quarters such as teachers, parents, students, question paper setters and evaluators in public examinations. Though over a period of time complete rigidity has lessened such as people now, no more raise voice against giving different number other than what is given in textbooks, in subject like mathematics. But again what is not clear is that whether it can go beyond textbook or syllabus or both. Here again it will have great impact on students' assessment.

The forth principle makes the examinations highly flexible and the NCF 2005 comes out with certain concrete measures to realize this. While it is imperative to make examination flexible as even sporadic occurrences of suicides due to failure in examinations needs to be stopped, there is no systematic study however whether they are really stressful to large sections of students, and are we not diluting the spirit of competitiveness which is an inevitability in the context of large population of students competing for limited opportunities available especially at secondary level and above. Integrating assessment with classroom life means that assessment has to be internal rather than external. There are many issues, which need to be addressed with its introduction such as different kinds of assessment, the periodicity of assessment and developing faith in internal assessment among parents and students etc.

The last principle places greater responsibility on teacher and student community to deal with the current concerns, which are often debatable. While it is necessary to provide this kind of education to the students in a participative democracy, it should be seen how far they will be translated with true spirit, without biases and how they will be assessed.

Though NCF 2005 emphasizes on internal assessment over that of public examination, it does not however focus on frequent testing. It says, "Routine activities and exercises can be employed to assess learning." But this may be nothing but a precept, which is not to be practiced. As experience in the field of classroom teaching leads to the conclusion that the schools which strive for results as indicators of performance, supervision as an essential ingredient for making effective teaching may not come up with feasible solutions if everything is completely left to the freewill of a teacher. Where the motivation levels are high, the success will resounding and otherwise they doom towards failure.

While it assumes that process assessment is an important as product assessment, it does not ignore the influence of product assessment and the need for working towards set objectives as it says, "well designed assessment and regular cards provide learners with feedback, and set standards for them to strive towards." However this may again create a feeling that all learning could be reduced to assessment and progress cards, and the aim of students must be to strive for marks.

In comparison to the previous document, the constructivist philosophy transcends throughout the document. If one takes a true constructivist view, as suggested in the NCF 2005, there will have to be a quantum change in assessment in comparison with behaviorist approach that was followed in the earlier three Curriculum Framework. Though the earlier Framework also spoke about liberating the students from the clutches of examination system, making evaluation friendlier and student centered, still they did nit come up with a drastic change in the assessment procedure. While under behaviorism evaluation is based on attaining pre-determined objectives, in constructivism assessment is highly subjective. Constructivism also focuses on open-ended learning experience wherein the operations and outcomes are not easily measurable, as in behaviorism. This is because they are not same fro each learner. It will be interesting to see how far the teachers will cope up with the call, which if implemented in true spirit will lead to going back to the system of assessment as propounded by Tagore, and also that of ancient "Gurukul" system.

However to put it realistically, the philosophy is more suitable where the trust is reposed on the teacher, the teacher is equipped with different methodologies and analytical abilities to grasp the variations among-students, the systemic and functional flexibility is present and where the teacher student-ratio is not unwieldy. It requires attitudinal change among all stakeholders i.e., educational administrators, parents and the teachers themselves who have to perceive the learning in a very different context, as constructivism maintains that learning outcomes are not always predictable and instruction should help and not control learning. Ultimately "Constructivism is a learning theory, more than a teaching approach" (Wilkinson, 1995).

All this puts big question marks as to

1. Are we in for a fundamental and revolutionary change in our approach to education
2. Is this a practical and feasible philosophy
3. Are our teachers ready to accept the new challenges posed by the policy makers
4. Will the system facilities for the smooth transformation from behaviorist to constructivist philosophy
5. Can we convince the parents and students about the need for this change
6. Are we nor going back from our Civilizational advancement where cutthroat competition is here to stay?

Conclusion

All these questions and many more came up as the new National

Curriculum Framework for School Education 2005 unravels. In fact there will be more questions than answers as within a period of 30 years the Curriculum Framework has taken a 'U' turn on many issues such as objectivity vs subjectivity. While the emphasis of the first curriculum framework was on hoe to systematize the pattern of student's assessment and make it more scientific, the curriculum framework of 2008 takes an altogether different perspective and focuses on students-centric assessment, which inevitably varies from one to one. Whether these kinds of changes make us believe that everything is at a state of flex, should be seen.

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# Teaching & Learning – Engineering Education in India

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**Abstract**

*This paper describes a study to investigate action learning and evaluation in improving teaching quality on the basis of analysis of NAAC. The study also focuses on the contribution of evaluative practices to the building of staff and organizational capability and the improvement to program performance.*

## Teaching / learning and evaluation:

It deals with the efforts of the institution in providing appropriate teaching/learning experiences to learners and also looks at the adequacy and competency of the faculty who handle the various programmes of study, as well as the efficiency of the evaluation methodology of the institution

## Criteria

- Judging students' knowledge and bridge/remedial courses
- Teaching/ learning process
- Use of new technology in teaching and co-curricular activities
- Examination process
- Innovative evaluation methods
- Recruitment of faculty and faculty development programmes
- Evaluation of teaching, research and work satisfaction of faculty
- Monitoring and rewarding successful teaching innovation

## Present Scenario of India

**Calculating weight ages [1]**

| Criteria | | University | Affiliated/ constituent colleges | Autonomous colleges |
|---|---|---|---|---|
| Teaching/learning and evaluation | | 250/1000 (25%) | 350/1000 (35%) | 450/1000 (45%) |
| **Criteria** | **Key aspects** | **University** | **Autonomous college** | **Affiliated /constituent college** |
| Teaching/learning and evaluation | 1. Admission process & student profile | 20 | 30 | 30 |
| | 2.Catering to diverse needs | 20 | 35 | 45 |

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| | | | | |
|---|---|---|---|---|
| | 3.Teaching-Learning process | 90 | 170 | 270 |
| | 4.Teacher Quality | 60 | 65 | 65 |
| | 5. Evaluation process & reforms | 50 | 40 | 30 |
| | 6.Best practices in teaching learning and evaluation | 10 | 10 | 10 |
| | Total | 250 | 350 | 450 |

**Improvement in teaching-learning strategies**

The attention of the institutions became focused on priorities and responsibilities, especially with reference to teaching/learning as their primary mission. In the scheme of assessment of NAAC, the criterion teaching /learning and evaluation carries the maximum weight age. It gave a positive stimulus to institutional attention and oriented institutions so as to improve their quality of teaching/learning by going beyond the routine examination-oriented outcome. The fact that teaching/learning has to be equal t or more important than research became well understood - in universities as well. Improved teaching methods using educational technology, projects and student seminars, providing computer skills, encouraging co-curricular activities, and incorporating community orientation were observed

**Campus Concept:**

The campus integrates the tools for effective teaching, learning, evaluation and communication. Main components used are the campus wideness, technological facilities, global access, digital class rooms, class facility, library facility, hostel.

**Class (should may):**

The technology has entered the classroom. An innovative way the class room teaching has morphed, with the blackboard being replaced by e-board and papers and pens replaced by laptops and the limited knowledge of the books.

Features of classroom

E-board

* Supported by Webster software
* For interactive chalk less writing
* Wireless lapel microphone to pickup audio
* Ceiling mounted camera to capture video
* Multimedia projector for display

**Teachers should have: -**

- Innovative way of teaching with technology enabled education system
- Burden of spending lot of time in drawing complicated figures can be reduced to a greater extent.
- Traditional class rooms were place and time bound and source of knowledge and learning
- Professor + supplementary tools = learner centric, open and flexible education that is opportunity for focused learning
- To listen remember, synthesize and interpret knowledge is drudgery but with digital tools will be effective because there is a chance to repeat any number of time and practiced till it is perfected.
- The lectures sessions can be interactive and digitized
- The teachers can access the performance of the students online uniformly and with transparency
- Information beyond the syllabus can be shared in small duration.
- Most important of all make best teachers which is measured in terms of money

**Students should be:**

- Need to take class notes are avoided thus enabling the student to focus on the topic being taught.
- Efficiency increases since student's attention is 100% on teachers lecture rather than on his writing notes and spellings
- Students at various can swap their notes in no time
- Instant availability of any material in the classroom
- Programming subjects can be learnt 'by doing' in the class room rather than in the Laboratory

**Examination should be:**

There is a demand of more transparent and reliable system of examinations, evaluation and reporting. It also noticed that the examination primarily tests the memory of the students. In fact examinations must be of the type that promotes creativity among the teachers in setting questions and to evaluate the creative ability of the students, which is the need of the hour in this highly competitive and globalised world.

**Renewal of evaluation system:**

The examining bodies should have a reliable evaluation system and timely declaration of results. After the initial evaluation of the answer paper a centralized core group can draw random sample from each batch and carry out independent evaluation.

**E-Examination:**

Technology has revolutionized education and every aspect of it in a big way. The computers can automate marking is one of the attractions of putting assessments online.

**Benefits of online examination:**

The two primary benefits of administering examination online are: -

a) The large cost savings of the substitution of machines of labor in grading and
b) The potential for enhanced student learning due to more frequent assessment

Another significant benefit is immediate feedback to students on home assignments and examinations.

**Conclusion:**

In this knowledge era the facilities provided to the students would help them to become globally competitive. Quality students are generated who can meet the challenging requirements of the emerging knowledge economy. The standard and exposure of the students to information increases and the quality of students coming out of the portal of the any other reputed established university in the world.

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# Kashmir Himalayan Lakes: Ecological Status and need for Conservation

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**Abstract:**

*The lakes of Kashmir Himalaya are undergoing rapid changes in their ecology in response to undesirable human activities. As a consequence, the useful life of the lakes has considerably reduced. They show many signs of stress such as regular occurrence of algal blooms, excessive growth of invasive species and decline in biological diversity. In some lakes the quality of water has deteriorated with deep water zones developing anoxic conditions especially in summer. The paper highlights the importance of lakes as source of potable water. Various environment issues are identified and suitable strategies for conservation and management of lakes are discussed.*

**Key words:** Kashmir Himalayan lakes, environment issues, conservation, management

## Introduction

The Kashmir Himalayan region abounds in natural freshwater lakes situated within the altitude range of 1580 m and 4000 m. These ecosystems have variable morphological features and their water quality and sediment chemistry differs significantly. The lakes support diverse biological populations mostly dominated by macrophyte vegetation. The lakes in Kashmir are used for recreation, drinking water supply, fishery, irrigation and navigation. A large number of aquatic plant species growing in these lakes are regularly harvested and used as vegetables, fodder for cattle, and for preparing mats and thatching material. The general perception in Kashmir, as elsewhere in India, is that the lakes could be subjected to any amount of stress without disturbing their stability. It is not entirely true. Over the years, due to intense land use and urbanization the regenerative capacity and stability of Lake Ecosystems have been greatly impacted. The situation is further exacerbated by ever increasing human population coupled with urgent needs for economic development. The lakes of Kashmir are fast becoming the most threatened ecosystems in response to rapid changes that are taking place in the society around them. Chemically active

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run-off from the agricultural fields, unchecked erosion of hill slopes by human encroachment, deforestation of catchment, flow of human wastes and other undesirable activities are causing increased silting and excessive nutrient loading in the otherwise healthy ecosystems, which served people of Kashmir fairly well in the past. Increase in population created pressure on the land forcing the farming community to search for additional cultivable land. Perhaps one of the easiest ways was to drain the lakes and use their peripheral areas for cultivation. Encroachment on lakes especially in the urban areas is very tempting; floating islands have been created for vegetable cultivation and for other commercial activity (Gopal, Zutshi, Chet, 2003).

In the recent past excessive exploitation of water bodies especially in the valley have drastically changed the entire ecological scenario. The lake water is being utilized in an uncontrolled manner for different purposes such as bathing, washing, for recreation, for feeding cattle and for growing vegetables by reclaiming water areas. These activities have completely destroyed the quality of water and reduced the useful life of many lakes.

Lakes and rivers are intricately connected with the life of people in Kashmir valley; they have been living close to these water bodies from times immemorial. The Neolithic settlement in Burzahoma overlooking the northern shores of Dal Lake is about 5000 years old. The early settlers not only used Lake Water for drinking purpose but also survived on the lake produce especially fish and water fowl. In the past, a healthy relationship existed between the people and the water bodies on which their very survival depended. It was the responsibility of the society to ensure that water quality is not harmed in any way. With the supply of piped water for domestic consumption in many areas of Kashmir the entire situation has drastically changed with people using water bodies for dumping wastes and garbage.

The lakes of Kashmir are to be considered as critical regional resource that need to be protected, conserved and managed for future generations. In the coming years the water crisis is going to be for real, therefore, it is time that we understand and evaluate various factors that are responsible for pollution of lakes and other water bodies in the state.

**Lakes of Kashmir**

Kashmir, which is partly a flat-land valley (covering ~ 35% area) and partly mountainous landscape (Pir Panjal and Himalayan ranges) constitute one of the three regions of the Jammu and Kashmir State. But in terms of aquatic resources Kashmir is extremely rich, comprising of lakes, streams, springs, rivers and wetlands. The lakes of Kashmir are divided into three category (i) The Valley lakes (ii) The Forest lakes and (iii) The Mountain lakes (Zutshi and Khan 1978). Valley lakes are situated within the valley

of Kashmir are mostly concentrated in the northeastern part. Only a few lakes are present in the southern part, situated at a slightly raised elevation within the Pampore Karewa belt. The distribution pattern of the lakes within the valley is perhaps governed by the past geological changes of the region. It is now established (Agrawal 1988) that the valley of Kashmir has come into existence as a result of desiccation and shrinkage of an ancient lake, which once occupied the entire floor of the valley. The "Karewa Lake" as it is often referred to, was formed as a result of the trapping of drainage from the Himalayan watershed by the rising of "Pir Panjal" mountain range. The presence of long stretches of lacustrine deposits in the form of "Karewas" which are about 3.5 million years old (Lower Karewas) are a testimony to the fact that the valley has passed through numerous geological upheavals associated with gradual draining of the lake. Tilting of the valley floor towards northeast forced the shifting of the already existing lake to that part of the valley. The reduced water body was subsequently known as the "Nagum Lake." Further drying and desiccation of the "Nagum Lake" resulted into smaller fragments giving birth to present day lakes and wetlands of Kashmir valley (Bhatt 1982). The emergence of River Jhelum from the foot hills of Pir Panjal about 80 thousand years back accelerated the process of draining of the ancient lake. The scope of the present paper does not allow a detailed discussion of the origin of the lakes of Kashmir, suffice to say that these ecosystems are quite ancient even if their origin may be linked to River Jhelum (Terra and Paterson 1939).

For decades, Dal Lake has been backbone of tourism in the state. Anchar Lake not only supported the local fishing community but also acted as an important communication link between different parts of the valley. Hokarsar is a protected water body, which is used as a refuge for migratory birds during their seasonal migration. A large number of villages have come up along the shores of many lakes viz., Manasbal, Waskur, Gozham, Ahansar, Khanpur, Naranbagh, Trigam, Telwansar and a few others. In Pampur region, Bodsar and Pashakuri are closely linked with the local economy e.g., harvesting of fodder, fish etc. Wular Lake, designated as a Ramsar Site, is one of the largest freshwater lakes in India. It is interesting to note that during the past centuries when Kashmir reeled under severe famine conditions due to frequent flooding of arable land people survived on *Trapa* (Singhara) fruit, which grows in large quantities in Wular Lake. The state government used to derive sizeable revenue from the lake produce. The lake is also a large source of fish, besides being important flood reservoir. Haigam Lake, an important bird sanctuary situated in the close vicinity of Wular, is sometimes referred to as its satellite lake. There are a few more small sized water bodies in the valley but these are not of much importance. In this paper, the term Lake is used in the same way as

has been traditionally used in Kashmir since long. No attempt is made to differentiate between deep lakes, shallow lakes and wetlands.

So far only one forest Lake viz., Nilnag, situated in Yusmarg area has been described. The lake is situated at about 2200 m altitude i.e., nearly 600 m above the average altitude of valley lakes. Nilnag was probably formed as a result of the damming of a river, which flowed from south to north. The damming must have occurred due to earthquake (Khan and Zutshi 1980). Although a part of the catchment is still under forest cover, extensive farming in the surrounding area especially in the southeastern part by local people is causing immense damage to the ecosystem. The villagers make multiple use of the lake e.g., fishing, bathing, washing, weed harvesting etc. The water out flow from the lake is used for irrigation by the villages situated at the lower altitudes. It is most likely there are a few more Forest Lakes present in the Pir Panjal mountains, which are waiting to be discovered and investigated.

Mountain lakes are basically high altitude lakes situated beyond 3000 m, both in the Pir Panjal and in the Himalayan ranges. They have been formed as a consequence of receding glaciers at the end of the last ice age, which in this part of the world is supposed to has taken place around 18,000 years ago. As a result of weathering glacial valleys were formed that subsequently got filled with melt water from the surrounding glaciers giving rise to lakes of different shapes, dimensions and depths. The excess water from precipitation and glacial melt either seeps underneath or else overflows. Some mountain lakes have been formed by the deposition of glacial moraines across their line of drainage. The small sized lakes are also known as mountain "tarns", the glacier carved bowls are cirques and the lakes thus formed are sometimes referred to as "cirque lakes".The mountain slopes of high altitude lakes are dotted with glaciers of different thickness and size depending on the extent of annual precipitation and temperature cycles. Very little vegetation is generally present on the high mountain slopes except for a few herbs and grasses. Being away from human settlements, the mountain lakes are not exposed to the type of the impacts that are normally observed in the valley and the forest lakes. However, mountain lake ecosystems are very sensitive to changes occurring in their watersheds especially changes connected with climate and glaciers are particularly important. One of the major threats to mountain lakes is the flow of glacial silt from the surrounding mountains, which gradually fills them up as the weathering of the mountain progresses. The fascinating features of mountain lakes are changing color of their waters, which vary from blue, deep blue, bluish-green to emerald. This is due to the impact of varying quantities of fine glacial material in the lake water that distorts the wavelengths of light, absorbing some and reflecting others.

From the Pir Panjal mountain range only two lakes, Alapther (also

known as the frozen lake by local people) and Kounsarnag (Vishnupad) have been studied. However, from the Himalayan region, Sheshnag, Gangabal, Nundkol, Vishensar, Kishensar, Tarsar, Gadsar, Yamsar, Zumsar and Tulyan, have been investigated in greater detail ( Vass et al. 1989, Zutshi 1991). There are numerous mountain lakes in Kashmir, which still remain unexplored.

**Lake Environment**

The lakes of Kashmir valley differ in their morphometric features, depicting significant variations in size, maximum depth and in the nature of their basins. A large number of lakes such as Bodsar, Trigam, Naranbagh, Waskur, Pashkuri are of smaller area (< 50 ha), Dal and Wular are comparatively larger in size with an area exceeding 1000 ha. The maximum depth in case of smaller lakes does not exceed 3 m. Manasbal with an area of 281 ha is ~ 13 m deep, the maximum depth of Dal and Wular lake is about 6 m. Summer thermal stratification is observed in Manasbal with warm monomictic circulation pattern. Majorities of valley lakes either stratify temporarily during Summer months with unstable thermocline or are polymictic. The Secchi visibility presents a lot of variations within the lakes depending on their close proximity to inflow channels. Presence of inorganic suspended material in water is a common feature, biogenic turbidity is rare occurence. The lake waters have alkaline reaction with pH in the range of 7.5 to 8.6. High pH in excess of 9.0 is reported close to macrophyte beds especially in summer when conditions for photosynthesis are quite favourable. Surface waters are usually well-oxygenated (Oxy.Sat. > 100%); anoxic conditions have been reported from deep-water zones during summer stratification especially in Manasbal Lake. Divalent cations are in excess of monovalents except in Trigam Lake where monovalents dominate. Formation of marl crust on the leaves and stems of many macrophyte species is quite common. However, the absence of limestone benches around the lake shores and presence of high colloidal suspensions of calcium carbonate producing lake whitening are absent thereby suggesting that the valley lakes may not be true marl lakes. Phosphorus and nitrogen levels of lake water remain well within the accepted limits except in case of Trigam, Telwansar, Waskur and Shiekhsar (Sumbal) lakes. In backwaters and side channels of Dal Lake P and N levels are also quite high. It is well known that the frequency of water renewal within the ecosystems have direct bearing on the extent of nutrient enrichment. Drainage lakes have high degree of water renewal. Trace metals are generally in low concentrations except for Zn, Fe and Mn. Lake sediments are rich in organic matter, inorganic constituents being on the higher side in samples collected close to inflow channels. The biological communities are dominated by macrophyte vegetation of moderate to low diversity.

Stands of mono-species vegetation [illegible] interfering with fishing and recreation. In lake waters with moderate to high Secchi transparency, *Myriophyllum spicatum*, *Potamogeton [illegible]us*, *P. pectinatus* and *Chara* spp. are present in high density, in-disturbed waters *Ceratophyllum demersum*, *P. crispus* and *P. puscillus* are the main components of the submerged community. Turbid waters support vegetation mainly represented by *Nymphoides peltatum*, *Trapa natans*, *Potamogeton natans*. Along the silted shores of the lakes *Typha angustata*, *Phragmites australis*, *Sparganium erectum* are quite common. *Nelumbo nucifera* covers large areas of moderately shallow regions of lakes especially that of Dal and Manasbal, where local cultivators spread it through vegetative means because of its high commercial value. *Nymphaeae mexicana*, a hybrid exotic species, is extensively propagated for its use as green fodder and for laying floating islands. Another invasive species, *Salvinia natans* is threatening many lakes and wetlands in Kashmir due to its rapid spread. Recently two new invasive species, *Azolla pinnata* and *Eichhornia* (water hyacinth) have been reported to occur in Dal lake.

Diatoms dominate the phytoplankton population and rotifers the zooplankton population of the lakes. In polluted lakes, blooms of blue green algae and euglenoids (imparting red colour) are quite common. Periphytic algae population constitutes an important contributor of primary production.

The environment conditions of forest lakes are not much different from those of valley lakes except for the occurrence of frequent algal blooms. Dominance of macrophyte vegetation by floating species especially *Polygonum amphbium* and *Nymphoides peltatum* is an important feature of Nilnag lake. Lake Waters are usually turbid, anoxic conditions are common in hypolimnetic zone and dimictic thermal stratification is a characteristic feature.

In comparison, mountain lakes present entirely different environment conditions, their waters have low nutrient concentrations, surface waters are well oxygenated, low biological density with high species diversity is a common feature and these ecosystems continue to have low pollution levels (Vass et al. 1989, Zutshi 1991). Mountain lakes are directly dependent on precipitation and snow cover melting in the watershed. Significant changes in Lake Levels are quite prominent e.g. in Alipather Lake.

**Major Issues**

Except for mountain lakes, both the valley and the forest lakes are undergoing rapid alterations in their environment conditions. As a result they may be included under the category of "threatened ecosystems", in need of urgent conservation and management measures.

The environmental issues are:

i) Erosion of lake catchment as a result of vegetation removal, deforestation, agriculture and horticulture activities, establishment of human settlements, excessive use of pesticides, chemicals and fertilizers etc.
ii) Flow of untreated municipal sewage, solid waste and kitchen refuse. In Dal Lake additional source of pollution is from floating islands and houseboats.
iii) Impairment of water quality impacting various uses such as drinking, bathing, recreation etc.
iv) Reduction in water volume and lake depth due to excessive flow of silt and deposition of decaying vegetation.
v) Useful life of the lakes reduced as a result of filling by sediments and vegetation.
vi) Excessive growth of macro-vegetation
vii) Presence of many invasive species
viii) Decline in biological diversity
ix) Illegal encroachment on lake area
x) Conversion of open water area into built area

**Conservation and Management**

The need for restoration and conservation of lakes of Kashmir Himalayan region arises because of the inability of these ecosystems to operate in self-sustaining ways. The damage inflicted by undesirable human activities have almost completely disturbed the self-repair process of the lakes. It is unfortunate that during the past years the magnitude of the damage inflicted on lakes and other aquatic ecosystems of the state have been underestimated with the result that the situation has now reached alarming proportions. Water diversion and abstraction for agriculture has starved lakes of dependable water supply, which is otherwise required for various biological functions, including dilution of nutrient levels. Today the Kashmir Himalayan lakes are threatened ecosystems. There are a number of constraints and limitations within which various restorations and conservation measures can operate. One has to understand and accept the fact that once a lake is polluted it is not possible to bring it to its original pristine state. It is therefore, absolutely essential to spell out restoration objectives in clear terms without any ambiguity. There is nothing like offering a restoration package, every lake is different and therefore, requires different approach. A lake is essentially a dynamic system in which numerous biological and metabolic processes are operating and therefore needs to be treated as a living system. It is crass ignorance to think that we know everything about the way a lake ecosystem functions and it is possible to conserve and manage it through physical measures alone. We still do

not fully understand the mechanisms that control [illegible]cal, chemical and biological processes in lakes. [illegible]utions, models or strategies that could be applied to [illegible]d lakes without collecting base line information on various parameters. Only a multi-disciplinary approach would stimulate and synergize cross-fertilization of ideas. There is need to blend scientific and technical strategies based on ecology, environment engineering, biology, economics, forestry and water management.

It is interesting to note that the state of Jammu and Kashmir is perhaps one of the first states in India to have recognized the importance of preservation of environment especially the aquatic resources and as a first step towards this direction a high level State Board for Ecology and Environment was constituted way back in 1976. The Board was chaired by the then Chief Minister. Many experts were invited to give their suggestions on various environmental issues confronting the state especially in the areas of tourism development, urban expansion and water pollution. In 1977 a consultancy firm, Enex of New Zealand was commissioned to prepare a Detailed Project Report (DPR) on Conservation and Management of Dal Lake. The final report was submitted to the state government in 1978, which suggested various measures to reduce pollution levels of the lake in order to improve its general environment. It is unfortunate that the good work done during early eighties could not be continued due to various political, administrative and other considerations. Despite spending huge amounts of money the Dal lake Development Project did not achieve much in terms of enhancing the quality of the environment or extending the useful life of the ecosystem (Zutshi 2004). It is time that the state government starts looking beyond Dal Lake. Many water bodies are under going rapid deterioration in their water quality and changes in biological communities. Conservation and management plans need be prepared for these ecosystems before it is too late. Since showcasing of various achievements by the Dal Lake Authority have failed to convince local people, stakeholders and lake users, it is time that the government takes serious note of the lacunae and introduce necessary measures to set things right. Recently, the Chairman of the Parliamentary Committee, who along with other members visited Kashmir to evaluate the work being done on the conservation of Dal Lake project, observed that," there has been no sustained and serious effort to clean the lake during the last several years. Out of huge sums of money provided by the central government, only 20% were actually spent and that too towards meeting the establishment cost. The state government had spent Rs 267 lakh to prepare 24 project reports, which have hardly been implemented." It is stated by a representative of CSE "that the way the J&K Lake and Waterways Development Authority was going about, it was preparing for the funeral of the Dal Lake". There is urgent need, therefore,

to review the entire Dal Lake Project in greater detail and incorporate mid-course corrections and alterations where ever necessary. Other lakes of Kashmir particularly, Anchar, Manasbal and some rural lakes in Shadipur area should be put under the control of a state designated agency so that conservation plans are drawn and scientifically implemented. Most of the valley lakes including Nilnag Lake are severely degraded. It is only the high altitude lakes, which are still in good and healthy conditions. Although Wular Lake is a Ramsar Site, nothing much has been done to improve its environment especially for migratory birds, fish and other biological life. The excessive siltation and sedimentation is taking a heavy toll of this unique water body.

Under the National lake Conservation Programme (NLCP) initiated in 1994 by the Ministry of Environment and Forests, Government of India, eleven lakes were initially identified for conservation and management including the Dal lake. The list was later increased to 25 lakes and it is now proposed to include 35 lakes from different regions of India. Recently, the MOEF prepared a comprehensive list of lakes that could be considered for future management based on their regional importance (NIE 2003). The list includes Kounsarnag, Mirgund, Mansar and Surinsar lakes from the Jammu and Kashmir State. Unfortunately many important lakes from this region are not included in the list. Mirgund is a wetland and Kounsarnag is not under any immediate environmental threat.

**Discussion**

The approach to conservation and management of lakes should include protection and quality enhancement of the environment, promotion of sustainable development, co-operation between user and government agencies, building of strong public and political support and assessment of the state-of-art research. It is of paramount importance to obtain complete information on various components of the lake ecosystem for effective resource management. The evaluation of rate of change of ecosystem would help in establishing priorities for management purposes by targeting the most altered parameters. In many cases, degradation of Lake Environment can be slowed down by strong public opinion. NGO'S can play crucial role in awareness campaign.

The conservation measures for restoration of lakes in Kashmir should include, aggressive treatment of catchment to stop downward movement of silt, strict implementation of land-use plans, effective moratorium on any type of construction activity in the watershed and within the peripheral areas of water bodies, substantial reduction in the use of pesticides, fungicides and fertilizers on agricultural fields bordering the lakes, banning of any type of encroachment within the lake, and dredging of sediments only in areas where it is absolutely necessary as it disturbs the food chain.

Treatment and diversion of sewage is necessary to upgrade quality of water and also safeguard against further decline in biodiversity. Selective weeding targeting mainly exotic species should be undertaken with great care. Continuous monitoring of Lake Environment needs to be carried out to evaluate whether the restoration measures are successful or else need mid-course correction. Monitoring should be undertaken by an independent agency preferably by the Kashmir University.

Restoring ecosystem stability would depend on the nature of the decisions taken by managers keeping sustainability in view. The managers should also be aware of what to do and what not to do, which is very crucial for success of any management strategy. Restoration towards a less degraded but not necessarily a pristine state, requires deep understanding about how far to go or how clean is clean or in other words what would be the future use of the water body. There are sufficient central and state environment protection laws that may be implemented from time to time depending on specific situations and local needs.

The specter of a great thirst is looming ahead of us. The water shortage is going to haunt the state in the coming years. There is urgent need to have complete rethinking on various uses of lakes and other water resources of Jammu and Kashmir. One of the major causes of water scarcity is climate warming that has triggered rapid melting of Himalayan glaciers. In Kashmir, the reduced water flow in streams, drying of springs and low water levels of river Jhelum especially during late summer and autumn is a regular feature. In the past, water was available in abundance; as a result it was freely wasted and subjected to excessive abuse. Although lakes do not figure largely in the total fresh water supply, they do have great importance in view of impending future water scarcity. In coming years, drinking water nearly cover as much as 6% of the land area (Bacha 1996) and if these ecosystems are properly protected and managed there will be less possibility of water crisis in Kashmir. The most important water quality problem in Kashmir is due to cultural eutrophication because of excessive release of nutrients from the catchment area. The problems of water pollution in Kashmir have compounded further by the absence of any clear cut State Water Policy. There is an immediate need to involve local community and other stakeholders effectively in the conservation and water resource management. While using the modern technology it would be extremely useful to see if some use is also made of the traditional knowledge. The best way forward would be to use a holistic approach for conservation and management of water resources of the state.

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# Maulana Abul Kalam Azad as an Educational Thinker

**Ms.Nuzhat Jan***

*" The tragedy is that the world worships words instead of meanings,and even though all are seeking and worshiping but one truth, they quarrel with one another over differences in mere names....If one day the veils of 'extrenals and names' can be lifted so that truth and reality (haqiqat) come before all unveiled, then, at once,all quarrels of this world will end, and all who quarrel will see that what we all seek is one and the same"*

*'Khutabat-e-Azad', ed.Shorish Kashmiri*

Maulana Abul Kalam Azad- a great intellectual , philosopher, theologian, a prominent leader was born in Mecca Saudi Arabia on 11th November, 1888 and named Muhiyuddin Ahmed. His father Maulana Muhammad Khairuddin a learned divine and a Sufi was born in Delhi in 1831. He wrote numerous books both in Arabic and Persian and his life and temperament were coloured by simplicity and contemplation of the sufis. In Delhi, he had thousands of disciples and his cliental extended upto Gujarat, Kathiawar and Bombay. At the age of 25, he went to Mecca and settled there and won fame as a scholar after publication of a ten volume work in Egypt. Maulana Azad's mother was Arab. In 1890 Maulana Khairuddin along with his family returned to India and settled in Calcutta. Maulana Abul Kalam Azad was brought up and educated strictly along Islamic lines in Calcutta from his father and teachers. He proved to be a child prodigy and finished his formal education by 16. While in Calcutta, he joined a group of revolutionaries and under his influence their activities were extended to many important towns of North India and Bombay.

Later, under the influence of Sir Syed Ahmad Khan's writings, he studied modern science, philosophy and literature, learnt English and acquired enough proficiency to be able to read books on history and philosophy. He was also well versed with many languages viz Arabic, Bengali, Hindi, Persian, and Urdu. In his early years, Azad had a derogatory attitude towards science. Later, he developed his idea that science is concerned with things can be perceived by the senses, religion with the supra-sensual. He wrote in Gubar-e-khatir ," true science and true religion,

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although they travel on different paths, in the end arrive at the same destination. He started a column in his journal al-hilal on "scientific matters" to make up for what he considered Muslims lack of knowledge in all things scientific.

Maulana Abul Kalam Azad was a brilliant debater, as indicated by his name, Abul Kalam, which literary means "Lord of Dialogues". He adopted his pen name "Azad" as a mark of his mental emancipation from a narrow view of religion and life.Maulana Abul Kalam Azad was not only enlightened, learned, wise and humble, he was also a man who often led from the front and set personal examples for others which could be summed in the following words by Akbar Allahbadi,

*The sluggards are quite content with mundane delights;*
*the wise cannot but strive for the ultimate.*

And Maulana Azad was an epitome of such wisdom, of sagacity, of courage. At last he died on 22 February 1958 in New Delhi.

**His works:**

Basic concepts of Quran, Ghubar-e- Khatir, Dars-e-wafa, India Wins freedom

**Periodicals Edited:**

Al-Balagh(calcutta), Al-Hilal (calcutta), Al-Jamia (calcutta), Al-Nadwa (Luknow), Lisan al-Sidq (calcutta), Paigham (calcutta).

**Philosophy of life: concept of man**

According to Maulana Abul Kalam Azad the concept of man which the East has evoked regards man as not merely an animal superior to all earthly creature but as essentially different from them in nature. Man is not the first among equals but is a being which is higher than any other creature. He is not only a progressive animal, but reveals in his being the lineament of God himself. In fact, his nature is so high and elevated that nothing higher is conceivable by human reason. In the words of the Chhanogya Upanishads:

*"That is Reality.That is Atman (soul).That art thou".*

This doctrine has been beautifully expressed in Arabic which means: "He who knows himself knows God".It will be readily agreed that there can be no higher concept of man. God marks the higher limit of human thought. By identifying man with God, the Eastern concept of man elevates him to godhead. Man has, therefore, no other goal, but to re-establish his identity with God. He, thus, becomes superior to the entire creation. Since man is an emanation of divinity, whatever man does is ultimately God's doing: whatever happens is due to the will of God. From this , it is , but another step to think of man as a mere toy in the hands of fate.

**Importance of Education:**

"Maulana Azad is the person of learning. I consider him as a person of the caliber of Plato, Aristotle and Pythagorus [illegible] great authority on history". said Mahatma Gandhi, the father of nation. Maulana Abul Kalam Azad was the first union Minister of Education of Independent India. Azad considered education to be the birth right of all men. He viewed education as a process leading to the growth of the "complete man". He explained that literacy would give man access to knowledge of the wide world which in turn would enable him to live in harmony with his environment. At the practical level he said that a training in special skills and crafts would give him the capability to earn his livelihood. He also underlined the importance of teaching hygiene as it would help man to create a healthy social environment for himself. He felt that the state had an obligation to ensure education to all at least upto the secondary stage. There are three stages in secondary education-elementary, middle and higher. Of these, elementary and middle are the more important because the foundation of the entire edifice of national education is laid in these two early stages. If the foundation is weak or wrongly laid, the rest of the structure is insecure or faulty. For these two stage, it is accepted the pattern of basic education which is of great importance to the whole structure of our national education. Beyond this stage, the position is somewhat different. when we consider the facilities for higher education in a state, we must match the facilities to the needs of society. Any maladjustment between demand and supply at this stage would create problems which the state must at all costs seek to avoid.

The real object of education according to Azad, was to train children as members of a community and to instill in them the habit of cooperative action for the social good. As the quality of a man in the ultimate analysis depend on the education he receives and the values he was taught to cherish, he felt that the Government had duty to organize a truly liberal and humanitarian education system which would set the country on the road to progress. Azad was filled with misgiving to find that the phenomenal advances made in science had, while adding new dimension to man's material prosperity, also increased in his power to course destruction and death. It made him think of devising a system of education which would especially underline the responsibilities of community living and common citizenship. Thus, Azad's ideal was a fusion of the Eastern and Western concepts of man to created fully integrated personality. Whereas the Eastern concept dwelt on spiritual excellence and individual salvation, the Western concept laid stress on worldly achievement and social progress. Azad felt that the two should ideally be integrated into a wider philosophy of education for the world.

**Content of Education:**

Maulana Abul Kalam Azad felt that a reorientation and revision in the content of education was necessary in the context of the changed needs of independent India. It was his considered opinion that scholars with a Euro-centric vision had written history, geography and of philosophy without duly acknowledging the role played by the orient in general and by India in particular in the overall story of human development and progress. He therefore, spoke on the need to rewrite Indian history objectively and in the right perspective. Azad held that the education system was title towards academic and literacy studies in keeping with the requirements of a colonial administration. In independent India there was the need to develop the agricultural sciences and to focus on technological and engineering studies.Further, owing to a false sense of values there was too much importance attached to a University degree and too little to the quality on the education imparted. In an address to UNESCO, Azad emphasized that the future of man was dark unless concepts of international understanding and world unity were explained to children in schools in realistic terms. He explained the basic tenet of UNESCO, viz that all conflicts originated in the minds of men and that it was bastions of peace would have to be built.

**Women's Education:**

All educational program will ultimately depend upon the proper education of women. If women take to education, more than half of our problems will be solve. Educated mothers will mean children who can be easily made literate. Providing education to women without giving them freedom and forcing them to conformity to the veil will not only be useless but injurious and baneful.

**Medium of Instruction:**

Azad hold that there is no place for English as the medium of instruction in future in India, but at the same time there should be no precipitate action that may damage the cause of education. He hold that the replacement of English as a medium of instruction should be gradual and stage by stage so that there is the least possible interruption or interference with the process of education in the country.

**Educational Contribution:**

At the inaugural function of the Madrasa Islamia, Calutta in 1920, Azad in his speech said, "Government education in our country has seriously damaged our national cultural heritage. The greatest loss is that we have forgotten the real aim of education. Education is a boon, and we should receive it only for the sake of education. Present education is for

making men able to get government jobs. Education today is narrowly aimed at economic gain. Do you think that these huge buildings which are called educational institutions are full of people who loved education and who really want to be educated? No, not at all. These institutions are full of students desirous of getting jobs. They are made to think that without education they cannot succeed in getting jobs".

Azad from the beginning was opposed to the education which narrowly aimed at material gain. He is the preface for Dr. Radhakrishanan"s book 'History of Philosophy: Eastern and westerrn", expressed dissatisfaction about the aims of education by real aim of education is the harmonious development of the individual and building of personality in a new way.

Azad's educational policy can better be defined by his five points scheme of education. It includes:

1) Compulsory education for children of 6-14 years of age;
2) Social education for illiterate adults;
3) Standard higher education;
4) Art education for the development and preservation of National culture; and
5) Education of science and technology for the development of the country.

Azad was the first education minister of independent India. He in his tenure from 1947 to 1958 did tremendous work for the upliftment of the country. Many institutions and the academies were opened. Following are some of them:

1) For the progress and development in science education following institutions were established:
   - Scientific Research Institute under the chairmanship of Shanti Swaroop Bhatnagar;
   - A separate institute for atomic development;
   - Indian Council for Agricultural and Scientific Research for Scientist of Industry and Technology;
   - Indian Council for Medical Research;
   - Indian Council for Historical Research; and
   - Indian Council for Social Science Research (which include History, Economics , Sociology).
2) Indian Council for Cultural Relations for introduction of Indian Culture to other nations.
3) Institute of International studies was established in Saproo House.
4) Following three academies were formed:
   - Sahitya Academy for development of literature;
   - Sangeet Natya Academy for the development of Indian

music and dance;

- Lalit Kala Academy for the development of painting.

Azad was the chairman of all three academies. The purpose was not only to felicitate artists from different parts of the country and to help the progress of these arts.

5) With the aim of preservation and development of national culture, and also with the aim of study of Sanskrit language and literature many institutions and especially universities were established.
6) Idara Uloom-e-Shariqa and idara Uloom-e-Islami institutions or the development of Islamic Education of Osmania university, Hyderabad were promoted by him.
7) Azad was a scholar of History. In his regime National Archive and national Museum were looked after properly.
8) Azad was a great Poet. He wrote poetry in Urdu& Arabic.

Now; 11th November, the birthday of Maulana Abul Kalam Azad, a great freedom fighter, an eminent educationist and the First Education Minister of Independent India, was celebrated as the National Education Day throughout the country by the Ministry of Human Resource Development as a tribute to the contribution of Maulana Azad to the cause of education in India. Educational institutions at all levels were involved in organizing seminars, symposia, workshops, rallies on importance of literacy and nation's commitment to all aspects of education on 'National Education Day'. From 2008 onwards 11th November is celebrated as National Education Day.

The inaugural function was held on 11th November 2008 at11.30 hrs at Vigyan Bhavan in which The President of India, Shrimati Pratibha Devisingh Patil was the Chief Guest. The function was presided by Shri Arjun Singh, Minister of Human Resource Development. A special cover on Maulana Azad was released on the occasion by the President as a tribute to this great son and architect of modern education in India. A set of books on Maulana Azad published by National Book Trust of India were released on this occasion. The National Book Trust organized a photographic exhibition on Maulana Azad on this occasion at Vigyan Bhavan.

The function was attended by Vice Chancellors of state and central Universities, heads of central educational institutes, eminent educationist and school children. Similar functions were organized in many states like Andhra Pradesh, Tamil Nadu, Jharkhand, West Bengal, Jammu & Kashmir etc.

To conclude the contribution of Maulana Abul Kalam Azad, a great freedom fighter, an eminent educationist and the First Education Minister of Independent India by his own words:

*".....I am proud of being an Indian. I am part of that*

*indivisible unity that is Indian Nationality. I am indispensable to this noble edifice. Without me this splendid structure of India is incomplete. I am an essential element which has gone to build India. I can never surrender this claim".*

We all celebrate his birthday as our National Education Day, we definitely strengthen his claim.

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# Khudi -
# The Fundamental Reality of the University

## The dilemma of love and beauty

*Khudi Ko Kar Buland Itna Ki Har Taqdeer Se Pehlay*
*Khuda Banday Se Khud Puchey Bata Teri Raza Kya Hai*
*(Dr Iqbal RA)*

***Miss Shagufta Rehman**

Khudi signifies mind or consciousness. Since where there is mind or consciousness, there is life. Though the consciousness is to be found in both man and animal. But the standard of human consciousness is higher than that of animal consciousness, because an animal is conscious, it knows, feels and thinks, but a human being not only knows, feels and thinks, but when he does so, he is conscious that he knows, feels and thinks. Thus in the human beings consciousness knows itself and human consciousness is of the nature of self- consciousness. It is this self- consciousness which is described more briefly by the word 'self'. Dr Iqbal (RA) gives the Urdu or Persian translation of this word as khudi.

Khudi or self consciousness whether as the Universal Self-consciousness or as expressed in the human being has only one urge and that is love or the urge or quest for Beauty. Now the question here is what is self- consciousness to love? Where is that beauty which it seeks? The answer is simple that self- consciousness itself is Beauty. The human self-consciousness loves the universal self- consciousness (which is really within it) and the universal self- consciousness loves the human self-consciousness. The later on account of its love for the former will reach the height of its Beauty and perfection in due course of time.

*"It mistake to search for the beauty outside the self*
*Where is it that which ought to be before us".*

Man expresses his love for the Divine self by worshiping it, adoring its qualities and acting in its service i.e by expressing its qualities in his own action. Self- consciousness (Human or Divine) is love and beauty at the same time when it is seeking self- consciousness, it is love and when it is being sought by self- consciousness, it is Beauty. The Divine self is actual beauty but the human Self- consciousness is potential beauty that has yet to be actualized or revealed as a result of the creative process. Beauty includes all its qualities like power, goodness and truth etc. which are all loveable and admirable and which are always expressed in the service for love. They all belong to self- consciousness of the universe and therefore

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also to man to the extent to which he is able to increase his love and his knowledge of beauty, and thereby to evolve and display his latent self-consciousness.

*"Beauty is truth and Truth is Beauty that all you know on earth and all you need to know".*

(Jhon Keats)

By adoration and action the self evolves its self- consciousness, identifies itself more and more with the qualities of Beauty and adds to its knowledge of beauty as well as to its power to give a better and futler expression to its urge for beauty. Knowing the self- consciousness of the universe and knowing one's own self are one and the same thing, because the growth of the self's knowledge in one direction result simultaneously in the growth of its knowledge in the other.

*"When you search for Him, you will find nothing but your self. When you search for your self, you will see nothing but Him".*

Dr Iqbal (RA)

Action is a tool which the self uses as a means for the satisfaction of its urge for Beauty. The self acquires knowledge (cognition) for the sake of action. All action is really directed to the removal of resistance in the path of the self's urge for beauty. By effort and action it gains power for further effort and action. When the self is obstructed in the achievement of its ends, it musters the whole of its power to smash resistance. The Divine Self and the human self are therefore, both perpetually in action.

*"If you wish to witness God unveiled then learn to see your ego in a clearer manner".*

Dr Iqbal (RA)

It is only the Divine Self and its attributes that can really satisfy a man's urge for beauty. Consequently, when a man is loving, and seeking by action and service, the consciousness of the universe and its qualities, he is expressing his urge for beauty in the right way. But when owing to his ignorance of the real desire of his self, he is not doing so, his urge for beauty finds expression in some other idea to which he wrongly attributes all the qualities of beauty. The reason is that we cannot hold any urge of our nature, least of all the most powerful urge of all, in obeyance for a single moment. This substitute idea chosen by man becomes the ideal of his life and dominates all his activities. The idea of his choice, no doubt appears to possess some qualities of the Real idea and that is the reason why he is allured to it, But his love for the wrong ideal does not endure long. Sooner or later, his urge of the self, his inner criterion of beauty begins to operate and the man discovers the elements or qualities of beauty that the ideal is lacking. When this happens, he becomes disillusioned and disappointed and comes to know that the apparent qualities of beauty in the ideal that had lured him to it where no more than illusions. Therefore;

he turns immediately to another ideal for the satisfaction of his urge for beauty. In the new ideal he tries to avoid those elements of ugliness or imperfection of which he had become conscious. But in the absence of his knowledge of the Right ideal and the qualities of beauty, he introduces some a other unknown elements of imperfection into it and these, sooner or later makes him dissatisfied with it and then he abandons it totally for another ideal. This process of trial and error continues as long as he does not choose upon the Right ideal. What idea a person chooses as the ideal of his life at a particular time depends upon the state of his knowledge and experience at that time and therefore, as his knowledge and experience improves, he approaches nearer the qualities of true beauty in the choice of his ideal. But the process is very long for innumerable combinations of right and wrong, perfect and imperfect are possible. It is also difficult as every new choice is the result of the painful adjustment. Thus the urge for beauty in man takes the form of the urge for ideals and is capable of being fully satisfied by an ideal of the highest beauty and perfection and that is the Divine Self. Ideals form stages in the development of the self. We are never absolutely wrong but we advance from lower to higher and from a less perfect to a more perfect ideal. In this way dream of world peace and world unity can never come out true unless all abandon their false ideologies and adopt the right ideology. Peace will come to the world not because we shall succeed in harmonizing conflicting ideologies, but because one ideal will replace the rest and dominate the world and bring everlasting peace can only be the right ideology.

*"Kafir ke ye pehchan k aafaq ma gum hai*
*Mumin ki ye pehchan k gum iss ma hai aafaq".*