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# Teacher Education

## Journal of Teacher Education and Research

# Research

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# Journal of Teacher Education and Research

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## **About the Journal**

The Journal of Teacher Education and Research (formerly Ram-Eesh Journal of Education) is the official Journal of the Ram-Eesh Institute of Education, which was established in 1999 under the Rama-Eesh Charitable Trust, New Delhi. Its first issue was published in 2004. It is a half-yearly journal. The purpose of this Journal is to foster inter cultural communication among educators and teachers nationwide; encourage transactional collaborative efforts in research and development; and promote critical understanding of teacher education problems in a global perspective. The Journal is designed to reflect balanced representation of authors from different regions of the Country.

The opinion and views expressed in this Journal are those of the authors and do not necessarily reflect the positions of the Editor, Advisory Board and of the Ram-Eesh Institute of Education.

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### **The Editor**

Journal of Teacher Education and Research  
Plot No. 3, Knowledge Park-1  
Surajpur-Kasna Road, Greater Noida  
G.B. Nagar, U.P.-201310-06, India  
E-mail: [principal\\_rie@rameeshinstitution.org](mailto:principal_rie@rameeshinstitution.org)

## Editorial

The year 2017 has witnessed some upheavals and some controversies in education. Primary education did not make people literate. No detention policy did not work. Students in English class could not read text of fifth class and student of fifth could not do a sum of third class. Therefore, no detention policy was scrapped. Higher education was not much better. Teacher training, technical and management colleges are closing down as they had mushroomed unplanned.

Universities were on boil due to interference of political parties. Students don't follow attendance rules. The management is helpless in controlling this trend. The result is the poor quality of education which makes students unemployable.

There is some silver lining in governments' efforts to make a few of our universities world class. Twenty universities are being encouraged to grow globally. Efforts by private entrepreneurs who have joined in developing quality schools and universities is a healthy sign.

In this issue we present to our research community some path breaking researches. We aspire for more revolutionary ideas in education.

Rajesh Baghel tracks influence of personality on carrier development by following Reymond Bernard Cattell's 16 factors underlying human personality. He used these personality factor model and 16 PF questionnaire. Career development comes with highest job satisfaction. Survey method followed by random and purposive sampling was used in selecting sample. Sample comprised of doctors, railway employees, bank employees, engineers, computer operators, farmers etc. Data is collected from Agra Distt. (U.P.) sample of 50 each in all 100 where selected on tabulation of data it was found that person oriented and non-person oriented occupations differed significantly in outgoing, warm hearted, easy going, participating and emotionally stable and calm in nature. The result of the study showed that there is a clear influence of personality on career choice.

Anuradha Sekhri has tried to assess the implementation of inclusive education of Children With Special Needs (CWSN) with regard to physical access, social access and quality of access. Evaluation was done in 12 out of 22 districts of Punjab, 66 primary schools and 59 CD blocks were covered. The data collected was analysed. The results show that implementation of inclusive education of CWSN is still at infancy stage as there is lack of necessary conditions in schools and the lack of government policies and finances. Therefore, quality resources and facilities must be provided to each educational institution to make inclusive education programme successful.

Sunanina Shenoy and Philip M. Prinz conducted study on the importance of narrative skills as a screener to consider while assessing English Language Learners who are at risk for language learning disabilities. The study was conducted in Bangalore (India). Sample

consisted of 104 students Grades 2-5 from low, middle and high cost private schools. Students performance scores on bilingual screening tool were compared to their performance on Narrative Assessment. Correlative analysis showed overlap between scores of better assessments. Result of this research showed that narrative assessment scores serve as a quick and important screener not only to corroborate the general language ability scores, but also to highlight the importance of using both formal and informal assessment tools in order to distinguish between language differences and disorders.

Himanshu Verma, Janaki B., Aparna Ravichandran and Santhi Prakash conducted present study to explore the teacher education quality in order to educate Children with Special Needs (CWSN). Present study included 30 special educators and 50 students D.Ed. (CWSN) & B.Ed. (CWSN). A questionnaire by Bullock (2015) was administered. Result revealed that both groups have different opinion towards teacher quality. Students believed than a good teacher should be more passionate towards teaching and should have positivity as well as good bonding with students whereas experienced teachers, pointed out flexibility, organized work and patience as a quality of good teachers.

Ravindra Kumar in this study investigates whether computer-assisted instruction (games/simulation) as remedial teaching for specific position-in space type of learning disabled children and whether computer assisted instruction help equally both boys and girls. The study adopted the pre-test-post-test-control group design. Sample of sixty four students were drawn from seven schools in Meerut, Uttar Pradesh, India. The researcher coordinated the computer assisted instructions (games/simulation) for position in space type learning disabled children which was used as an instrument for experimental group while control group was exposed to traditional teaching method. Data collection was on diagnostic test of learning disability DTLTD Test. The t-test was used to analyze the hypothesis. The findings revealed that experimental group performed better than the control group. The study found computer assisted instruction method to be better than traditional method.

Shalini Singh attempted study of life skills and academic anxiety among senior secondary school students. Education enables an individual to live his life efficiently and purposefully. Each individual sets his goal of life. These goals of life are achieved through certain characteristics. These characteristics are known as '**life skills**'. Through the study following results were drawn Girls possess more life skills than boys, anxiety hinders academic performance through retardation, girls are more anxious than boys, students who are better in life skill score are better in examination due to less academic anxiety, Government school students are more anxious than public school students.

K. Sarvanan has conducted his study to find out the Occupational stress level of Government and Private Higher Secondary School Teachers living in different environmental situations. The scale used in the study has been developed by researcher 60 Private school teachers and 60 Government teachers have participated in the present study. At the end of the study it was seen that Private school teachers have less occupational stress levels than government

schools teachers. There is a meaningful difference in the stress level points of Government and Private Higher Secondary Teachers. Policy makers are advised to analyze the teacher training and assessment system with the assumption that personal and social characteristics and working conditions may have an effect on teacher occupational stress. Sample teachers were selected by using simple random sampling from three segments by using lottery method because of easy accessibility and affordability. Sample Percentage was used to analyze the data.

Sharmila Devi, C., Soumya Mehta and Karan Bajaj attempted to study the feasibility of taking a gap year and estimate the number of people who have or are likely to take a gap year from the Symbiosis Centre for Management Studies. A survey was formulated containing a particular set of questions devised by researcher about the concept of a gap year and students' thoughts regarding the same. A sample population of 50 students was selected on a random basis and their personal details and inputs were taken into consideration and studied upon. Results of the study made us to conclude that the awareness of gap year is still very less and most students want to take their education without taking any gap, although the study indicates that 50 percent of the sample population want to take a gap.

Monica Bedi and Bodige Mamtha have conducted an empirical study in technical institutions in India on occupational stress and coping strategies among teaching professionals. With the advent of technologies and globalization, the nature of work in various organizations have gone through drastic changes over the century. It is still changing at whirlwind speed. These changes have touched all professions including teaching. This research was done on 140 employees including 67 males and 73 females. Teachers from Technical institutions including engineering and non-engineering disciplines and with varied experience, constituted the sample of the study. Occupational Stress Index (OSI) by Srivastava and Singh was used to collect data. Teachers were found to be moderately to highly stressed on sub scales of role overload, role conflict, responsibility for persons, powerlessness etc. of occupational stress index.

We hope our efforts at bringing new researches in our Journal will flourish. In this issue we present to our researcher community some path breaking researches. We aspire for more revolutionary ideas in education.





## Influence of Personality on Career Development

Rajesh Baghel

### ABSTRACT

*Those who think about a successful and satisfying career need to understand themselves first. They also need to learn how to perform best in the workplace. One of the key factors in career development is the realization that job satisfactions at its highest when the job engages the strongest aspects of an individual's personality and when the job in line individual's values and attitudes.*

**Keywords:** Personality, Career, Development, Occupation, Person oriented, Non person oriented

### INTRODUCTION

Reymond Bernard Cattell was very much devoted to the rigorous scientific method. One of the most important results of Cattell's application of factor analysis was his discovery of 16 factors underlying human personality. He called these factors 'source traits' because he believed that they provide the underlying source for the surface behaviour we think of as personality. This theory of personality factors and the instruments used to measure them is known respectively as the personality factor model and the 16 PF questionnaire.

Those who think about a successful and satisfying career need to understand themselves first. They also need to learn how to perform best in the workplace. One of the key factors in career development is the realisation that job satisfactions at its highest when the job engages the strongest aspects of an individual's personality and when the job in line individual's values and attitudes.

The 16 personality factors are described in the below table 1.

Using all 16 factors and a more comprehensive set of descriptions than we've given here, you can create a pretty accurate picture of someone's personality. We work on the hypothesis that the personality of person-oriented and non-person oriented occupations do not differ.

### METHODOLOGY

#### Sample

Survey method was followed randomly, and purposive sampling technique was used to select the sample. The sample comprised of person-oriented occupation individuals who enjoy working in contact with people like doctors, railway employees, bank employee and others and non-person oriented occupation individuals who don't come in contact with others at working place like engineer, computer operator, farmer and others. The data is collected from Agra

**Table 1:**

Factor		Descriptors	
A	Warmth	Reserved	Outgoing
B	Reasoning	Less intelligent	More intelligent
C	Emotional stability	Affected by feelings	Emotionally stable
E	Dominance	Humble	Assertive
F	Liveliness	Sober	Happy go lucky
G	Rule consciousness	Expedient	Conscientious
H	Social boldness	Shy	Venturesome
I	Sensitivity	Tough-minded	Tender minded
L	Vigilance	Trusting	Suspicious
M	Abstractedness	Practical	Imaginative
N	Privateness	Straight forward	Shrewd
O	Apprehension	Self-assured	Apprehensive
Q1	Openness to change	Conservative	Experimenting
Q2	Self-reliance	Group dependent	Self-sufficient
Q3	Perfectionism	Self-conflict	Self-control
Q4	Tension	Relaxed	Tense

District of U.P. Over all 100 working people were considered as the sample of study. (Total working people i.e.  $N = 100$ , person oriented occupations i.e.  $N_1 = 50$ , Non-person oriented occupations i.e.  $N_2 = 50$ ).

### Tools

Tool is used for data collection. 16 PF test consist of 108 items, in each item three alternative answers are provided. The working people are required to select one correct statement on the basis of the description. The total administration time for the scale is about 25 to 35 min. The scoring procedure is given in test manual was followed. To provide maximum consistency in scoring, scoring stencils were used for easy and accurate scoring.

### Analysis and Interpretation

The scores obtained from the attitude scales were tabulated and analysed using SPSS 10 version. Statistical technique like percentage, mean, standard deviation and  $t$  test were used to analyse the data.

### Testing Hypothesis

$H_0$ : The personality of person oriented and non-person oriented occupations do not differ.

$H_1$ : The personality of person-oriented and non-person oriented occupations differs. For testing, this hypothesis  $t$  test has been used.

**Table 2:**

Personality	Occupation	N	Mean	SD	t Test
A	1	50	7.43	1.96	2.541
	2	50	6.84	2.14	
B	1	50	4.48	1.31	1.098
	2	50	5.74	1.23	
C	1	50	6.54	2.004	2.022
	2	50	6.41	2.082	
E	1	50	5.72	1.88	0.464
	2	50	5.59	1.67	
F	1	50	6.13	1.87	0.482
	2	50	6.18	1.96	
G	1	50	6.18	2.06	1.482
	2	50	6.84	2.19	
H	1	50	6.32	2.15	0.851
	2	50	6.30	2.07	
I	1	50	5.93	1.83	0.567
	2	50	5.84	1.86	
L	1	50	5.63	1.94	1.685
	2	50	5.77	1.84	
M	1	50	5.63	2.11	0.006
	2	50	5.84	2.17	
N	1	50	5.7	2.103	0.843
	2	50	5.6	1.829	
O	1	50	5.95	1.86	0.478
	2	50	6.05	2.009	
Q1	1	50	6.57	2.113	0.501
	2	50	6.82	2.017	
Q2	1	50	5.56	1.95	1.630
	2	50	5.61	1.93	
Q3	1	50	6.20	2.001	0.055
	2	50	6.42	2.206	
Q4	1	50	5.75	2.009	1.660
	2	50	5.35	2.018	

$t = 2.58$  at 0.01 level;  $t = 1.96$  at 0.05 level

Descriptive analysis of personality: (1) Person-oriented occupations and (2) non-person oriented occupations,  $N = 100$  (Table 2).

### Interpretation

Obtained value  $t = 2.541$  is greater than tabulated value 1.96 at 0.05 level; therefore, there is a significant difference at 0.05 level.

Obtained value  $t = 2.022$  is greater than tabulated value 1.96 at 0.05 level; therefore, there is a significant difference at 0.05 level. Hence, null hypothesis is rejected at 0.05 level.

### CONCLUSION

The personality of person-oriented and non-person oriented occupations differs at A (outgoing, warm hearted, easy going participating), and the personality of person-oriented and non-person oriented occupations differs at C (emotionally stable, faces reality, calm, nature).

From the table, it is conclude in the Indian context, the present study gives the result that the personality of person-oriented and non-person oriented occupation do not differ at personality B, E, F, G, H, I, L, M, N, O,  $Q_1$ ,  $Q_2$ ,  $Q_3$ ,  $Q_4$ .

The personality of person-oriented and non-person oriented occupations differs at personality A, C.

The above result shows that there is a clear influence of personality on career choice.

However, if you can understand what your personality is, you then make better use of the strengths it gives you and make allowances for the resultant weaknesses. Note that personality is relatively unchanging through adult life, and this understanding will help you in your selecting career.

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## Assessment of the Implementation of Inclusive Education Scheme in the State of Punjab

Anuradha Sekhri

### ABSTRACT

*The right to live with dignity and self-respect as a human being leads to a continuous analysis of policies and services aimed at marginalised sections. The development of a nation is contingent upon education that contributes to the holistic development of a person irrespective of its gender, caste, religion and socio-economic background, with or without any disability or challenges. The inclusion of children with special needs (CWSN) is seen in terms of physical access, social access and quality of access as the key interventions suggested under Sarva Shiksha Abhiyan (SSA). To achieve the goal of inclusion, SSA in different states has adopted different approaches for preparing CWSN for schools. The objective of this paper is to evaluate the implementation of inclusive education in the state of Punjab. The evaluation of inclusive education was done in 12 out of 22 districts of Punjab. A total of 66 primary schools and 59 CD blocks were covered. To seek answers to the queries made in the stated objective interview, schedules-cum-questionnaires were administered to the concerned personnel during the field study. The data collected from numerous sources required simple statistical treatment such as frequencies and percentage.*

**Keywords:** Inclusive education, Children with special needs (CWSN), Sarva Shiksha Abhiyan (SSA), RTE, Interventions, Implementation, Evaluation

### INTRODUCTION

The mandate of RTE Act (2009) is to provide free and compulsory education to all children of 6–14 years. Thus, the three aspects of Sarva Shiksha Abhiyan (SSA) are **access**, **enrolment** and **retention** of children in this age group. RTE Act stresses the importance of preparing schools to address all kinds of diversities due to caste, gender, disability, culture and religion.

**The major objective and thrust of SSA** is on providing meaningful and quality inclusive education to all children with challenges, irrespective of kind, category and degree of disability. The ultimate aim is mainstreaming of all children with special needs (CWSN) in neighbourhood schools by developing full potentiality of these children and promoting effective participation of all.

This also includes special training for school readiness programmes in the form of home **schooling** and **residential schooling**. In this context, SSA has adopted **zero rejection policy** so that no child having special needs should be deprived of the right to education and taught in the fabric of formal elementary school with an environment best suited to individual's learning needs.

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Research Investigator, Institute for Development and Communication (IDC), Chandigarh, Punjab  
Email id: anu.sek2010@gmail.com

The inclusion of CWSN is seen in terms of physical access, social access and quality of access as the key interventions suggested under SSA.

For the proper assessment of the scheme in terms of its implications in accordance with the set objectives, it becomes essential to review the policy of SSA on inclusion.

The main focus of SSA is (i) on providing meaningful and quality education to CWSN and mainstreaming them in formal elementary schools, (ii) 'a policy of zero rejection', (iii) that every special need child has a right to education and (iv) he/she should be taught in an environment which is best suited to his/her learning needs.

Ideally for the successful implementation of inclusive education for CWSN, following **components** are essential and integral to the entire scheme of inclusion.

#### **Components of Inclusive Education Scheme:**

- Awareness
- Necessary infrastructure for accessibility and conducive environment for CWSN.
- Preparation of individualised educational plan/programme (IEP) for CWSN for achievement of set goals.
- Aids and appliances to be used to facilitate teaching and learning.
- Teacher training for efficiency/proficiency in imparting education to CWSN.
- Resource support.
- Removal of architectural barriers.
- Monitoring and evaluation of the progress made by CWSN.

In light of these components, the evaluation of IE was done.

#### **OBJECTIVES OF THE STUDY**

To assess as to what extent the scheme has been implemented in accordance with policy of SSA on inclusion.

#### **RESEARCH METHODOLOGY**

Descriptive exploratory survey design was employed in this study. As per design of the study, the evaluation of inclusive education was done in 12 out of 22 districts of Punjab. The study was conducted in following districts.

Region wise, the following districts were included in the study as shown in Table 1.

Since the study was to be conducted in schools where the resource rooms were available, the selection of schools became purposive in nature, combined with the technique of random selection out of the entire list of schools in a CD block. Sampling techniques involved a combination of purposive and random selection of schools. The list of sample unit and sample size is given in the (Table 2).

**Table 1: Region by districts**

Majha Region	Doaba Region		Malwa Region		
Amritsar	Hoshiarpur Jalandhar	Kapurthala	Faridkot Fatehgarh Sahib	Fazilka Mukatsar	Patiala Ropar Mohali Ludhiana

**Table 2: Sample units and sample size**

Sample Units	Sample
IE resource centre trainers	11
IE resource teachers	60
IE volunteers	59
Parents of CWSN enrolled for bridge course at Amritsar and Patiala	21
Parents getting benefit of IE volunteers from resource room	109
Principal/head of schools having resource room	63
No. of schools to be covered	66

Source: IDC Survey Data, 2016–2017

### Component 1: Awareness

It means creating awareness among the educationists, policymakers, parents and the recipients of inclusive education, general public and volunteers is essential for all the stakeholders under this scheme. Awareness requires understanding of the need, importance and potential of the CWSN and for abolishing attitudinal barriers that prevent CWSN from coming to school. For creating widespread awareness among the stakeholders, various modes like use of print and electronic media, awareness camps, parent–teacher meetings (PTM) are organised as powerful means to inform the parents of CWSN about the care and management of potential of the children. Counselling is another means of creating awareness to help parents as to how to bring up and teach special skills to CWSN at home.

To find as to what extent awareness is created among the parents and teachers, while interviewing the head teacher, it was revealed that a number of means and ways are adopted throughout the year to do the needful, as detailed in Table 3.

**Conducting Surveys:** The age old practice followed to create awareness among stakeholders is through conducting surveys which was reported by five (7.9%) of the heads.

Out of 63 heads who were interviewed, it was revealed that even before the implementation of the IE scheme, the house-to-house surveys at village level were conducted for the enrolment of children in school. Moreover, there always had been some CWSN in some classes. So conducting surveys has been a common practice followed to make parents aware of the need for education for special children.

**Table 3: Creating awareness among parents and teachers**

Means	Frequency	
	<i>N</i>	%
Conducting surveys	5	7.9
PTM–SMC meetings	16	25.4
Invites in annual functions and festivals	7	11.1
Rallies and seminars	23	36.5
No response/no activity	12	19.1
<b>Total</b>	<b>63</b>	<b>100</b>

Source: IDC Survey Data, 2016–2017

**PTM–SMC Meetings:** PTM and school-management committee (SMC) meetings are regular features in every school. PTM are held once a month. It was mentioned by 16 (25.4%) of the head teachers. The focus of the meeting is mainly on counselling and guidance of the parents regarding needs and problems of the special children, how to take care of them at home, how to teach them everyday life skills and how to provide attention to CWSN. These are the major issues of discussion during the meetings.

**Special Invites on Annual Function and Celebration of Festivals:** Inviting dignitaries, parents, panchayat members, NGOs to annual function, celebration of festivals like Diwali, Dussehra, Lohri and so on is another forum used to spread the message regarding need and importance of education for the CWSN. This was the response of seven (11.1%) of the heads.

**Rallies and Seminars:** Rallies and seminars is another common mode of creating awareness as mentioned by 23 (36.5%) of the heads. Rallies are considered to be an effective medium used to spread the message among the masses. Seminars are also organised for the teachers and for the administrators at block, cluster or at district level.

The most commonly used practices are the PTM–SMC meetings and conducting rallies and seminars to achieve the purpose of creating widespread awareness among the stakeholders.

#### **Component 2: Necessary Infrastructure for Planning and Management for Accessibility and Conducive Environment for CWSN**

The basic infrastructure and the facilities necessary for an organisation to function efficiently are building, water, power, transport and administrative set up. As per SSA, infrastructure for IE also refers to the different functionaries at state, district and block level with assigned roles and functions for effective implementation of IE programme.

Table 4 presents the infrastructural facilities in schools. A total of 66 schools were visited.

**Principal's/Head Teacher's Room:** Out of the 66 schools surveyed, a separate room for the head was available in 52 (78.8%) schools for administrative purpose, except in those 14 (21%) schools where the total number of rooms was only two or three in the building.



**Table 4: Status of basic infrastructure in schools**

Responses	Physical Facilities for Academics									
	Principal Room		Resource Room		Library		Science Lab		Computer Lab	
	N	%	N	%	N	%	N	%	N	%
Yes	52	78.8	59	89.4	20	30.3	2	3.0	2	3.0
No	14	21.2	7	10.6	46	97.0	64	97.0	64	97.0
Total	66	100	66	100	66	100	66	100	66	100

Responses	Other Facilities											
	Store Room		Kitchen		Drinking Water		Toilets		Ramps		Playground	
	N	%	N	%	N	%	N	%	N	%	N	%
Yes	42	63.6	61	92.4	64	97.0	63	95.5	48	72.7	32	48.5
No	24	36.4	5	7.6	2	3.0	3	4.5	18	27.3	34	51.5
Total	66	100	66	100	66	100	66	100	66	100	66	100

Source: IDC Survey Data, 2016–2017

There are 20% of primary schools which do not have adequate building with required infrastructure.

**Classrooms:** The number of classrooms in a school varied according to the level of the school, from 2–3 rooms to maximum of 17 rooms as in the case of a senior secondary school, where the primary school was part of the school building. The seating arrangement in the classroom was satisfactory in 50 (75.8%) of the schools. In the remaining 16 (24.2%) schools, overcrowding of children was observed in classrooms. This hampered the movement of CWSN in class.

**Furniture:** Furniture in the classrooms was quite sufficient according to the observation made by the team, but not according to the needs of the CWSN.

**Resource Room:** 59 out of 66 that is 89.4% of the schools had a provision for separate resource room. In seven schools, library, storeroom, a partitioned classroom or portion of head teacher's room was utilised for the purpose. During the winters, the CWSN were made to sit in the open or in verandahs.

Except in seven (10.6%) schools, other schools, though have resource rooms, are not adequately equipped with furniture, as per needs of CWSN. Availability of aids and equipment, and teaching learning material was reported to be adequate only by 23 (39%) out of 59 I. volunteers.

**Library:** There was a provision of library in 20 (30.3%) schools. Obviously, it was in secondary or in senior secondary schools.

**Science Lab and Computer Labs:** Provision of science and computer Labs were only in 2 schools from among a total of 66 schools.

**Kitchen, Drinking Water and Toilets:** More than 92% of the schools had a provision for kitchen (for mid-day meals), drinking water and toilet facilities, mostly in hygienic conditions, **but some of the toilets were not user friendly from the point of view of CWSN.**

**Provision for Store Rooms:** Provision for store rooms was in 42 (63.6%) schools, which were used for various purposes.

**Ramps:** Ramps were created in 48 (72.7%) schools to remove architectural barrier for CWSN, as per requirement for the accessibility of CWSN.

**Playgrounds:** Playgrounds were found in 32 (48.5%) schools, but some of these were not in good condition.

**By and large, infrastructural facilities in most of the schools for regular school children were quite up to the mark.**

**Teachers' Strength:** The academic achievement of the children is linked with the teacher's inputs provided in the classroom. As per data collected from 66 schools, it was observed that the number of teachers varied from a minimum of 2 to maximum of 26 teachers. There are 36 schools where the number of teachers varied from four to seven per school. However, there were schools with larger strength of children, so the number of teachers was also up to five or six teachers or more.

In high/senior secondary schools for 9, 10 and 11 classrooms, the teachers' number was 17, 19 and 20 teachers in respective order. In a school with 17 classrooms, there were 26 teachers on rolls.

- The strength of IE volunteers in school was adequate as there was one IE volunteer in every school to manage the resource room.
- The resource teachers, however, as per their mobile mode of functioning, visited the schools sometimes twice a month, where the distance from one school to another was more than 10 km.

### **Component 3: Preparation of Individualised Educational Plan/Programme (IEP) for CWSN for Achievement of Set Goals**

IEP is a statement regarding the needs, special services required by CWSN and the achievement of the child within a stipulated time. In theory, this is prepared jointly by the special education teacher/resource teacher and general teacher. It is constantly reviewed by the district/block level functionaries who also monitor the performance of each child.

On the basis of the data, **it was revealed that IEPs were prepared mainly by the IE volunteers, which is the main task assigned to them according to 33 out of 59 volunteers** that is 57.6% of them. The goals for individual achievement of CWSN are set/assigned by the resource teacher as reported by nine (15.3%) of the volunteers.

Although IEPs are prepared by the IE volunteers, when regular/formal education teachers were interviewed regarding 'how' do they determine the goals of CWSN, 37 (58.7%) teachers

mentioned that they make use of classroom observation of daily performance of children to set individual goals for them and three (4.8%) teachers took the help of parents in recording the case history of a CWSN.

**The role of Regular Classroom Teachers in preparing IEP conjointly with inclusive education resource teachers IERTs was barely minimal.**

**Hurdles in Achieving IEP Goals:** Setting up the goals of IEP appears to be subservient to the burden of official work, handling of 'Dak' on the part of IERTs as recorded by 11 (18.3%) of resource teachers. Second, lack of training to handle multiple disabilities of CWSN in the same resource room was reported by 19 (31.7%) IE volunteers.

#### **Component 4: Aids and Appliances to be used to Facilitate Teaching and Learning**

Use of illustrative aids such as charts, models, maps, visuals, assistive technological devices, appliances, equipment and apparatus are all such aids to facilitate the process of both teaching and learning. Any classroom/resource room is incomplete without these assistive devices.

**Aids in Regular Classrooms:** The physical verification and the check list data revealed that 56 (94.8%) out of 66 schools had necessary illustrative aids.

**Resource Rooms:** The resource room requires specific appliances, apparatus and equipment to cater to the needs of special children, with different impairments.

Table 5 reveals the required and available devices as per the needs of CWSN.

**At certain places, it was observed that the apparatus/appliances were locked in the cupboard for fear of being damaged by using/handling by CWSN.**

It was also observed that many IE volunteers were not knowledgeable enough to make the proper use of the equipment provided for the purpose of teaching and learning in a proper manner. The volunteers were only managing the CWSN, to keep them busy, teaching them activities for daily living skills, language/speech, reading, writing, numeracy, toilet training and so on.

**With limited aids and appliances, the CWSN require longer training in resource rooms before they acquire school readiness skills.**

#### **Component 5: Teacher Training for Efficiency/Proficiency in imparting Education to CWSN**

Teacher training is concomitant to proficiency in teaching and learning and administration.

##### *Qualification of Head Teachers*

- From the point of view of administration, out of 63 heads, there were 19 (31.5%) head teachers who were adequately qualified as they had either BA/B.Ed. or BA/ETT suitable for primary/elementary schools. The rest of them were either over/under qualified to implement the scheme of inclusive education in letter and spirit – 24 (38.1%) heads were MA/B.Ed. and 20 (31.7%) were ETT/JBT only.

**Table 5: Required and available devices**

<b>Visual Impairment</b>		<b>Mobility Devices For OI</b>	
<b>Required</b>	<b>Available</b>	<b>Required</b>	<b>Available</b>
Teaching devices	Braille writers	Canes, beepers etc.	Canes only
Braille paper	Self-made Braille calendar	<b>Devices for activities for daily living</b>	
Braille writer	overhead projectors	Games, puzzles	Games and puzzles
Talking aids and tape recorder		Sports	Clocks, watches
Reading machines		Kitchen equipment	
Braille computers		Clock, watch	
Magnified books		<b>Mental retardation (MR Kits)</b>	
Screen cards		Workbooks, worksheets	MR Kits
Overhead projectors		Pictures, charts	Worksheets
Spectacles etc.		Educational toys and games	Picture charts
<b>Hearing impairment</b>		Blocks	Puzzles, beads
Hearing aids	Hearing aids	Models of common objects	Blocks, models
Digital hearing aids		Memory aids/electronic notebook	
Door bells		<b>Cerebral palsy</b>	
Software, pictures/video		Powered wheel chairs	MR Kit
<b>Speech impairment</b>		Communication aids	Manual wheelchairs/CP chairs
Mirror	Mirror	Mealtime aids	Mealtime aids
Portable speech synthesiser		<b>Physical impairment/orthopaedic defects</b>	
Alarming devices		Ankle foot orthosis (AFO) and knee AFO (KAFO)	AFO and KAFO
Listening system		Crutches	Crutches
Computerised speech lab		Tricycles	Tricycles
<b>Autism</b>		Wheel chairs	Wheel chairs
Portable word processor	DVD player	Calipers	Calipers
Talking word processor		Ortho shoes	Ortho shoes
Headphones			

Source: IDC Survey Data, 2016–2017.

- None of the head teachers had training in special education.
- Most of them could not provide suitable answers to the questions put to them.
- The heads were not involved much about the implementation of the IE scheme. They were not in a position to provide proper guidance to IERTs and also regular classroom teachers, with the result there was no intervention on their part in planning strategies for teaching and evaluating CWSN.
- **It was observed by the investigators that heads as well as regular teachers did not consider IE as part of the regular system of education.**

#### *Qualification of Regular Classroom Teachers*

Out of 63 teachers, 36 (57.1%) were Master degree holders with B.Ed./M.Ed. who were over qualified in comparison with their performance in interview sessions.

The primary/elementary level of schooling a graduate with ETT/B.Ed. degree can be more successful provided they also have diploma/degree in special education, as they have to teach a mixed group of special children along with children with only disabilities.

#### *Qualification and Specialisation of IERTs*

- Out of 60 resource teachers, 26 (43.3%) had done B.Ed. in special education, 14 (23.3%) of them had done diploma in special education with BA/MA and 10 (16%) of them had only diploma in special education as their qualification. Disability wise, 14 (23.3%) of them were specialist in hearing impairment, 33 (55%) in mental retardation and 10 had specialised in visual impairment. Although the resource teachers were adequately qualified for teaching the CWSN, their expertise was not utilised fully because of either mobile nature of their work. Some of them were taking undue advantage of the situation and therefore the education of CWSN is being adversely affected.
- **Among the IE Volunteers**, only 12 (20.3%) had professional qualification suitable to teach and handle 8–10 children of varied disabilities in the resource rooms. Most of the IE volunteers are qualified for MR children. Therefore, they are not efficient from the point of view of providing proper skills to other categories of CWSN.
- **The Teachers in Regular Classrooms** were not professionally trained to exhibit their proficiency in teaching to the CWSN. The resource teachers, with adequate professional qualification, could not render their services in some of the resource rooms throughout the week for teaching properly to CWSN. The IE volunteers were managing the CWSN resource rooms efficiently, providing adequate training to them. **So the parameter of teaching training and efficiency needs much to be desired in inclusive education set up.**

#### *For Quality of Access: Provision of Resource Support*

Resource support was observed in the form of

- (i) **Appointment/provision** of special educators in all the districts known as District Special Educators D.S.E's.

- (ii) **Assistance devices** were provided according to category of disabilities, though in limited way. Either the resource rooms were not equipped adequately to meet the requirements of CWSN as per norms of inclusive education, or there was a limited space in some of the resource rooms for proper utilisation of such devices.

### **Component 6: Resource Support for Quality of Access**

Under inclusive education scheme, opportunities are provided to CWSN in regular classroom to facilitate their retention through resource support in the form of

- Special educators
- Assistive devices
- Teaching learning material in accordance with category specific and individual needs of CWSN, and flexibility in delivery of subject matter.
- In addition, support is also required from resource teacher, trained sensitised teacher, acceptance by peers, classroom management according to individual needs of CWSN.
- Preparation of IEP, monitoring and periodic review of IEP, also are essential features of inclusive education programme.

The external support to be provided by interdisciplinary team of experts such as educational psychologist, speech and occupational therapy and medical experts.

On the basis of fieldwork, following observations were made for the purpose of evaluation for all the above aspects of resource support.

#### *Resource Support and Teaching Learning Material*

- **Appointment of Special Educators:** The special educators were appointed in all the districts as district special educators (DSEs).
- **Assistive devices:** Provided category-wise in schools were as follows:
  - o **For Orthopaedic/Physically Challenged:** Wheelchairs, crutches were available in 51 out of 66 schools (77.3%).
  - o **For Mental Retardation:** MR Kit, blocks, puzzles, beads etc were provided in 61 schools (92.4%).
  - o **For Autism:** Use of MR kit was only in 21 out of 66 (31.8%) schools.
  - o **For Cerebral Palsy:** Availability of CP chair was made in 52 schools (78.8%).
  - o **For Hearing Impairment:** Hearing machines were available in 47 (71.2%) schools.
  - o **For Visual Impairment:** There was Braille slate only in 43 (65.2%) schools.

**As far as assistive devices are concerned, the resource rooms were not adequately equipped to meet the requirements of CWSN as per norms of inclusive education.**

In certain schools, for want of proper resource room, and for proper space, the gadgets, assistive devices, were kept under lock and key by the IE volunteer. In 18 (27.2%) schools,

the resource rooms were improvised, that is using partitioned space in Principal's office, class room, store room, library also.

*Support from Resource Teachers, Classroom Teachers and Acceptance by Peers*

**Support Provided by the Resource Teachers**

Support provided by the resource teachers was in the form of

- Making provision of teaching–learning material such as charts, flash cards, stationery and others, at their own expenses as per 48 (80%) of the responses.
- Seeking help from parents and NGOs and community with a focus on procuring teaching–learning material was revealed in six (10%) cases.
- Providing guidance to parents regarding their expectations from the school, if the expectations are unrealistically higher than the progress made by the child according to 50 (83.3%) of the resource teachers.
- Collaboration with each other's that is seeking guidance from fellow IERTs of different specialisation and IE volunteers to handle CWSN with different disabilities as per six (10%) of them.
- Assessing the need of repeating the IEP goals of the performance of CWSN if not satisfactory, according to 56 (93.3%) resource teachers.

*Support Provided by the Regular Classroom Teachers*

It was mainly in the form of

- Motivating and encouraging CWSN to participate in sports and co-curricular activities (5: 7.9%).
- Helping CWSN to learn new concepts as per 37 (41.6%) responses.
- Gearing classrooms according to the needs of CWSN is a dream yet to come true.

**Acceptance by Peers**

The CWSN were accepted by the peers as was revealed in the responses of both types of children and the situations which call for feeling of oneness.

**Responses of CWSN**

- |                                    |   |                |
|------------------------------------|---|----------------|
| • Playing together                 | : | Yes 86 (96.6%) |
| • Sharing or taking lunch together | : | Yes 80 (89.9%) |
| • Help-in studies                  | : | Yes 2 (10.1%)  |
| • Being ridiculed/made fun         | : | Yes 71 (79.8%) |
| • Being ignored                    | : | No 66 (74.2%)  |

#### Responses from Peers

- Inviting CWSN on birthday : Yes 40 (56.3%)
- Visiting home of CWSN : Yes 35 (49.3%)
- Liking CWSN as much as other friends : Yes 48 (67.6%)
- Making fun of them : Yes 51 (71.8%)
- Stopping others in bullying CWSN : Yes 31 (43.7%)

The acceptance of CWSN by peers was reflected in indicating in positive direction the responses given both by the CWSN and peers.

#### *Classroom Management according to Individual Needs of CWSN*

In the primary schools, the number of classrooms for each of the five classes, and in accordance with strength of students and other rooms such as for principal, store room and others has always been under scanner. Expecting classrooms to be geared according to the need and nature of disability for movement, required furniture, equipment and all other teaching-learning requirements is high. **However, the CWSN were accommodated in the classrooms without much consideration for their needs and problems pertaining to different categories of disabilities.**

#### Preparation of IEP

The IEPs were mainly prepared by IE volunteers with occasional support from the resource teachers. Preparation of IEP was one of the tasks assigned to the IE volunteers as reported by 33 (55.9%) IE volunteers.

#### Monitoring and Periodic Review of IEP

Monitoring is the main job of DSEs/trainers. According to eight (72.7%) of them, they pay monthly visits to schools, resource rooms and have meetings with IERT and others. Monitoring the working of IERTs, and checking the IEPs was mentioned by the four (36.4%) of DSEs.

#### External Support

As far as external support is concerned, none of the schools had a provision for

- Educational psychologist
- Speech therapist
- Occupational therapy
- Medical experts

**Except physiotherapist who visits the school occasionally, other external supports were not made available to CWSN.**



### **Component 7: Removal of Architectural Barriers**

In those schools wherever it was required, there was a provision for ramps for easy approach to the resource/classroom for CWSN. Even otherwise, primary schools are by and large housed in single storey buildings.

### **Component 8: Monitoring and Evaluation of the Progress Made by CWSN**

The evaluation for the academic achievement of CWSN in regular classrooms is based on written examination which is at par with regular classroom students. In resource rooms, the day-to-day progress of CWSN is monitored and evaluated by the IE volunteers in accordance with the goals set in IEP for each child in the resource room. The bases of evaluation are the routine work, oral exercises and specific skills and task assigned by the IERTs.

**The evaluation of CWSN either in regular classrooms or in resource rooms is not being done according to the strategies of evaluation to be used for the assessment of CWSN.**

### **CONCLUSION**

The results show that the implementation of inclusive education in Punjab is still at infancy stage. The lack of necessary conditions in schools and the lack of government policies and finances are the main barriers to implementation of inclusive education. There lie several obstacles and challenges related to teacher preparation to promote inclusive education. It is not impossible to attain success in inclusive education in country through effective teacher-preparation strategies. To make inclusion appropriate teacher preparation for inclusive education must be made compulsory in all teacher-education programmes irrespective of elementary or secondary level. Further, quality resources and facilities must be provided to each teacher in the educational institutions to make inclusive education programme successful.

Inclusive education strives to address the learning needs of CWSN, with a particular focus on those who are subject to being isolated and excluded. The philosophy behind inclusive education is to promote opportunities for all children to participate, learn and have equal treatment, irrespective of their mental or physical abilities. However, despite a strong emphasis on implementation of the scheme, there is a long way to go before this becomes a reality. One of the many challenges for inclusion of children with disabilities in the mainstream schools is that there are no standard practices or established methodology to guide the regular teachers. There is a need to demonstrate how inclusive education works in schools where children with disabilities and children without disabilities study together. With such a resource being available, teachers will be able to find solutions, based on the local context, using evidence-based practices. Trained teachers and an inclusive methodology are vital for making this shift happen.

## Importance of Narrative Skills Assessment to Identify ELL Students at Risk for Language-Learning Disabilities in Speakers of L1 Kannada and L2 English

Sunaina Shenoy<sup>1,2\*</sup> and Philip M. Prinz<sup>2</sup>

### ABSTRACT

*This study stresses the importance of a narrative skills assessment as a screener to consider while assessing English language learners who are at risk for language-learning disabilities. It was conducted in Bangalore, India, and the sample consisted 104 students in Grades 2–5 from low, middle and high-cost private schools. Student performance scores on a bilingual screening tool were compared with their performance on narrative assessment. A correlation analysis demonstrated a great deal of overlap between scores on both assessments, with narrative assessment scores significantly predicting both English scores ( $r = .43, p < .01$ ) and Kannada scores ( $r = .34, p < .05$ ) on the bilingual test. Narrative assessment skills were predictive of general language competence in speakers of English and Kannada and an important screener to consider while assessing this population of English language learners who were at risk for language-learning disabilities.*

**Keywords:** Bilingual assessment, English language learners, Indian education, Language-learning disabilities, Narrative assessment, Special education

### INTRODUCTION

The focus of this study was to compare students' performance scores on a bilingual screening tool developed by the author<sup>1</sup> and a narrative skills assessment using the *Narrative Scoring Scheme* (Heilmann *et al.*, 2010). This was part of a larger dissertation study (Shenoy, 2015, 2016) in which both screening tools were developed in English and Kannada<sup>2</sup> to help teachers identify students who were at risk for language-learning disabilities (LLDs)<sup>3</sup>. At present, teachers

<sup>1</sup>The tool was an adaptation of the CELF 5 Screening Test (Semel *et al.*, 2013).

<sup>2</sup>Kannada is part of the Dravidian language family, which is the second largest language family in India and accounts for 215 million speakers or 20% of the population (Banthia, 2001). Although the Indo-Aryan languages (e.g. Hindi, Bengali, Marathi and Urdu) are mostly spoken in the North India, the Dravidian languages (e.g. Telugu, Tamil, Malayalam and Kannada) are mostly spoken in South India.

<sup>3</sup>The term *language learning disabilities* was introduced by Stark and Wallach (1980), in their attempt to develop a conceptual framework for the term 'learning disabilities' by drawing from the fields of reading, psychology and speech–language pathology. This approach was an effort to expand views on assessment and intervention and to stress the connections among language, learning and literacy. For the purposes of this study, the term LLD is used to incorporate learning disabilities that manifest primarily as problems with oral language development. This in turn will serve as a precursor to measuring later reading success.

<sup>1</sup>Post doctoral Research Scholar, Graduate School of Education, University of California, Berkeley, Berkeley, California, USA

<sup>2</sup>Professor, Graduate College of Education, San Francisco State Univ., San Francisco, California, USA

\*Corresponding author email id: Sunaina@berkeley.edu

in Bangalore, India use school-based performance scores, which are restricted to rote-memorisation tests in content areas. These tests are conducted in English only and serve to identify persistent low achievers who need additional instructional support at home and school. As all students in these classrooms are English language learners (ELLs)<sup>4</sup>, the study aims at expanding teachers' assessment repertoire to include screening tools in both L1 (Kannada) and L2 (English) to help them make a more accurate distinction between students who are in the process of acquiring a second language and those who might be at risk for LLDs.

The study was conducted in low, middle and high-cost private schools<sup>5</sup> in Bangalore, India, where the home-language background for the students was Kannada, and all students were enrolled in schools that followed an English immersion model. English is considered the link language that helps with communication among people from different states and communities, who typically speak several local languages. It is also considered the language of power because it provides access to the global job market. Therefore, most of the urban private schools in the country offer an English immersion programme with no bilingual support. According to the Annual Status of Education Report, India (2012), 80% of Indian schools are government schools, but because of the poor quality of education, 27% of Indian children are privately educated. In urban centres, more than 50% of children (27 million) attend private schools and all these students are ELLs as they come from different native language backgrounds but follow an English immersion model in school. Although this model has been effective with students from a higher socio-economic status (SES) background, in which they have more exposure to the language in addition to their native language, it has not proved to be the best option with students from lower SES backgrounds in which the home language is dominant.

Given the aims and setting for the study, the following research questions were addressed:

- (a) What is the efficacy of using a bilingual screening tool in L1 Kannada and L2 English to classify ELL students who are at risk for LLDs?
- (b) What is the efficacy of using narrative assessment to predict student scores on the bilingual screening test?

These questions also form the basis for the review of literature section which draws from three main theoretical frames: (a) the population of ELLs with LLDs, (b) the importance of narrative skills assessment and (c) the cultural context and special education practices in Bangalore, India where the study was conducted.

<sup>4</sup>The term *English Language Learners* is utilised to refer to students who come from different home-language backgrounds and are introduced to English as a second language and the primary language of instruction in school. For the purposes of this study, all students in the sample spoke Kannada at home and their schools followed an English immersion model. The students' fluency rates in English varied from beginning and early intermediate to advanced depending on the level of English language support they had at home.

<sup>5</sup>For the purposes of this study, low-cost schools refer to private schools where the annual tuition costs for each student is approximately Rupees 7,200 (\$120), middle-cost schools refer to private schools where the annual tuition costs for each student is approximately Rupees 40,000 (\$667) and high-cost schools refer to private schools where the annual tuition costs for each student is approximately Rupees 150,000 (\$2,500).

## REVIEW OF LITERATURE

### English Language Learners with Language-Learning Disabilities

The number of ELLs is growing in the United States, and according to the US Department of Education (USDOE), Institute of Education Sciences, National Center for Education Statistics (NCES) (2015), ELLs constitute 9.2% (approximately 4.4 million students) of the school population in the United States. Zehler *et al.* (2003) found that 76% of 4th grade ELL students were performing below grade level in English reading. ELLs continue to exhibit lower academic achievement, especially with regard to literacy skills, than their non-ELL peers (Murphey, 2014), and, in general, we know that low achievement tends to be the most important screen in an eventual LD diagnosis. Although instructional practices are similar for both ELLs and non-ELLs, a given practice might prove less effective for ELLs because they face the double challenge of learning academic content and the language of instruction simultaneously (Goldenberg, 2008). As ELLs are not proficient in the politically dominant language of instruction, they often experience difficulty learning the content. The difficulties experienced by ELLs in the process of learning English and the difficulties experienced by students with diagnosed LLDs, often appear similar, if not identical (Damico *et al.*, 2003; Paradis, 2005). The basis of the language, reading or written difficulties doesn't point directly to the cause or reason. For example, dis-fluencies in language development and the ability to perceive and organise information can be distorted in both populations; however, the underlying causes may be very different (Hamayan and Damico, 1991). Other symptoms of disability – for example difficulty following directions, experiencing anxiety during the school day and others – can again stem from different causes; ELLs may have difficulty following spoken directions in English, but students with LLD might have intrinsic difficulties with receptive language that would lead to similar behaviours. Students with LLD may exhibit some or all of the same behaviours but if they are also ELLs, these difficulties will be evident in both languages and across many learning contexts (Crago and Paradis, 2003; Cummins, 1984, 2000; Hamayan and Damico, 1991).

Artiles *et al.* (2005) identified three main factors that led to the LLD diagnosis for ELLs:

- Language support: ELLs with straight English immersion were more isolated (no language support) as compared with ELLs with modified English immersion (some language support) or bilingual classrooms (primary language support was part of daily instruction). ELLs in straight English immersion were three times more likely to be placed in resource or remedial programmes than ELLs in bilingual classrooms.
- Language proficiency: If a student was bilingual and fluent in both English and his/her native language, he/she was less likely to be placed in special education as opposed to a student who was less fluent in both English and his/her native language.
- Pre-referral strategies: He found that if teachers used intensive small group instruction and pre-referral instructional strategies to target the individual students' needs, students were less likely to be placed in special education.

We tend to think of ELLs as a homogeneous population, but in fact, the range of their language and academic skills is extremely variable. The challenges that ELLs face in classrooms are

specifically linked to language demands, or the linguistic knowledge required for productive participation, which are usually transparent in proficient speakers of the language (Goldenberg, 2008). Differentiating the source of the difficulty for ELLs – LLDs or second language acquisition – is often challenging. Nonetheless, differentiating these sub-populations is critical not only for our understanding of the unique learning trajectories they may experience but also for appropriate educational placement. An accurate diagnosis would lead to better treatment options, both in general education and special education settings.

### **Importance of Narrative Skills Assessment**

Narrative skills play a crucial role in the development of discourse, literacy and socialisation practices (McCabe and Rollins, 1996). According to Roskos *et al.* (2008), measures of children's language abilities, such as narrative assessment and language samples, inform classroom instruction as well as identify children who might need additional learning supports. This is based on the findings that language abilities serve as a predictor for later reading skills, social behaviour and academic performance (Catts *et al.*, 2001; Pankratz *et al.*, 2007; Storch and Whitehurst, 2002). Justice *et al.* (2010) observed that narrative assessment provides professionals with a valid and informative assessment approach to examine language skills as it had significant concurrent and predictive relations with measures of general language ability. It was also useful in establishing and monitoring language growth and planning language interventions. Moreover, it gives researchers an opportunity to observe and record students' language abilities within 'developmentally appropriate and naturalistic contexts' (Justice *et al.*, 2010, p. 218).

**Early identification:** According to McCabe and Rollins (1994), the early identification of problems in discourse skills and narrative abilities is critical for identifying students who are at risk for 'later learning and literacy-related difficulties' (p. 45). Dickinson and McCabe (1991) found narrative skills development to have strong implications for emergent literacy skills because the ability to tell a coherent narrative is a precursor to later development of reading skills. Oral language competencies are predictive of reading outcomes, and narrative skills assessment promotes the early identification of reading difficulties.

**Micro-structural and macro-structural analyses:** The former focuses on vocabulary and grammar, the latter focuses on broader text-level narrative organisation skills. Although micro-structural analysis focuses on linguistic form and content, including grammatical, syntactic abilities and vocabulary skills, macro-structural analysis focuses on the story tradition that includes a problem, attempts at solving the problem and consequences (Heilmann *et al.*, 2010).

Justice *et al.* (2010) developed the Narrative Assessment Protocol as a scalable tool to measure students' language abilities within a narrative context. It measures five aspects of language: sentence structure, phrase structure, modifiers, nouns and verbs. These aspects represent narrative micro-structure which is targeted at the syntactic, morphological and lexical structures that students use while constructing a narrative (Justice *et al.*, 2010). This again points to measuring components of oral language that are predictive of later language and reading comprehension (Pankratz *et al.*, 2007). The tool was developed for use with preschool children and students from diverse cultural and linguistic backgrounds (Peña *et al.*, 2006).

During the same year, Heilmann *et al.* (2010) developed the Narrative Scoring Scheme (NSS) as an index of narrative macrostructure for elementary school children. They analysed retells of a wordless picture book and compared micro-structural measures of vocabulary and grammar to predict NSS scores. They found narrative scores to be significantly correlated with scores on micro-structural measures proving that oral narrative competence was a powerful tool for clinicians and educators. It was developed to not only include key components of the story-grammar tradition such as introduction, conflict resolution and conclusion but also to include inter-utterance text-level elements such as mental states and character development (Heilmann *et al.*, 2010). The participants in the study completed a narrative retell of the wordless picture book 'Frog Where Are You?' (Mayer, 1969), and the purpose was to 'establish a normative database reflecting typically developing children's oral narrative skills and to further our understanding of children's developing narrative competence' (Heilmann *et al.*, 2010, p. 157). Earlier, Miller *et al.* (2006) had documented the power of oral narrative language samples to predict reading achievement in both Spanish and English. Heilmann *et al.* (2008) had expanded on this work to demonstrate the reliability of a measure of narrative assessment with ELL populations. The conclusions of their study revealed, 'oral narrative data from ELL children can be accurately transcribed and the narrative measures are stable over time, providing the research foundation for clinical use of narrative language samples' (Heilmann *et al.*, 2008, p. 178).

The current study is an expansion of this body of work to a population of ELL students with and without LLDs within an Indian context. The goal of this study was similar to Heilmann *et al.* (2008), and in that, the author wanted to give the ELL students every opportunity to document their highest level of narrative ability. Moreover, cross-linguistic evaluation of a child's language skills provided information about proficiency levels in both languages and is an important factor to consider while classifying students as being dominant in their L1 or L2 or being at risk for a LLD.

### **Cultural Context and Special Education Practices in India**

**Linguistic and cultural context:** Although the Indo-Aryan languages (e.g. Hindi, Bengali, Marathi and Urdu) are mostly spoken in the North India, the Dravidian languages (e.g. Telugu, Tamil, Malayalam and Kannada) are mostly spoken in South India. The official languages of the country are Hindi and English. The British colony legacy has led to English being the primary language for government, business and education. Although Hindi is taught as a primary language and language of instruction in northern India, it is slowly being displaced by English. In the southern states, the medium of instruction in schools is both the state language (e.g. Kannada) and English, with Hindi taking on a third-language status. Again, in the South, English immersion models in schools are displacing heritage languages.

According to Sanjeev and Kumar (2007), India is one of the few countries where the education of children with special needs does not fall within the purview of the human resource development sector, but rather the social justice and empowerment sector, the primary focus of which is rehabilitation, not education. The issue of education of children with disabilities remains imperceptible, hidden from the public domain, a private problem for families and NGOs to deal with. Although most developed countries like the United States face the problem

of over-representation of certain minority groups in special education (Harry and Klingner, 2006), developing countries like India face a paradox where majority of the population are under-represented in schools (Peters, 2004). Poverty seems to be an underlying cause and consequence of a disability, as it (a) is more common in poor families and communities, and (b) limits the access to employment and education, which in turn leads to even greater economic exclusion (Kalyanpur, 2008).

**Assessment practices in Bangalore, India:** There are three tiers of private schools in the urban centres in India: low cost, middle cost and high cost. In low-cost schools, which constitute roughly 50–60% of the school population in urban centres, there is no mention of special education, and parents and teachers still view it within a segregated context that does not find place in their schools. In the middle-cost schools, which constitute roughly 30–40% of the school population in urban centres, special day classrooms for moderate/severe disabilities do exist, but although they are located within the school site, the children have no contact with their typically developing peers. In high-cost schools, which constitute roughly 10–15% of the school population in urban centres, special education resource rooms that provide pull-out services for mild-moderate disabilities do exist, but there are no special day classes for either mild/moderate or moderate/severe disabilities.

Teachers currently identify persistent low achievers and students who might be ‘at risk’ for a disability in classrooms by using English-only assessments. They predominantly use two forms of assessment to identify students who are ‘at risk’ for a learning disability: (a) performance on school-based exams, which are conducted every 3 months, and focus on content-area skills, and (b) work samples, which focus on students’ written work. Other assessment tools such as bilingual/language tests and informal tests across learning contexts are not considered essential in diagnosing a cognitive disability. The current special education practices in private schools in Bangalore, India (where the study was conducted) depends on the resources that are available to schools and is also closely tied to socio-economic status. Based on the level of their special education needs, students can be referred (a) back to general education classrooms with pull-out services in resource rooms on the school site, (b) to after school programmes with one-on-one instruction or (c) to special schools in segregated settings. The option of a special day class on the school site does not exist.

## **METHOD**

### **Participants**

The sample for the current study consisted of 104 students: 64 from a low-cost private school, 32 from a middle-cost private school and 8 from a high-cost private school. Of these students, 62 were female and 42 were male. All the students identified as being South Asian from the Indian sub-continent. They also identified as belonging to the Dravidian linguistic group. The students were selected to participate in the study if their home language was Kannada (which is primarily spoken in the state of Karnataka, India), and their medium of instruction in school was English. All of them were from grades 2 to 5 and were between 7 and 10 years old. The school sites were located in a large urban city, Bangalore, in the state of

Karnataka in South India. All the programmes followed an English immersion model with no L1 bilingual support.

### **Data Collection Procedures**

The author of the study collaborated with two bilingual psychologists from Bangalore University to translate and culturally adapt the screening tools in English and Kannada. They also translated the parent permission form and child assent form to Kannada. At the school site, for the main part of the study, the researchers met with the coordinators of the respective grade levels and obtained a list of Kannada-speaking students in these grade levels. A school cover letter and a parent permission form was sent to the parents through the child. Parents were given 2 weeks to return the signed forms to the researchers. Based on the response, a total of 104 students were recruited to take part in the study, ranging from low- to high-cost private schools. Both screening tools took approximately 15 min each to administer. The English version of the bilingual screening tool was administered two weeks before the Kannada version. This was done in an effort to not have students give rehearsed answers from the previous session. The narrative assessment was administered in the students' dominant language only.

### **Measures: Development and Analysis**

**Bilingual screening test:** An adaptation of the *Clinical Evaluation of Language Fundamentals 5 Screening Test* (Semel *et al.*, 2013) was utilised for the study. This screening tool was specifically chosen because it is a criterion-referenced bilingual test that has already been developed and validated in both English and Spanish. It was thus easier to validate it in another language, by taking into consideration the cultural norms, practices and concepts and conducting a pilot study to replace any ambiguous items. The tool was translated into Kannada and adapted to Indian English. It was rendered culturally appropriate for students in an Indian context by ensuring that the language used was grounded in artefacts and experiences that are relevant to and typical of the culture of the region. The English–Kannada language development norms set forth by Prakash *et al.* (1993) and Karanth and Suchitra (1993) were referenced and followed for this study. Some of the items were changed from American English to reflect British language use, and the picture prompts were changed to be more context-specific, but they still tested the same language skill. For example, item 8: subjective pronoun, under the word structure subtest, had the words 'hot dog' and 'hamburger', which were changed to 'sandwich' and 'burger' which are more familiar terms in Indian English. Similarly, in the case of item 10, under the word class subtest, the word 'marker' was replaced with 'sketch pen', again a term that the students would be more familiar with. The only item that had to be dropped was question 37, which uses the phrase 'A quarter past three', because that is not a common way in which time is expressed either in Indian English or Kannada. All other items on the test remained the same and were translated the same way into Kannada.

The test was developed for students aged 5–21 years. It consisted of the following subtests: word structure, word classes, following directions, sentence recall, sentence assembly and semantic relationships. These items were developed to assess language skills that have been shown to be problematic for and/or indicative of individuals with language disorders. In terms of reliability, Cronbach's alphas for the six subtests were calculated for the Indian English and



Kannada versions of the test. For the Indian English test, the word structure subtest consisted of nine items ( $\alpha = .72$ ), the word classes subtest consisted of five items ( $\alpha = .76$ ), the following directions subtest consisted of five items ( $\alpha = .72$ ), the sentence recall subtest consisted of seven items ( $\alpha = .75$ ), the sentence assembly subtest consisted of six items ( $\alpha = .82$ ) and the semantic relationships subtest consisted of seven items ( $\alpha = .77$ ). For the Kannada test, the word structure subtest consisted of nine items ( $\alpha = .78$ ), the word classes subtest consisted of five items ( $\alpha = .86$ ), the following directions subtest consisted of five items ( $\alpha = .83$ ), the sentence recall subtest consisted of seven items ( $\alpha = .69$ ), the sentence assembly subtest consisted of six items ( $\alpha = .77$ ) and the semantic relationships subtest consisted of seven items ( $\alpha = .73$ ).

Moreover, the content validity of both versions of the test were rendered grade and age-appropriate by a panel of eight bilingual teachers. The screening tool was also piloted on a group of 10 students in the non-clinical population and a group of 8 students who were previously identified as having a LLD. A percentage of 90 of the former group were identified as 'above criterion in L1 or L2 tests', and 100% of the students previously identified as having a LLD were identified as 'below criterion on both L1 and L2 tests' and in need of further language assessment.

The test is not a diagnostic tool designed to provide an in-depth diagnosis of speech/language disability or the degree of impairment of speech or language abilities, rather, it is used to identify students who are 'at risk' for a language disorder and need to be referred for further language assessment. They help in measuring whether the students' language abilities appear to be adequate for his/her age. The total score attained by the student is compared with a research-based criterion score appropriate for the student's age and certain recommendations are made. Typically, these recommendations include conducting a diagnostic test and conducting informal assessments like teacher and parent interviews as well as classroom observations.

The criterion score for the test varied depending on the age of the child (they achieved a criterion score of 14, 17, 11 and 13 if they were 7, 8, 9 and 10 years old, respectively), and accordingly he/she was considered 'below criterion' or 'at/above criterion'.

**Narrative assessment:** The narrative assessment served as a language sample of the student and was analysed using the Narrative Scoring Scheme (Heilmann *et al.*, 2010). The tool was used because it had clear, easy-to-follow descriptors that could serve to analyse language samples of any language. The script for the wordless picture book, 'Frog Where Are You?' (Mayer, 1969), was read to the student in their dominant language as they followed along with the pictures in the book. They were then recorded as they retold the story. Each of the transcripts was analysed according to the presence of various aspects or components of the story: introduction, character development, mental states (i.e. the amount and type of vocabulary that are used to describe the characters' thoughts and feelings), referencing (i.e. consistent and appropriate use of antecedents and clarifiers), conflict resolution, cohesion (i.e. appropriate sequencing, details and transitions throughout the narrative) and conclusion. NSS uses a 0–5-point scale for each of these seven dimensions (Heilmann *et al.*, 2010). A score of 5 indicates proficient; 3, emerging/inconsistent and 1, immature or minimal. Narratives of neurotypical adults would fall into the somewhat proficient to proficient range (4–5). The dimension scores

were summed together to create the NSS total score (maximum = 35), which served as a holistic impression of the narrative (Heilmann *et al.*, 2010). This measure served as an assessment of problems in sequencing and cohesion. Proficient scores were indicative of typical language development; emerging and minimal scores were noted as an area of concern requiring further evaluation. Three bilingual researchers, who were fluent in both Indian English and Kannada, scored and analysed the language samples. The English transcripts were scored using the Systematic Analysis of Language Transcript (SALT) software (Miller and Iglesias, 2008). The Kannada transcripts were scored by hand using similar guidelines. The researchers went through 10 h of training practicing on the SALT website and discussing Kannada codes. Inter-rater reliability was 90% for the English transcripts and 92% for the Kannada transcripts.

This study incorporated a mixed method research design to answer the research question. The data analysis includes descriptive statistics, and correlations, as well as a language sample analysis. Data from three sources were used: (a) teacher-generated list of low-achieving students, (b) the bilingual screening tool scores and classification and (c) narrative assessment scores.

## RESULTS

The results were organised around the research questions. The first question was as follows:

What is the efficacy of using a bilingual screening tool in L1 Kannada and L2 English to classify ELL students who are atrisk for LLDs?

Table 1 provides a classification system of students across low- and middle-high cost schools. The data was organised to reflect language competence in both L1 and L2. It was interesting to note that the percentage of students who were at/above criterion on both versions of the test and might possibly be bilingual were relatively the same across low- and middle-high cost schools. Although a majority of the students (70%) in the middle-high cost school were more competent in their L2, English, a majority of the students (53.12%) in the low-cost school were below criterion on both tests and 'atrisk for a LLD'. The screening tool was very efficacious, not only for students who might be atrisk but also served as a classification for all students in the population. This result will hopefully lead to better educational placement decisions for these students.

During the researchers' initial interactions with the teachers from the schools, they requested a list of 2–5 students from their class whom they considered persistent low achievers based on

**Table 1: Classification of student scores on the bilingual screening tool in both English and Kannada across low-cost and middle-high cost schools**

<b>N = 104</b>	<b>At/above Criterion: L1 and L2 Screening Test</b>	<b>At/above Criterion: Only L1 Screening Test</b>	<b>At/above Criterion: Only L2 Screening Test</b>	<b>Below Criterion: L1 and L2 Screening Test</b>
Low-cost school (N=64)	10(15.63%)	18(28.13%)	2(3.12%)	34(53.12%)
Middle-cost school (N=40)	7(17.50%)	0	28(70%)	5(12.5%)

their school-based performance scores. Out of the 104 students in the study, teachers identified 33 students who fit that profile; of the 33, 27 were from the low-cost school and 6 were from the middle-high cost schools. The teachers' list was compared with the classification that was established through the bilingual screening tool. Table 2 presents a summary of these results.

**Table 2: Classification of student scores on the bilingual screening tool in both English and Kannada for students identified as 'persistent low achievers' by teachers**

<b>N = 33</b>	<b>At/above Criterion: L1 and L2 Screening Test</b>	<b>At/above Criterion: Only L1 Screening Test</b>	<b>At/above Criterion: Only L2 Screening Test</b>	<b>Below Criterion: L1 and L2 Screening Test</b>
Low-cost school (N=27)	0	0	15 (55.55%)	12 (44.44%)
Middle-high cost school (N=6)	0	4(66.66%)	0	2(33.33%)

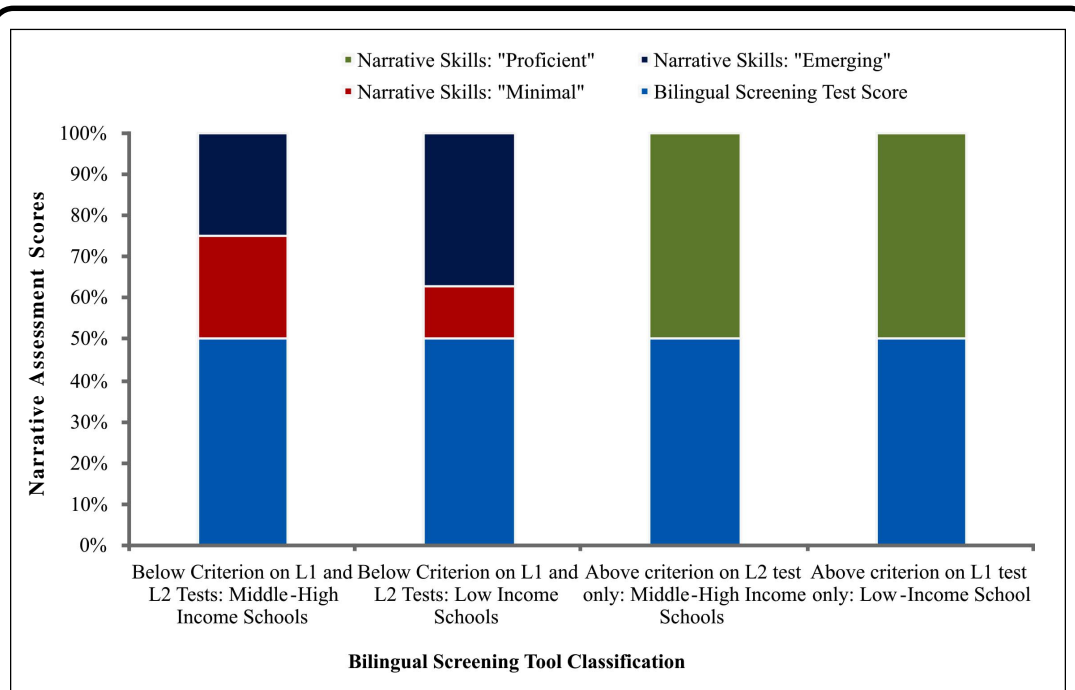
In the low-cost school, 55.55% of the students identified as being persistent low-achievers by their teachers were classified as 'at/Above criterion: only L2 (Kannada) screening test', suggesting that their low achievement was a result of them not yet being fluent in their L2 English. Compared with this, 66.66% of students in the middle-high cost schools were classified 'at/above criterion: only L1 screening test', suggesting that they were not at risk for a disability but might need additional instructional supports to help them improve their school-based performance scores. A total of 14 students (12 students from the low-cost school and 2 students from the middle-high cost schools) were identified as being 'below criterion: L1 and L2 screening test' and might be at risk for LLDs. Although this is a more realistic and plausible outcome for students from middle-high cost schools, there might be other contributing factors in low-cost schools that need to be considered before students are referred for complete diagnostic evaluations.

The second research question was as follows:

What is the efficacy of using narrative assessment to predict student scores on the bilingual screening test?

The narrative skills classifications of 'proficient', 'emerging', and 'minimal' were compared with students' classifications on the bilingual screening test. A great degree of overlap was observed between the scores and this is illustrated in Figure 1.

Although 39/40 (97.50%) of the students from the middle-high cost schools chose to retell the story in English, 54/64 (84.37%) of the students from the low-cost school chose to retell the story in Kannada. Out of the two students in the middle-high cost schools identified as 'below criterion on both L1 and L2 tests', one demonstrated 'minimal' and the other demonstrated 'emerging' narrative language skills. Moreover, the four students from the middle-high cost schools who were identified as 'above criterion on L2 English test only' by the bilingual screening tool also turned out to have 'proficient' English language skills according to the narrative assessment analysis. From the 12 students in the low-cost school identified to be



**Figure 1: Column graph showing the overlap between the narrative skills assessment and bilingual screening tool**

'below criterion on both L1 and L2 tests', 3 students had 'minimal' narrative skills and 9 had 'emerging' narrative skills; none were proficient. In addition, from the 15 students who were identified as 'above criterion on L1 Kannada test only' in the low-cost school, all of them were identified as 'proficient' according to the narrative skills assessment. The high correspondence between narrative skills assessment scores and bilingual screening tool scores points to narrative assessment as a possible screener for underlying LLDs. It was also interesting to note that out of the 10 students who chose to retell the story in English from the low-cost schools, 7 had 'emerging' narrative language skills in English, 2 had 'proficient' narrative language skills in English and 1 student had 'minimal' narrative language skills in English. But none of these students were identified 'persistent low-achievers' by their teachers or the bilingual screening tool. This suggests that the narrative assessment is a good predictor of students being 'at risk' only if they take the test in their dominant language, which for these students was Kannada.

The Pearson product-moment correlation was used to compare the predictive value of narrative assessment scores and the bilingual test scores. The correlation matrix is presented in Table 3. Narrative assessment scored significantly predicted English test scores ( $r = .43, p < .01$ ) and Kannada scores ( $r = .34, p < .05$ ).

In summary, the bilingual test was efficacious not only to parse out language differences from disorders, but also provide teachers with a better understanding of their students' needs as a move away from the generic label of persistent low achievers that is currently used. The narrative skills assessment was efficacious as a quick screener to understand students' language

**Table 3: Correlations between the CELF 5 scores and narrative assessment scores**

	CELF 5 English	CELF 5 Kannada	5 Narrative assessment scores
CELF 5 English	-		
CELF 5 Kannada	-0.16	-	
Narrative assessment scores	0.43**	0.34*	-

\*p< .05; \*\*p< .01

competence in L1 and L2. When these scores were compared with bilingual scores, a lot of overlap was observed between their classification categories.

## DISCUSSION

### Theoretical Implications

**Bilingual language development:** Cummins (1984) developed a model of second language acquisition and introduced the terms *Basic Interpersonal Communication Skills* (BICS) and *Cognitive Academic Language Proficiency* (CALP) to describe the language acquisition process. BICS, which is the ability to communicate basic needs and wants, as well as carry on basic interpersonal conversations, takes approximately 1–3 years to develop after the student is first exposed to the second language. As important as it is, it is insufficient to facilitate academic success. On the other hand, CALP or the ability to carry out advanced interpersonal conversations as well as communicate thoughts and ideas effectively, takes approximately 5–7 years to develop, and it is essential for academic success. It thus takes an average ELL at least 4–5 years to become competent in the L2 to be assessed in that language (Cummins, 1984). In this period of development of CALP, the errors that are observed in the development of literacy skills often appear similar to students with LLD, which leads to a potential misdiagnosis. Research indicates that the less schooling a child receives in a native language, the longer he/she will take to acquire proficiency in a second language. Cummins (1984) model of BICS and CALP has implications for interpreting the findings of my study and for identifying students as being at risk for LLDs. The number of students who were identified by the screening tests as being at risk in the low-cost schools far outnumbered the students identified as being at risk from middle-high cost schools. One reason that could explain this discrepancy in scores is that students in low-cost schools did not have any English support at home and were receiving no bilingual language support to develop their Kannada language skills in school.

**Bilingual narrative development:** Narratives can be analysed in terms of the entire structure of the story (macrostructure) and specific types of words and sentences that are used to tell the story (microstructure). Research studies (Berman and Slobin, 1994; McCabe and Bliss, 2005) have concluded that both monolingual and bilingual children use very similar macrostructure elements, but differ in their use of microstructure elements. The latter reflect cross-linguistic differences in the use of vocabulary and grammatical forms (Berman and Slobin, 1994). This was true with the sample in this study too. A lot of students chose to use

the word, 'mole' or 'rat' instead of the word 'gopher' that is not common in Indian English. Moreover, almost all students ended the narrative with the boy saying goodbye to the frog, and they used the colloquial term 'ta-ta', which is commonly used in Kannada instead of 'bye-bye'.

### Implications for Practice

Based on the results of the bilingual screening tool, teachers would be able to distinguish between low-performing English learners who are simply learning English slowly (i.e. students who score relatively higher on the Kannada language assessment compared with the English) and those more likely to be at risk for a disability (i.e. students who score low on both the Kannada and English assessments). Differential follow up would be called for in these two situations. In the first case (high Kannada scores in relation to English), redoubling genuine efforts in the spirit of true bilingual education (teaching students in both Kannada and English) is the most likely pathway to success, at least according to research accumulated over the last 30 years (see Cummins, 1984; Ramirez, 1991; Ortiz and Yates, 2002; Hoover, 2008). In the second instance (low scores in both languages), it is probably best to refer students for a complete diagnostic language assessment (Artiles and Ortiz, 2002; Ortiz and Yates, 2002). This referral could also lead to better educational placement decisions for students with LLDs as well as pedagogical decisions regarding working with ELLs.

The scores on the bilingual screening tool not only seek to pinpoint students, who may be 'at risk' for a disability, but also lay out an initial classification system that will allow teachers to classify students into one of four categories, based on a comparison of their scores in the two languages: 'at/above criterion in both L1 and L2' are students who achieve high scores in both language assessments, 'at/above criterion in English only' and 'at/above criterion in Kannada only' are students who score high in one language but not the other and 'below criterion on both tests' were to target a sub-group of students who might be at risk for a disability. Moreover, 12 students (out of the 14 students identified as being at risk for a LLD) were from low-cost schools and 2 students were from middle-high cost schools. This constituted roughly 19% of the sample in the low-cost school and 5% of the sample in the middle-high cost school. Government of India (2010) states that teachers in private schools identified at least 2–3 students in a class of 40 as having a learning disability. The discrepancy between performance scores between the low-cost and middle-high cost schools points to other contributing factors, such as the school and home environments, that might affect students' scores.

The Narrative Scoring Scheme (Heilmann *et al.*, 2010) was used to analyse the narrative skills of students in the sample. They were classified on three levels, as 'proficient', 'emerging' and 'minimal' in their narrative skills based on the retelling of the story, 'Frog Where are You' (Mayer, 1969), in their dominant language. These classifications of 'proficient', 'emerging', and 'minimal' were then compared with students' language competencies on the L1 and L2 tests. A great degree of overlap was observed between the scores. 70% of the students identified as being at-risk by the bilingual tool, were also classified as having 'emerging' narrative skills and 30% of students identified as being at risk by the bilingual tool, were also classified as having 'minimal' narrative skills. It would be interesting to conduct a complete diagnostic

battery to determine if only 30% of these students who were 'at risk' and had 'minimal' narrative skills emerge as the students with LLDs. In addition, 100% of the students, who were identified as being dominant in their L1 or L2, also had 'proficient' narrative skills. This finding is consistent with an earlier finding by Justice *et al.* (2010), who observed that narrative assessment provides professionals with a valid and informative assessment approach to examine language skills as it had significant concurrent and predictive relations with measures of general language ability. It was also useful in establishing and monitoring language growth and planning language interventions. One twist on the narrative assessment scores: The data suggest that the narrative assessment was most effective in predicting an underlying disability *only if* the student took the test in his or her dominant language. Some students who chose to retell the story in English, even though their dominant language was Kannada, got a classification of 'minimal' or 'emergent' but were not identified to be 'at risk' either by their teachers or the bilingual screening test.

## **CONCLUSIONS**

### **Limitations of the Study**

**Sample size and generalisability:** The small size of the sample, consisting of 104 students in total, 64 from low-cost schools and 40 from middle-high cost schools, make it hard to generalise the data to other speakers of English and Kannada, as well as make comparisons between the schools. Larger sample sizes would not only address the issue of norms but also provide more comparison data and improve the predictive value of the data. The sample consisted of students from private schools in Bangalore, India, which provides a snapshot of the education system. But this is skewed, as it does not include government schools and other rural schools in the country. Moreover, students in the low-cost school followed a state-level curriculum, whereas students in the middle-high cost schools followed a national-level curriculum, which could have pedagogical implications on assessment and intervention.

**Scope of assessing students in Kannada:** Developing screening tools in Hindi, which is one of the official languages of India, would have had a far greater reach throughout the country, as opposed to the limited reach of Kannada, which is predominantly restricted to one Indian state, Karnataka. Even though the natives to the state of Karnataka speak Kannada, the study was conducted in a large city, Bangalore, where not all the students spoke the language. In most Indian classrooms, especially in urban settings, students come from varying home-language backgrounds. The diversity of languages in the city limited the sample sizes from these schools. It is thus important to develop these screening tools in Hindi and other Indian languages to serve more students in the classrooms.

### **Recommendations for Future Research**

This study serves as a springboard for future research regarding the assessment of ELLs, both in terms of identifying students who might be at risk for a disability, as well as informing pedagogical decisions for this population. It is a pioneer study that was aimed at developing screening tools in both English and Kannada to serve students in Bangalore, India, who come from Kannada-speaking backgrounds. Teachers can use the results of the screening to guide

their instructional practices as well as refer students for further language testing. Eventually, the hope is that it will improve educational placement decisions for these students.

Narrative assessment scores served as a quick and important screener not only to corroborate the general language ability scores but also to highlight the importance of using both formal and informal assessment tools to distinguish between language differences and disorders. Moving forward, it would be interesting to analyse personal narratives of these students as a move away from a generic script and look at emerging themes that reflect literacy practices in Indian homes and schools. Narrative assessment scores also highlighted the importance of testing ELL students in both their L1 and L2 and extending the value of a screening tool to consider their varying needs and providing them with appropriate instruction. It would be interesting to look at the differences and similarities between narrative skills across language families, such as the Indo-Aryan language family and the Dravidian language family, to come up with specific linguistic indicators that are potential red flags for teachers to be aware of while looking for signs of LLDs in their students.

In conclusion, this study as a first step in assessing students early on and providing students with important screeners in general language ability and narrative skills assessment that will lead to better intervention and educational placement outcomes for these students. But we still have a lot to learn about the implementation of the screening tools, as well as the cultural considerations such as pedagogical reform and parent involvement within the Indian school context.

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## The Teacher Education Quality: Perspective of Experienced Special Educators & Upcoming Educators on Teaching Special Need Children

Himanshu Verma<sup>1\*</sup>, Janaki B.<sup>2</sup>, Aparna Ravichandran<sup>3</sup> and Santhi Prakash<sup>4</sup>

### ABSTRACT

*The present study explores the teacher education quality to educate children with special needs (CWSN). This study included 30 special educators and 50 students D.Ed. (CWSN) & B.Ed. (CWSN). A questionnaire by Bullock (2015, Rising Tide, 1, 1) was administered. Result revealed that both groups have different opinion towards teacher quality. Students believed that a good teacher should be more passionate towards teaching and should have positivity as well as good bonding with students, whereas experienced teacher pointed out flexibility, organised work and patience as a quality of good teachers.*

**Keywords:** Teachers' education, Children with special needs, Trainee teachers, Quality education

### INTRODUCTION

Students are the basic building block for any country; if students undergo effective learning and education, then it will have major contribution in developing their country. For every student, teachers work as an architecture because educators help in moulding the thinking process of a student. Efficient and good teachers have a major contribution in building and developing the client abilities and talents. Many researchers tried to define the teachers' quality which helps the students, but there is no firm consensus within the field as to exactly what constitutes high-quality teaching or a quality teacher. There are many definitions presented in literature, but still there is not one definition which is completely able to define the teachers' quality. By definition, a good teacher is a 'high quality teacher' (Merriam-Webster).

Under no child left behind, a good teacher is one that is highly qualified with at least a bachelor's degree, state certification and passing scores on core curriculum tests (Norman, 2010). In school systems, good teaching is often defined on the basis of behaviours linked to successful student outcomes and test scores (Cochran-Smith and Fries, 2001). These above-stated definitions are not efficient in explaining the teachers' quality. After so many debates, the clearest and potentially most useful definition comes from the Peter (2010).

<sup>1</sup>Lecturer, Ashtavakra Institute of Rehabilitation Sciences and Research, East Rohini, New Delhi-110085, India

<sup>2</sup>ASLP, Chaitanya Therapy Centre, Mogapair, Chennai, Tamil Nadu, India

<sup>3</sup>Lecturer, <sup>4</sup>Assistant Director and Special Educator, AYJNISHD (SRC), Manovikas Nagar, Secunderabad-500009, Telangana, India

(\*Corresponding author) email id: \*himanshu.v.91@gmail.com, <sup>2</sup>therapyjsr92@gmail.com,

<sup>3</sup>aparnaravichandran75@gmail.com

### **Defining the Quality Teacher**

*A quality teacher is one who has a positive effect on student learning and development through a combination of content mastery, command of a broad set of pedagogic skills, and communications/interpersonal skills. Quality teachers are life-long learners in their subject areas, teach with commitment, and are reflective upon their teaching practice. They transfer knowledge of their subject matter and the learning process through good communication, diagnostic skills, understanding of different learning styles and cultural influences, knowledge about child development, and the ability to marshal a broad array of techniques to meet student needs. They set high expectations and support students in achieving them. They establish an environment conducive to learning, and leverage available resources outside as well as inside the classroom.*

These definitions suggest that teaching quality in practice constitutes a set of actions and activities that improve student outcomes. Bullock (2015) provided the three major themes which help in defining the good teacher. He gave those three themes after reviewing a many studies related to teachers' quality (Beishuizen *et al.*, 2001; Arnon and Reichel, 2007; Sahin and Cokadar, 2009; Devine *et al.*, 2013; Ciascai and Vlad, 2014). Those three themes are teacher's ability, personality and relationship with students.

**Ability View:** This view suggests that a good teacher should have skills, knowledge and experience (Beishuizen *et al.*, 2001). This must go simultaneously with content and pedagogical knowledge. According to Shulman (1987), a good teacher is able to provide clear instructions. Aksoy (1988) classified concept under the theme instruction and identified good teachers as those able to clearly explain tasks and information. A good teacher always presents material in an organised and engaging way and always used creativity. Green (2014) asserts that it is challenging to teach knowledge or ability, knowledge and ability must be learned through experience. This view implies, to some degree that good teachers are made, not born.

**Personality View:** This view focuses on the balanced combination of mature personality with characteristics like kindness, helpfulness and patients (Beishuizen *et al.*, 2001). The personality perspective defines a good teacher based on characteristics and traits, rather than by knowledge or ability. This view suggests, to some degree, that good teachers are born, not made.

**Teacher–Student Relationship:** This view suggests that good teachers treat all students equally. This view further supports that good teachers listen and care about students' problem (Arnon and Reichel, 2007). This view could be associated with 'Teacher–Student Relationship Quality', which when strong can influence student motivation, engagement and performance (Hughes, 2011).

### **REVIEW**

In recent years, many articles, reports and studies were published which reported that teacher quality matters a great deal in term of student learning. Borah (2013) did a study on regular school teachers and revealed that after having good knowledge and awareness also, many time regular school teachers labelled the slow learner of their class as dumb or learning disabled which had inverse effect on the students' psychology and the behaviour. She further reported

that all regular school teachers had undergone the classes of educational management for children with special needs (CWSN) during their trainee period, but due to their negative attitude and myths about disabled children, they mislabelled them.

Darling-Hammond and Youngs (2002), in their review of empirical literature, found little support for following four assumptions:

- (a) Teachers matter for student achievement, but teacher education and certification are not related to teacher effectiveness;
- (b) Verbal ability and subject matter knowledge are the most important component of teacher effectiveness;
- (c) Teachers who have completed teacher education programmes are academically weak and underprepared for their jobs;
- (d) Alternative certification programmes have academically stronger recruits who are highly effective and have high rates of retention.

They noted that the second assumption was most strongly supported because many research studies had revealed that the verbal ability and subject matter knowledge are related to teacher effectiveness. Their review of the research confirmed that some teacher qualifications may matter more than others but indicates that these qualifications often were mediated by the grade level and subject matter being taught, whereas Rice (2003) indicated that these above-stated assumptions were important when we looked into the education for lower grade children. While looking into the many studies quoted into the literature, we can find that all studies had different parameters regarding teacher quality which is often the case, despite some areas of common ground, the field remains engaged in active debate and discussion around some key aspects of defining quality teaching and its impacts. Understandings of 'quality' can be contentious. These discussion and debate become more important and complex when we consider the education for CWSN. As we know that CWSN have their own various issues which majorly affect the scholastic performance of children.

### **Children with Special Needs and Special Educators**

Many reports state that special educators had more stress compared with regular educators at work place. For example, research by Fimian (1983) and Fimian and Santoro (1983) conducted a study on 365 low, moderate and high stress of full time special education teachers. Results indicated that many special education teachers exhibited frequent and strong manifestations of job-related stress. The study indicated that 87.1% reported their jobs as being moderately to very stressful with 46% (45.6%) reporting high stress levels.

Additional studies have found that much of teacher stress is due to workload. Morvant and Gersten (1995), for example found that only half of the special needs educators in their study consented that their workload was manageable, 68% of their participants reported that they had too little time to do their work and one-third reported that conflicting goals, expectations and directives were a frequent source of stress.

Research by Kaysoki (1997) found that there was a significant difference between the stress levels of special needs education teachers and regular classroom teachers with special needs teachers reporting significantly higher levels of stress than normal classroom teachers. Special needs educators also perceived paperwork to be one of the greatest causes of stress. One of the major and common causes of stress among the special educators was the care and worry about the educational career for their differently able students. They reported that till school, it was fine for these students because they had support in some or other way, but mainstreaming of these children is one of the hurdle and greatest stress due to the presence of myth about them among the people. To overcome these issues, a special educator should be confident enough with good attitude (Allinder, 1994). A study done by Goe (2007) reported that a good teacher also motivates the parents of CWSN for their child education as many reports reported that many times CWSN were not able to reach to the school and ignored by the society.

### **Rights of CWSN**

As per Indian government rules, CWSN also have equal right for education but still because of lack of awareness and negative attitude towards CWSN, they were not able to acquire education. The aims of education for pupils with special educational needs are the same as apply to all children. Education should be about enabling all children, in line with their abilities, to live full and independent lives so that they can contribute to their communities, cooperate with other people and continue to learn throughout their lives.

Government of India (GOI) policies like 'Sarva Sikhsha Abhiyan' provides an equal right for education to all children including CWSN. GOI implemented an inclusive education setup in many states to promote education for CWSN. After implementation of 'Sarva Sikhsha Abhiyan' and promoting an inclusive education also, many teachers, parents and professionals have their own myth about CWSN. Many studies reported that after the implementation of many policies for CWSN and promoting an awareness programme for CWSN, still society don't have good attitude towards CWSN. According to a recent report, mostly teachers were aware about the problems and needs of CWSN but still have negative attitude towards with CWSN (Authors, 2017). These all issues directly and indirectly hampered the teachers' quality. To improve the educational carrier of CWSN, special educators play an important role. A special educator helps these children for their educational needs based on type of disability present.

Special education is a specialised area of education which uses unique instructional methods, materials, learning aids and equipment to meet the educational needs of CWSN. Special education teachers use various techniques to promote learning. Depending on the disability, teaching methods can include individualised instruction, problem solving assignments and small group work. When students need special accommodations to take a test, special education teachers see that appropriate ones are provided, such as having the questions read orally or lengthening the time allowed to take the test. Special education teachers help to develop an Individualized Education Program for each special education student.

After these all efforts, most of the time CWSN are not able to attend higher education. Many times, these children do not achieve basic education (Special Education News, 2017). According to UNICEF (2014) report on quality of teaching for CWSN revealed that special educators

teaching skills were not appropriate as per the CWSN. Report further revealed that majorly trainees were aware about the different teaching strategies but not able to implement appropriately as per the child needs. UNICEF report also revealed that trainee teachers and experienced teachers had quite different thoughts on quality of good teachers.

Many studies (UNESCO, 2000; Jamwal, 2012; Alexander, 2014; Authors, 2017) reported that special educators faced many problems in teaching the CWSN. These problems can be overcome with good quality of teacher education; hence, the present study explores the teacher education quality to educate CWSN.

## AIM

The present study explores the perspective of experienced special educators and upcoming special teachers on teaching for CWSN.

## METHODOLOGY

### Participants

Thirty experienced special educators (age: 29–55 years; mean: 35 years) with minimum of 3 year experience and 50 trainee teachers (age: 18–25 years; mean: 21 years) were included in the present study. The trainee teachers include 30 D.ED students with mean age of 20.6 years and 20 B.ED students with mean age of 22.1 years. The participants were taken from both institutional setup and educator's working in schools of Hyderabad (Figure 1).

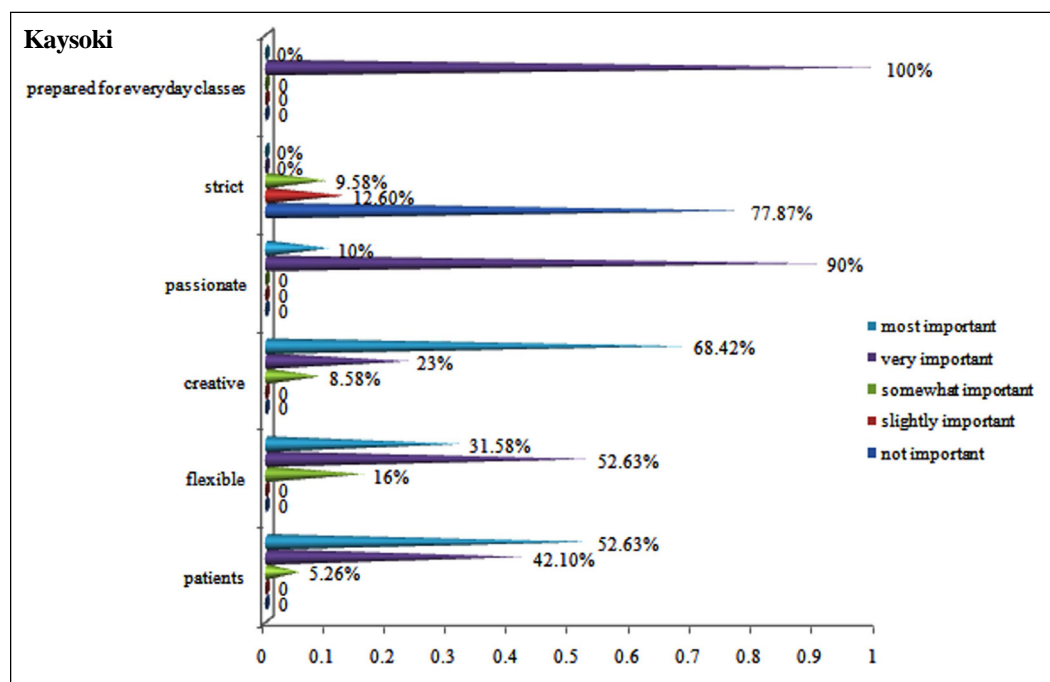


Figure 1: Percentile result of trainee teachers



### **Stimuli/Tool Used**

The questionnaire 'what makes good teacher: a belief of students and teachers' developed by Bullock (2015) was used as assessment tool. This questionnaire consists of 20 questions that assess the importance of various aspect that teacher consider during teaching situation. Each question is given with response in 5-point rating scale where '1' indicates 'not important' and '5' indicates 'the most important'. Moreover, a column is provided to give explanation for their choice of response.

### **Procedure**

The overall data was collected in two steps. Under step one, the demographic details of participants were collected, and then the questionnaire was distributed. In step two, the filled in data was collected after 3 days. The questionnaire was distributed to 75 experienced teachers and 75 student trainees. Only 50 experienced and 60 student trainees had given back the questionnaire. Among them, 20 experienced educators and 10 student trainee educator's response were eliminated as the questionnaire was not complete.

### **Data Analysis**

Descriptive analysis was done. The mean, standard deviation and percentage were computed from the responded questionnaire.

### **RESULT**

Result of the present study analysis in four different parameters

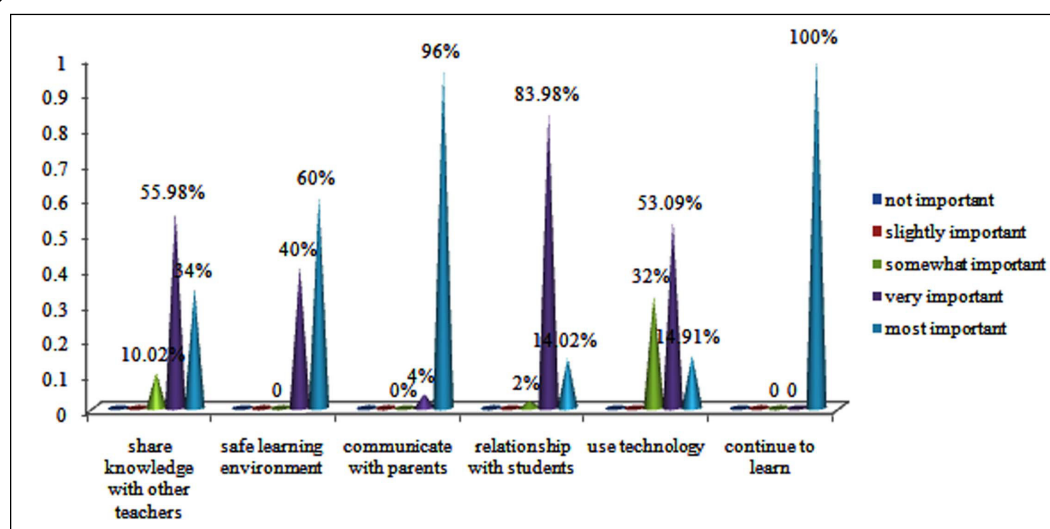
- Belief of trainee educator on good teachers for CWSN
- Belief of experienced educator on good teachers for CWSN
- Difference of opinion among both groups on good teachers for CWSN
- Similarities between both groups on good teacher quality for CWSN

### **Demographic Data**

Among 30 experienced special educators, 7 (23.33%) were males with mean age of 41.23 years, whereas 23 (76.66%) were females with mean age of 33 years. Among trainee teachers, 31 (62%) were females with mean age of 20 years and 19 (38%) were males with mean age of 21.56 years (Figure 2).

### **Trainee Educator Belief on Good Teachers' Quality for CWSN**

Most of the trainee students indicate that patience and flexibility are the important qualities of good teacher. A percentage of 100 trainee teachers report that teachers need to prepare before the class and should have content knowledge. They reported that preparing before for class helps the teachers to choose the appropriate strategies according to the type of disability. A percentage of 68.42 trainee teachers opted for 'the most important' option when asked about the creativity as a quality of good teacher. They reported that creativity in education helps the



**Figure 2: Percentile result of experienced special educators**

CWSN; it makes easier for children to learn their subjects and make the class interesting. Mostly (77.87%) trainees indicated that good teachers should not be strict and firm, with his/her students, because when teachers behave strictly, it may give rise to negative behaviour in students (Figure 1).

#### **Experienced Special Educators' Belief on Good Teachers for CWSN**

Almost all special educators reported that flexibility, patience, creativity, positive behaviour towards CWSN and safe learning environment are some prominent quality of good teacher. According to this group, patience helps the special educators in handling more efficiently these children as well as somehow it also helps in building the positive teacher–student relationship. They reported that sharing knowledge with other teachers and working as a part of team help in updating a teacher as well as it help in solving the many student issues in class. They reported that sharing an idea with co-teachers and other professionals always helps in acquiring a new knowledge as we learn through shared experiences. They (96%) also reported that a teacher should communicate with parents once in a week or at least once in a month (Figure 2).

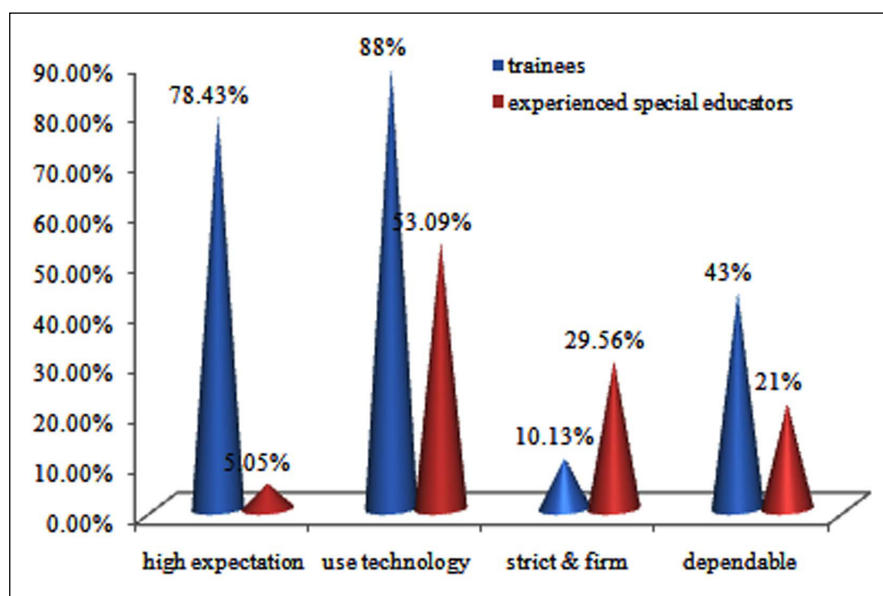
#### **Different Views of Both Groups on Good Teachers for CWSN**

Both group had some different point of view regarding the quality of good teachers towards CWSN. Mostly trainee group (78.43%) indicated that teacher should have high expectations with CWSN, whereas 94.05% experienced special educators reported that teacher should not have a high expectation with CWSN. A percentage of 88 trainee reported that a good teacher should used technology in class, whereas only 53.09% experienced special educators indicated the same. Trainee teachers (77.87%) indicated that good teacher should not be strict, whereas 57% experienced special educators opted 'somewhat important' and 29.56% opted for slightly

important. Experienced special educators reported that being slightly strict in class helps in maintaining discipline in class (Figure 3).

### **Similarities between Groups on Good Teacher Quality for CWSN**

Both groups indicated that passion towards teaching, patience, flexibility, engaging with students and strong relationship with students, preparing for everyday classes, positivity and creativity as a major component of good teachers. Both group agreed that flexibility and creativity in education helps the CWSN.



**Figure 3: Difference between both groups**

## **DISCUSSION**

Result of the present study revealed that both groups had some differences and similarities. Major difference was seen in terms of strictness in class. Experienced special educators try to make class creative and simultaneously focus on discipline aspect also. According to trainee teachers, strictness in class may lead to the negative feeling in children. Result of the present study is well supported by the study done by Bullock (2015) on regular school teachers and students. Bullock also reported that teacher focuses on more flexibility and discipline, whereas student believe in not to be strict as a quality of good teachers. A study done by UNICEF (2014) on Barbados reported significant difference in student and teacher point of view about good teacher quality for CWSN.

### **Trainee Educator Belief on Good Teachers' Quality for CWSN**

Most of the trainee students indicate that patience and flexibility are the important qualities of good teacher. A percentage of 100 trainee teachers report that teacher need to prepare before

the class and should have content knowledge. They reported that preparing before for class helps the teachers to choose the appropriate strategies according to the type of disability. This is in relation to a report where more than 50% of teachers emphasis on good planning and preparedness as indicator for good teacher (Devine *et al.*, 2013).

The present study also reported that 68.42% of trainee teachers opted for 'the most important' option when asked about the creativity as a quality of good teacher similar result was reported by Sugrue (1997). He had worked with primary teachers and explored the teacher perception towards importance of craft work for the educational, mental and behavioural development of education. His study reported that most of the teachers agreed that craft work must be included in classes which help in the better educational development of students. They further reported that creativity in education helps the CWSN; it makes easier for children to learn their subjects and make the class interesting.

Mostly (77.87%) trainees indicated that good teachers should not be strict and firm, with his/her students, because when teachers behave strictly, it may give rise to negative behaviour in students. This is in relation to the study done by Beishuizen *et al.* (2001) who reported that good teachers are the ones who build good relationships with their students.

#### **Experienced Special Educators' Belief on Good Teachers for CWSN**

Almost all special educators reported that flexibility, patience, creativity, positive behaviour towards CWSN and safe learning environment are some prominent quality of good teacher. According to this group patience helps the special educators in handling more efficiently these children as well as somehow it also helps in building the positive teacher–student relationship. They reported that sharing knowledge with other teachers and working as a part of team help in updating a teacher as well as in solving many student issues in class. They reported that sharing an idea with co-teachers and other professionals always help in acquiring a new knowledge as we learn through shared experiences. Cochran-Smith and Lytle's (1993) suggest that knowledge of practice is embedded in reflection and evidence driven evaluation of practice. They (96%) also reported that a teacher should communicate with parents once in a week or at least once in a month.

#### **Different Views of Both Groups on Good Teachers for CWSN**

Both groups had some different point of view regarding the quality of good teachers towards CWSN. Mostly trainee group (78.43%) indicated that teacher should have high expectations with CWSN, whereas 94.05% experienced special educators reported that teacher should not have a high expectation with CWSN. Making high expectation may put child and educator to emotional instability and the same was reported by the Kitching (2009). Kitching identified the complexity and emotional challenges for new teachers in adapting to the new environment and highlight that boredom and frustration is part of teachers' new world when expectation from students is too high.

A percentage of 88 trainee reported that a good teacher should use technology in class, whereas only 53.09% experienced special educators indicated the same. Fahie and McGillicuddy (2013) found the similar results. They reported that most of the teachers rate active learning, innovative

methods and technology in teaching as the important parameter. They reported that use of technology during class helps in developing interest among students, whereas study done by Nagar *et al.* (2013) reported that more use of technology also developed many other issues which will hamper the students' education.

Trainee teachers (77.87%) indicated that good teacher should not be strict, whereas 57% experienced special educators opted 'somewhat important' and 29.56% opted for slightly important. Experienced special educators reported that being slightly strict in class helps in maintaining discipline in class. The result goes parallel with the statement quoted by Fives and Buehl (2011) in his study, 'the practices in systematic dimension in context of school and community interact to influence student outcomes in classroom', whereas Devine *et al.*, (2013) in their study found that greater than 50% of teachers has ranked compassionate and sympathy towards children are important.

## **CONCLUSION**

Though there have been policies and acts that state about the inclusion of disabled children in school, the knowledge and attitudes of teachers in accepting those children play an important role. The special educators in turn play a significant role in spreading awareness about the difficulties faced by CWSN and so the attitude among the, on this issue, has an effect over the counselling of teachers in inclusive set up. The educators during training period are exposed to good teaching practice, gain class room experiences, learn teaching using new curriculum and data-driven practice. But beside these experience and preparation, there are other factors contributing in making a good teacher.

The question of what knowledge, attitudes, behaviours and skills teachers should possess is the subject of much debate in many cultures. This is understandable, as teachers are entrusted with the transmission to learners of society's beliefs, attitudes and deontology, as well as of information, advice and wisdom and with facilitating learners' acquisition of the key knowledge, attitudes and behaviours that they will need to be active in society and the economy. These all parameters become more for debate when the topic of education for CWSN comes into the existence. To find the answer on what parameters made the good teacher for CWSN, the present study was conducted.

The study tries to explore the perspective of experienced educators and trainee educators about the quality of a good teacher for disabled children. The present study included total of 80 participants. Among 80 participants, 50 were trainee educators and 30 were experienced teachers with minimum of 3 years of experience. The testing has been carried through a questionnaire which was given by Bullock (2015) that had 20 questions, with each having a response in 5-point rating scale. Results revealed that both group advocate on creativity, passion, patience, good relationship with students, safe learning environment and flexibility as major quality of good teacher. Experienced teachers view that a good teacher builds strong relationship with children, shows them that they care and acts as a team player. Good teachers should know their students as well as environment around them. Moreover, it is important that teachers should understand the implication of student-centred learning setup than a teacher-centred learning. A trainee teacher has essential understanding on continual learning, creativity and

flexibility as those are equally important to be a good teacher. They know learning is more in this career than just teaching; hence, they need to approve to be a student and constantly improve upon knowledge.

There are certain common points where educators mention that a good teacher must be willing to adapt on instruction towards children and also take a lesson towards learning rather than examination point of view. This suggest that teaching isn't definite or stagnate but rather a good teacher need to be creative and more willing to try new things. They commonly believe that a good teacher is not only someone who educates but also someone who can connect with them personally while teaching.

### **IMPLICATION**

The study implies the importance of strong classroom community so the disabled children feel safe to learn and grow. Moreover, it implies that student trainee should be given more of practical experiences, it can be interpreted that these trainee students perceive the education initially from the life experience they have undergone as student. Similarly, there are various other factors, like the characteristic behaviour, the integrated intervention and others, of CWSN, that could have provoked the present result and which may not have been considered.

There has been number of literature that have focused only on teacher's attitude towards CWSN and also disabled children attitude on their teachers. Moreover, there are literatures that talk about special educators versus teachers' perspective in inclusion of children in normal school set up.

### **FUTURE IMPLICATION**

Very limited literature focus on difference between the attitudes of trainee and experienced educators. Hence, there is a need of dearth in the study. This is one of the preliminary studies done in Hyderabad with respect to Indian scenario, the sample is restricted hence to one region and limits the generalisability of the study. The implication of study is to add on to the existing research showing the perspective, ideas and thoughts of future educators and existing educators on dealing with children of special need. It is known that there is no one factor that makes a good teacher but rather a complex combination of factors. The study also suggests a need for revision in curriculum that focus on training the educators for CWSN. To ensure that teachers receive the kinds of skills and knowledge to guide the delivery of education in special setting, there is need for continued focus on teacher development. The future research demand to add on to this is through advancement in the study.

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## Computer-Assisted Instruction: An Innovative Tool of Remedial Teaching for Children with Position-in-Space type of Learning Disability

Ravindra Kumar

### ABSTRACT

*Now-a-days, the computer is an innovative tool for remedial teaching of children with diverse need. In this study, the investigator investigated whether computer-assisted instruction (CAI) (games/simulations) as remedial teaching for specific position-in-space type of learning disabled children and whether CAI helps equally both boys and girls. The study adopted the pre-test–post-test-control group design. Simple random sample of 64 students were drawn from seven schools in Meerut, Uttar Pradesh, India. The researcher coordinates the CAIs (game/simulations) for position-in-space-type learning-disabled children which was used as an instrument for experimental group, whereas control group were exposed to traditional teaching method. The instrument used for data collection was diagnostic test of learning disability Diagnostic Test of Learning Disability test. The *t* test statistics was used to analyse the hypothesis. The findings revealed that experimental group performed better than the control group. The study found that CAI method was better than traditional method on fifth-grade position-in-space coordination learning-disabled students.*

**Keywords:** Position-in-space, Computer-assisted instruction, Learning disabled, Diagnostic test of learning disability, Remedial teaching, Innovative tool

### INTRODUCTION

Computer-assisted instruction (CAI) is a new teaching–learning strategy in which the topics to be taught is carefully planned, written and programmed in a computer which could be run at the same time in several computer units and allows each student a computer terminal. The instructions are also programmed on a computer disc, which could be played using audio, video, drag and drop, gaming and simulation activity for the student to learn the topic at his/her leisure time and at his/her own pace. The potential benefit of CAI cannot be underestimated in the contemporary world. There is lot of established findings on the instructional value of computer, particularly in advanced countries. There are now several CAI packages on different subjects. It is obvious that current trend in research all over the world is the use of computer facilities and resources to enhance students' learning. Chang (2000) and Yusuf (2009) opined 'many exercises that depart from traditional method are now readily accessible on the web (p. 521), even though teachers do not use these facilities'. Jenk and Springer (2005) opined that the way CAI is delivered can affect its effectiveness, and that new studies are needed to clarify

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Assistant Professor, School of Education (SoE), Central University of South Bihar, Gaya, Bihar  
Email id: ravikrishna010586@gmail.com

the effect of CAI in contemporary student environment. Instructional material and strategies through CAI have been found to aid academic achievement and retention. Orisebiyi (2007), who investigated the effect of computer-assisted package on student's achievement in learning disability, found CAI to be effective on student's achievement. However from reviews, it was observed that many of the studies were focused on some parts of mathematics such as algebra, statistics, word problem and quadratic equation, not much on geometry using CAI Package.

CAI improves instruction for students with disabilities because students receive immediate feedback and do not continue to practice the wrong skills. Computers capture the students' attention because the programs are interactive and engage the students' spirit of competitiveness to increase their scores. Also, CAI moves at the students' pace and usually does not move ahead until they have mastered the skill. Programs provide differentiated lessons to challenge students who are at risk, average or gifted.

**Disability:** Disability is more than a problem or difficulty with how our body works – a child with an impairment may experience disability when functioning in an environment that impact the child's successful performance at a task [NCERT, 2014 (Focus Paper)].

**Innovative Tools:** Information and Communication Technology (ICT) is a popular topic among many teachers and teacher educators today. There are many ICT tools on the Internet which are available in online and offline and many of them open up new possibilities of teaching and learning in the classroom. In this text, the research reviewed one of the most important offline ICT tools with a lot of potential: CAI.

**Learning Disabilities:** Learning disability is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to Central Nervous System dysfunction. Even though learning disability may occur concomitantly with other handicapping conditions (e.g. sensory impairment, mental retardation, social and emotional disturbance) or environmental influences (e.g. cultural differences, insufficient/inappropriate instruction, psychogenic factors), it is not the direct result of these condition or influences.

**Position-in-Space:** The position-in-space, which is the ability to perceive the relationship between two or more objects in space, that is of it being above, below, behind, in front of, next to and others to the person observing. This grows out of the individual's inherent ability to organise and see order in space. It is also necessary that one comprehends words designating position-in-space when he/she reads or hears it, for adequate comprehension.

Position in space is the skill we use in determining where we are in relation to our physical emotional world. When this skill is low, one may become physically disoriented. This may occur when trying to find a car in a parking lot or you may lose your place on the page as you read. Frequently low position-in-space will cause an inaccurate perception of one's relationship with others. 'How close is our relationship?' One may frequently vacillate between shy and obnoxious. This skill is essential to understand geography (where things are located) and history (when did various events occur) and how they all fit together.

The purpose of this study was to investigate the effectiveness of CAI developed by author for use with primary school students, particularly fifth graders, for improving their learning disabilities. Follow-up was gathered to determine the maintenance of CAI.

#### **OBJECTIVES OF THE STUDY**

1. To compare the effectiveness of remediation of position-in-space learning disabilities with pre-test and post-test of traditional method of teaching.
2. To compare the effectiveness of remediation of position-in-space learning disabilities with pre-test and post-test of CAI method of teaching.
3. To compare the relative effectiveness of remediation of position-in-space learning disabilities with CAI and traditional method of teaching.

#### **HYPOTHESES OF THE STUDY**

1. There was no significant difference between the pre-test and post-test of traditional method of teaching in remediation of position-in-space of learning disabled children.
2. There was no significant difference between the pre-test and post-test of CAI method of teaching in remediation of position-in-space of learning disabled children.
3. There was no significant difference between the effectiveness of CAI and traditional method of teaching in remediation of position-in-space learning disabled children.

#### **SCOPE OF THE STUDY**

The study focused on the effectiveness of CAI as remedial teaching for learning disabled fifth grade. It was limited to position-in-space learning disabled children of fifth grades students of CBSE board in Meerut, Uttar Pradesh.

#### **METHODOLOGY**

The research design for this study was pre-test–post-test experimental group and pre-test–post-test control group design. The target population was 749 from 7 CBSE schools in Meerut, Uttar Pradesh, India. The sample for this study was made up of 64 students using simple random-sampling techniques [Behavioural Checklist, NVGIT, Diagnostic Test of Learning Disability (DTLD)]. A breakdown revealed that the experimental group consisted of 32 students with a gender balance of boys ( $n = 17$ ) and girls ( $n = 15$ ), whereas the control group had a gender balance of boys ( $n = 17$ ) and girls ( $n = 15$ ), respectively. The experimental group was taught using computer-assisted instructional package (CAI, game/simulation) which covered position-in-space of learning disability, whereas control group was taught using traditional method.

#### **RESEARCH TOOLS**

The following tools were used by the researcher to conduct the study:

1. Behavioural Checklist for Screening the Learning Disabled (B.C.S.L.D.) developed by *Swaroop and Mehta*.

2. Diagnostic Test of Learning Disability (DTLD) developed by *Swaroop and Mehta*.
3. Non-verbal Group of Intelligence Test (NGIT) developed by *Imtisungba*.
4. Computer Assisted Instruction (CAI) package consisting of games/simulations developed by *Author*.

### **Computer-Assisted Instruction for Position-in-Space Type of Learning Disability**

In this group, following six small games/simulations were selected for remediation of position-in-space disability:

1. *Learning Shapes Videos*: In this simulation, children need to select learning shapes and watching carefully. Every shape describes itself in audio–video form.
2. *Paint the Picture Game*: In this game, children need to paint the complete picture with the help of model picture shown on screen.
3. *Make Pair Game*: In this game, children need to select the particular object for related function. This is the drag and drop game. In this game, many different objectives show on the top side of the screen and bottom show the answer object for the make pair.
4. *Mixed Bag Game*: In this game, children need to select right answer shown on the screen. This is the non-verbal figure game. In this game, researcher arranges the six stages in difficulty order. Children diagnose the pattern in question and after that select the right responses.
5. *Solitaire Game*: Here, the children are provided with a pack of total 52 cards. There are three stages in this game: one suit (easy), two suits (medium) and four suits (hard). The child has to prepare four series of cards beginning from arranging them in descending order to complete a series.
6. *Seesaw Logic Figure Game*: In this game, children need to select the heaviest object. The efficiency between children was compared by time factor and scores acquired. Levels were arranged as per difficulty order.

All the games were arranged as per difficulty order and children were trained to participate in the games/simulations. These games/simulations overcome position-in-space disabilities completely or to some extent.

### **METHOD OF DATA COLLECTION**

The teachers in the sampled schools were trained as research assistants in the use of CAI package. The study period was of 45 classes for 5 months, twice a week. The classes were conducted in a computer institute with CAI for position-in-space type of learning disability. There was an orientation between the researcher and the students who underwent the test from the selected schools. The experimental group students were exposed to CAI package (games) which had been installed on desktop computer, whereas control group students were taught using traditional teaching method having the same content used for the experimental group. At the end of the experimental study, DTLD was administered as the post-test to

measure the outcome of learning disability of the students. The DTLD test was administered in the same manner for the post-test also. The test was conducted at the same time with the help of research assistants in each school and the script collected immediately for scoring. The  $t$  test was used to test all the null hypotheses using Statistical Package for Social Sciences version 20 at 0.05 alpha level.

## RESULTS AND DISCUSSION

Phase 1: Remediation of learning disability through traditional method with reference of position-in-space learning disabled children

**Table 1: Statistical values on the DTLD sub-test of position-in-space of group-A (control group) students on the pre-test and post-test**

Testing	<i>N</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>t</i>
Pre-test	32	1.84	0.91	0.62	5.88**
Post-test	32	2.62	0.79		

\*\*Significant at 0.01 level.

Table 1 shows that mean scores on the DTLD sub-test of position-in-space of group-A students on the pre-test and post-test were 1.84 and 2.62, respectively. The  $t$  value for the difference in mean scores came to be highly significant ( $t = 5.88$ ,  $P < 0.01$ ). It inters that the traditional method of teaching was helpful in improving significantly the position-in-space among the selected subject, that is learning disabled children.

Furthermore, a highly positive ( $r = 0.62$ ) correlation was yielded between pre-test and post-test scores on this subtest meaning thereby that the traditional method was consistent and equally effective for almost all the children that is improvement in position-in-space regardless of their prior achievement on DTLD sub-test of position-in-space.

Phase 2: Remediation of learning disability through CAI method of teaching with reference of position-in-space learning disabled children.

**Table 2: Statistical values on the DTLD sub-test of position-in-space of group-B (experiment group) students on the pre-test and post-test**

Testing	<i>N</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>t</i>
Pre-test	32	2.00	0.71	0.40	13.54**
Post-test	32	3.96	0.78		

\*\*Significant at 0.01 level.

The data shown in Table 2 reveal that mean scores on the DTLD sub-test of position-in-space of group-B students on the pre-test and post-test were 2.00 and 3.96, respectively, the difference being 1.96. The difference was found to be highly significant ( $t = 13.54$ ,  $P < 0.01$ ). Thus, CAI (game/simulations) method was also effective in improving position-in-space among the learning disabled students.

The results are almost identical to those achieved for the sample subjects. The results are almost identical to those achieved for the traditional method except that the correlation obtained in case of CAI method ( $r = 0.40$ ) is much less than that obtained for the traditional method ( $r = 0.62$ ).

Phase 3: Comparing relative effectiveness of CAI and traditional methods in remediation of position-in-space learning disability:

**Table 3: Statistical values on the DTLTD sub-test of position-in-space of group-A (control group) and B (experiment group) students on the post-test**

Groups	N	M	SD	t
Group A	32	2.62	0.79	7.13**
Group B	32	3.96	0.78	

\*\*Significant at 0.01 level.

An observation of Table 3 shows that mean scores achieved on DTLTD sub-test of position-in-space on the post-test by group-A and group-B students differ significantly ( $t = 7.13$ ,  $P < 0.01$ ). It infers that CAI method was better than the traditional method in improving position-in-space among learning disabled children.

### FINDINGS AND CONCLUSIONS

H<sub>0</sub>-1: The traditional method of teaching, which included individual attention and drill and practice, was significantly effective in remediation of position-in-space learning disability for learning disabled children. The traditional method was found to be effective for position-in-space learning disabled children.

H<sub>0</sub>-2: The CAI (games/simulations) method of teaching was found to be significantly effective in effective in remediation of position-in-space type of learning disability for learning disabled children.

H<sub>0</sub>-3: The CAI (games/simulations) method was significantly better than the traditional method in remediation of position-in-space learning disability for fifth-grade learning disabled children.

The findings are consistent with the results reported by Haberman (1977) for socially/emotionally disturbed school children, Lavine and Kareev (1980), Watkins and Webb (1981), Bukatman (1981), Maccini *et al.* (2002), Vasanthal (1994), Kim (1998), Reddy and Kumar (1997), Sharma (2004), Crute (2000), Chiang (1986), Fuch *et al.* (2006), Miller (2007), Seo and Bryant (2009), Anyamene (2012), Singh and Agrawal (2013), Brown *et al.* (2013), Kumar (2015) and others found that various forms of computer delivered instruction have the potential for improving student achievement scores.

### EDUCATIONAL IMPLICATIONS OF THE FINDINGS

The findings of the study provide the awareness to the teachers, parents and guardians of learning disabled children. The educational implications of the findings of study are as follows:

1. All games and simulations may be used for helping the learning disabled children because in CAI package, all games and simulations are easy to download and supported almost all the operating systems.
2. **The findings** of the study may develop the tendency of practices, trial and error habits in students.
3. It was found that the CAI package may provide to be effective but is not the panacea for students with learning disabilities.
4. The findings of the study that CAI package may improve the thinking process of learning disabled children can also be useful in providing the ways to teach for learning disabled students.
5. The findings of the study reveal that the CAI package may be helpful in making teacher awareness to teach as teaching material. The teachers may be used the selected games and simulations as a teaching material to improving the performance of students.

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## A Study of Life Skill and Academic Anxiety of Lower Secondary School Students

Shalini Singh

### ABSTRACT

*Every child is born with a number of innate tendencies, impulses and drives. If these impulses and drives remain uncontrolled, these can lead to haphazard, purposeless and disorganised way of life. So, the purpose of providing education becomes more important. Education enables an individual to live his life efficiently and purposefully. Each individual sets his goals of life. These goals of life are achieved through certain characteristics. These characteristics are known as 'life skills'. Through the study, following results were drawn – girls possess more life skills than boys, anxiety hinders academic performance through retardation, girls are more anxious than boys, students who are better in life skill score better in examinations due to less academic anxiety, government school students are more anxious than public school students.*

**Keywords:** Academic anxiety, Coping skills, Life skills, Lower secondary students, Negotiation skills, Social skills, Thinking skills

### INTRODUCTION

A nation can only rise up to heights through successful citizens. All citizens of a nation are of different castes, creeds and religions. Our country, India, is a good example of it. Now, there a question arises that how citizens of any country can become smart. The answer is very simple that they can become smart through literacy as well as hygienic habits. Now, it is clear that education is the only tool in the hands of a nation that can provide 'smart citizens'. All citizens of a nation make society. Smartness means being technologically advanced. Stability of a nation depends upon literate society. Education plays vital role in the building up of society.

Every child is born with a number of innate tendencies, impulses and drives. If these impulses and drives remain uncontrolled, these can lead to haphazard, purposeless and disorganised way of life. So, the purpose of providing education becomes more important. Education enables an individual to live his life efficiently and purposefully. Each individual sets his goals of life. These goals of life are achieved through certain characteristics which are called skills. These skills are named under various heads – literary skills, language skills, functional skills, livelihood skills, vocational skills, technical skills, employability skills, cultural skills, sports skills, recreational skills, life skills. Each skill polishes personality in its field. Thus, the most important skill for developing whole of personality is 'life skill'.

Life skills may be defined as abilities, attitudes, knowledge and behaviours which are essential for better adjustment in society and achieving goals of life to become successful citizen of

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Assistant Professor, Department of Education, V.M.L.G. College, Ghaziabad, Uttar Pradesh, India  
Email id: sshalini\_78@rediffmail.com

society. From psychological point of view, life skills are those mental and emotional skills which enable an individual to cope with and succeed in his life. Life skills are of different types – social skills, negotiation skills, thinking skills, coping skills.

These skills play an important role in grooming psychosomatic and psychometric powers. Psychosomatic powers lead to successful personal and professional life whereas psychometric powers increase possibility of acceptance of an individual by other members of society. Overall, these skills not only enrich physical but also mental strength through enhancing peace of mind, concentration and insight and intuitions. Life skills also make impressive personality and happiness in social life too. Happiness is the root of healthy competition, successful and progressive life in all aspects of life.

### **REVIEW OF RELATED LITERATURE**

Fein (1963) studied curvilinear relationship between anxiety and achievement of nursing school and found that anxiety effects achievement of students. Gupta (1983) conducted a study of anxiety, achievement motivation in relation to academic achievement and economic status of secondary level students. Homchaudhari (1983) conducted an analytical study of correlates of academic performance of college students of Mizoram and found various correlates which were responsible for good academic performances of students. Mehrotra (1986) conducted his research work on relationship between Intelligence Socio Economic Status, Anxiety, Personality Adjustment and Academic Achievement of High School Students and found that all above variables really effect academic achievement of students.

Gupta (1992) studied relationship between locus of control, anxiety, level of aspiration and academic achievement of secondary level students and established facts that locus of control of brain controls anxiety and level of aspiration of each student of secondary level. UNESCO (1999) called Inter-Agency meeting on Life Skill at Geneva and passed resolution that there is more need to explore life skills because these are essential for each individual of the world. Deshmukh (2000) found that anxiety, achievement motivation, intelligence, high and low self concept affect academic achievement of Junior High school students. Meera (2001) explored that classroom environment and academic stress has impact on achievement of tenth grade students. UNESCO, (2001) conducted a study on need and importance of life skills for non-formal type of education. Srivastava (2006) found in his study that academic achievement of students is different in different school organisational climate. Sud and Sinha (2006) studied that academic performance is related to self handicapping, test anxiety and study habits of high school students. Copland (2008) does evaluation of the stop and think social skills programme with kindergarten students in their study and found that social skills are complimentary part of their personality.

After reviewing the related literature of the life skills and academic anxiety it was found that a few studies were conducted on lower secondary students. So the researcher had chosen for the study.

### **NEED AND SIGNIFICANCE OF THE STUDY**

In present time, each individual of the world is under stress. Due to stress, even young learners are committing suicides in various ways. It also increases the need to study life kills in their

syllabus from the beginning. Considering the importance of life skills, 164 nations of the world committed to 'Education for all' which included life skills as a basic learning need for young learners. Life skills also enable young learners to develop attitudes towards healthy behaviour and perfection in social behaviour.

Life skills are essentially those abilities that promote mental well-being and competence in young learners. These skills also enable them to learn from challenges of day-to-day life by implicating their knowledge for best solutions of those problems. Thus, it is clear that life skills lead to analytical and critical thinking. Through life skills young learners become able to manage their emotions, pros and cons of life and develop their understanding for best possible interpersonal relationship with others too.

### **DEFINITION OF KEY TERMS**

#### **Life Skills**

The World Health Organization has defined life skills as, 'the abilities for adaptive and positive behaviour that enables individuals to deal effectively with demands and challenges of everyday life'.

The United Nations International Children's Emergency Fund has defined life skills as, 'a behaviour change or behaviour development approaches designed to address a balance of three areas – knowledge, attitude and skills'.

**Social Skills-** Such skills develop self-awareness, empathy in an individual for making them social orator.

**Negotiation Skills-** These kind of skills generate traits for effective communication and interpersonal relationship in an individual.

**Thinking Skills** – These skills develop critical and creative thinking, problem solving and decision-making power of an individual.

**Coping Skills-** These skills help to cope up with stress and emotions of others in daily life.

#### **Academic Anxiety**

Anxiety is a feeling of uneasiness and tension which is considered as a response to some unknown but anticipated danger or perceived threat that may exist only in one's imagination. It may be based on unconscious threat as well as conscious thoughts about what may happen. Generally, anxiety is of two types – trait or state. Trait anxiety arouse from some temporary situation of the environment such as examination, accident, punishment and others. Thus, anxiety originated by examination is known as 'academic anxiety'. It is normal response to the pressure of school. In other words, academic anxiety is a kind of state anxiety which relates to the impending danger from the environment of the academic institution including teachers and certain subjects like Mathematics, English and others. It functions positively and negatively both. For example, if a learner gets motivated with mild anxiety, he completes his assignments and studies properly represents positive functioning. On the other hand, if anxiety is severe

then it hinders the academic performance instead of improving it and then it represents negative functioning. Sometimes it adversely affects performance of a learner on test papers too.

Lower Secondary Students- Students studying in ninth and tenth grades were covered under such level.

### **OBJECTIVES OF THE STUDY**

The objectives of the study were as follows:

1. To study the difference in life skills of boys and girls.
2. To study the difference in academic anxiety of boys and girls.
3. To compare life skills of learners studying in lower secondary level of government and public schools.
4. To compare academic anxiety of learners studying in lower secondary level of government and public schools.
5. To find out relationship between life skills and academic anxiety of learners studying in lower secondary level of government and public schools.

### **HYPOTHESIS OF THE STUDY**

The hypotheses of the study are as follows:

1. There is no significant difference in life skills of boys and girls.
2. There is no significant difference in academic anxiety of boys and girls.
3. There is no significant difference between life skills of boys and girls studying in lower secondary level of government and public schools.
4. There is no significant difference between academic anxiety of boys and girls studying in lower secondary level of government and public schools.
5. There is no significant relationship between academic anxiety of boys and girls studying in lower secondary level of government and public schools.

### **DELIMITATIONS OF THE STUDY**

Delimitations are as follows:

1. The present study is delimited to Ghaziabad city only.
2. The present study is delimited to lower secondary level learners.
3. The present study is delimited to two variables – life skill and academic anxiety.

### **RESEARCH DESIGN**

#### **Population and Sample**

All the students studying in lower secondary level in Ghaziabad district were considered as population. A list of all schools from District Inspector of schools DIOS office was collected.

Out of these, one government and one public school was selected through lottery technique but due to the feasibility reasons, sample of 60 students were selected from each school. Thus, sample of 120 students were finalised through random cluster sampling. A total of 30 girls and 30 boys were selected from each school.

### **Research Methodology Used for the Study**

Descriptive survey method has been used for the present study.

### **Variables Used for the Study**

(a) **Independent variable:** Life skill

(b) **Dependent variable:** Academic anxiety

### **Research Tools Used for the Study**

(1) **Life skill scale:** This test was prepared by Dr. Raina Tiwari. The test was for learners of 15–18 years of age. It categorises learners into five categories – very high skills, high skills, moderate skills, low skills and very low skills. It has 40 items in total. Out of these, 20 items show positive high skills and other 20 items show negative low skills. The items of the test were related with personal and social skills only. No time limit duration for completion of the test was mentioned in the test. Although a learner has taken 15–20 min in completion of the test, the reliability of the test was found .79 by test–retest method and .81 by Kuder–Richardson formula. Validity of the test was found .71.

(2) **Academic anxiety scale:** This test was prepared by Dr. A.K. Singh and Dr. A. Sen Gupta. The test was for learners of 13–16 years of age. The test measured general anxiety of learners studying in VIII, IX and X grades. It has 20 items in total. It categorises learners in five categories – very less anxiety, less anxious, average, anxious and very anxious. The reliability of the test was found .60 by test–retest method and .65 by split half method. Validity of the test was found .31 calculated by neuroticism scale and .41 by Sinha scale .

No time limit duration for completion of the test was mentioned in the test although a learner has taken 10–15 min in completion of the test.

## **RESULT AND DISCUSSION**

**Hypothesis 1** There is no significant difference in life skills of boys and girls.

**Interpretation:** Table 1 indicates that mean and SD of boys is 28.0 and 3.560 and of girls these values are 28.7 and 3.562. The  $t$  value was found .95. The table value at df 118 is 1.98 at .05 level and 2.62 at .01 level. Thus, it can be interpreted that calculated  $t$  value is lesser than the table value at both the levels of significance. Hence, null hypothesis is accepted at both the levels and this indicates that there is no significant difference between life skills of boys and girls.

**Hypothesis 2** There is no significant difference in academic anxiety of boys and girls.

**Interpretation:** Table 2 indicates that mean and SD of boys is 13.67 and 5.33 and for girls

**Table 1: Showing significance of difference in life skills between boys and girls**

Groups	No. of Students	Mean	SD	<i>t</i> Value	Level of Significance Table Value of <i>t</i>	
					.05 Level	.01 Level
Boys	60	28.0	3.560	.95	1.98	2.62
Girls	60	28.7	3.562			

df = 118.

**Table 2: Showing significance of difference in academic anxiety between boys and girls**

Groups	No. of Students	Mean	SD	<i>t</i> Value	Level of Significance Table Value of <i>t</i>	
					.05 Level	.01 Level
Boys	60	13.67	5.33	.93	1.98	2.62
Girls	60	12.88	3.01			Not significant

df = 118.

these values are 12.88 and 3.01. The *t* value was found .93. The table value at df 118 is 1.98 at .05 level and 2.62 at .01 level. Thus, it can be interpreted that calculated *t* value is lesser than the table value at both the levels of significance. Hence, null hypothesis is accepted at both the levels and this indicates that there is no significant difference between academic anxiety of boys and girls.

**Hypothesis 3** There is no significant difference between life skills of boys and girls studying in lower secondary level of government and public schools.

**Interpretation:** Table 3 indicates that mean and SD of public school students is 33.97 and 3.80 and of government school students these values are 27.98 and 3.68. The *t* value was found 1.25. The table value at df 118 is 1.98 at .05 level and 2.62 at .01 level. Thus, it can be interpreted that calculated *t* value is lesser than the table value at both the levels of significance. Hence, null hypothesis is accepted at both the levels and this indicates that there is no significant difference between life skills of students studying in lower secondary level of government and public schools.

**Table 3: Showing significance of difference between life skills of students studying in lower secondary level of government and public schools**

Groups	No. of Students	Mean	SD	<i>t</i> Value	Level of Significance Table Value of <i>t</i>	
					.05 Level	.01 Level
Public school	60	33.97	3.80	1.25	1.98	2.62
Government school	60	27.83	3.68		Not significant	Not significant

df = 118.

**Hypothesis 4** There is no significant difference between academic anxiety of boys and girls studying in lower secondary level of government and public schools.

**Interpretation:** Table 4 indicates that mean and SD of public school students is 12.30 and 3.10 and of government school students these values are 12.75 and 2.77. The calculated  $t$  value is .78. The table value at df 118 is 1.98 at .05 level and 2.62 at .01 level. Thus, it can be interpreted that calculated  $t$  value is lesser than the table value at both the levels of significance. Hence, null hypothesis is accepted at both the levels and this indicates that there is significant difference between academic anxiety of students studying in lower secondary level of government and public schools.

**Table 4: Showing significance of difference between academic anxiety of students studying in lower secondary level of government and public schools**

Groups	No. of Students	Mean	SD	$t$ Value	Level of Significance Table Value of $t$	
					.05 Level	.01 Level
Public school	60	12.30	3.10	.78	1.98	2.62
Government school	60	12.75	2.77		Not significant	Not significant

df = 118.

**Hypothesis 5** There is no significant relationship related to the academic anxiety of students studying at lower secondary level.

Groups	Mean	SD	$t$ Value	$r$ Value	Level of Significance Table Value of $t$	
					.05 Level	.01 Level
Life skills of students ( $N = 120$ )	28.48	3.59	36.73	-.050	1.97	2.59
Academic anxiety of students ( $N = 120$ )	12.52	2.94				

**Interpretation:** Table 5 indicates that mean and SD of life skills of all students are 28.48 and 12.52, respectively. The calculated  $t$  value is 36.73 which is significant at both levels .01 and .05 level because their values are 1.97 and 2.59. The calculated  $r$  value is -.050 which is negligible or slightly negative. Thus, it is clear that if scores of life skills will increase then academic anxiety will decrease. Hence, null hypothesis that there is no significant relationship related to academic anxiety of students studying at lower secondary level. In other way, it indicates that students of public schools who are high in life skills show less academic anxiety.

### MAJOR FINDINGS OF THE STUDY

The major findings of the study also support findings of studies mentioned in review of related literature. These are as follows:

1. Although there is no significant difference between life skills of boys and girls studying at lower secondary level yet difference in mean value clearly indicates that girls possess more life skills than boys.
2. Although there is no significant difference between academic anxiety of boys and girls studying at lower secondary level yet difference in mean value clearly indicates that girls are more anxious than boys.
3. Although there is no significant difference is found in between life skills of students studying at lower secondary level in public and government schools yet mean value clearly indicates that students of public schools have better life skills than students of government schools.
4. Although there is no significant difference between academic anxiety of students studying at lower secondary level in public schools and government schools yet difference in mean value clearly indicates that government school students are more anxious than public school students.
5. In spite of slight negative co-relation between life skills and academic anxiety, both are correlated and results conclude that students who are better in life skill score better in examinations due to less academic anxiety.

#### **IMPLICATIONS OF THE STUDY**

The implications of the study are as follows:

1. Emphasis should be laid by schools and parents to provide opportunities to students for acquiring more life skills.
2. Students having high anxiety should be treated with patience by teachers and parents. To avoid high anxiety, parents should not compare their children with others.
3. Generally, students having more life skill show better academic performance but in few cases, in spite of more life skills academic performance is poor. In such cases, teachers, counsellors and parents should try to solve the problem jointly.
4. Level of anxiety shows negative relationship with life skills. It indicates that few students show poor results academically due to high level of anxiety in them. Such kind of anxiety hinders academic performance through retardation.

#### **SUGGESTIONS FOR FURTHER RESEARCHES**

Suggestions for further researches are as follows:

1. Other researches can be carried out on larger sample.
2. Other researches can be carried out for single gender and age too.
3. On the basis of results, the researcher suggests schools for incorporating the concept of life skills in their educational programmes.
4. Other researches can be carried out on higher level students with more variables.
5. Environmental factors affect traits of children but on the basis of results, it is clear that there are some hidden factors that are also responsible for academic anxiety of students.



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## A Study on Occupational Stress among Teachers of Higher Secondary Schools in Nagappattinam District

K. Saravanan<sup>1\*</sup> and K. MuthuLakshmi<sup>2</sup>

### ABSTRACT

*The aim of the study is to find out the occupational stress level of government and private higher secondary school teachers living in different environmental situations. The scale used in the study has been developed by researches. 60 private school teachers and 60 government teachers have participated in the present study. At the end of the study, it was seen that private school teachers have less occupational stress levels than government school teachers. There is a meaningful difference in the stress level points of government and private higher secondary teachers. Policy-makers are advised to analyse the teacher training and assessment system with the assumption that personal and social characteristics and working conditions may have an effect on teacher occupational stress. Sample teachers were selected by using simple random sampling from three segments by using lottery method because of easy accessibility and affordability analysed by using statistical package of simple percentage.*

**Keywords:** Stress, Role stress, Occupational stress, Higher secondary schools teacher

### INTRODUCTION

Stress is simply the body's non-specific response to any demand made on it. Stress is not by definition synonymous with nervous tension or anxiety. Stress provides the means to express talents and pursue happiness. It can also cause exhaustion and illness, either physical or psychological, heart attack or accidents. The important thing to remember about stress is that certain forms are normal and essential. The result of continuing stress may become disruption in one or more of the following areas of health, physical, emotional, spiritual and social.

An occupational stress is any force that pushes a psychological or physical factor behind its range of stability, producing a strain within the individuals. Stress in teaching is an ongoing issue of concern for those involved in education. Teacher stress is defined as experiences in teachers, of unpleasant, negative emotions such as anger, frustration, anxiety, depression and nervousness, resulting from some aspect of their work as teachers (Kyriacou, 2001).

Beehr and Newman (1978) working in organisations not only provides individuals with life-sustaining income but also exerts its own pressures on them. This can ultimately have negative consequences both for achieving the goals of the organisational and meeting the needs of the individuals working in them. Thus, the work environment is a source of social and psychological stress, which has harmful effects on the well-being of the employees. Stress in general and

<sup>1</sup>Research Scholar, <sup>2</sup>Associate Professor, Commerce, Bishop Heber College (Autonomous), Trichy-17, Tamil Nadu, India

\*Corresponding author email id: saravanakarnan@yahoo.in

occupational stress in particular is universal and frequently disabling human phenomenon. Stress arising at work has detrimental effect on the behaviour of people, which ultimately results in personal and organisational inefficiency. Occupational stress can be described as a condition where occupation-related factors interact with the worker to change (disrupt/enhance) his or her psychological or physiological condition, so that the person's mind and/or body is forced to deviate from its normal way of functioning.

## **REVIEW OF LITERATURE**

Davis and Newstrom (1985) stress is a condition of strain on one's emotion's thought processes, and physical condition. When it is excessive, it can threaten one's ability to cope with the environment, 'stress' is the general term applied to the pressures people feel in life. As a result of these pressures, employees develop various symptoms of stress that can harm their job performance. People who are stressed may become nervous and develop chronic worry. They are easily provoked to anger and are unable to relax. They may be uncooperative or use alcohol or drugs excessively. These conditions occur from other causes also, but they are common symptoms of stress.

Mathew (1993) stress has a variety of meaning to people in the workplace. To the production manager in a chemical plant, it may be the tension of missing the shipping date of a large order for a major customer. To the business executive, it may be frustration associated with the inability to acquire sufficient short-term loans from banks to cover the operating needs, and so on.

In the words of Szilagyi and Wallace, stress is an internal experience that creates a psychological or physiological imbalance within an individual and results from factors in the external environment, the organisation or the individual.

D'Souza (1993) today's leaders not only live and work at a faster pace but also must also deal with uncertainty and change. They need effective methods for coping with the kind of stress that affects anyone in leadership positions. People popularly identify managing directors or chief executive officers as those most susceptible to stress and disease. However, people at all levels of management find themselves exposed to comparable pressures.

Robbins (2005) most of us are aware that employee stress is an increasing problem in organisations. Friends tells us they're stressed out from greater workloads and having to work longer hours because of downsizing at their company. Parents talk about the lack of job stability in today's world and reminisce about a time when a job with a large company implied lifetime security. We read surveys in which employees complain about the stress created in trying to balance work and family responsibilities. In this section, we'll look at the causes and consequences of stress and then consider what individuals and organisations can do to reduce it.

Xiao *et al.* (2003) in their study on 'Teachers Needs in China' reveal that during the past 10 years or more, a majority of researchers job satisfaction in China have mainly focused on urban areas rather than on rural areas (Xiao and Li, 2003) with more and more emphasis on education in rural areas; especially in areas of high poverty, recent studies have paid more attention to teachers' job satisfaction in rural areas.

Sargent and Hannum (2005) in their study on 'keeping Teachers Happy job Satisfaction among Primary School Teachers in Rural North-west China' comparative study highlight an in-depth research on teacher job satisfaction in rural north-west China, in terms of community factors, school environment factors and teacher characteristics. Their findings were mostly in alignment with previous studies, but contrary to their assumptions, however, teachers with greater workloads felt more satisfied. Further, more economic development was negatively connected with teacher's satisfaction.

Jha (1988) in his study on 'Jobs Stress and Employee Strain in India Executives' explains the pattern of stress and strain in three work groups, namely production, personnel and data-processing divisions in an organisation. Results indicated that job future ambiguity had negative effect on job satisfaction in all the three groups. The pattern of stress in the three groups was different among different levels of management. Among different levels of managers, the middle level managers had more role ambiguity than others did.

Reddy and Ramamurthi (1991) in their study on 'The Relation between Stress Experience on the Job-Age, Personality and General ability' analysed the influence of age, personality and general ability of the individual in the perception of stress. It was found that only age influenced the perception of stress. There was only very limited contribution of personality and general ability of the individual to the intensity of stress experience of the individual.

Rajeswari (1992) in her study on 'Employee Stress: A Study with Reference to Bank Employees' found significant negative relationship between age and stress and also between experience and stress. This study also found negative correlation between number of members in the family and stress. The level of stress did not differ between different levels of workers, namely officers and clerks.

Singh and Sehgal (1995) in their study on 'Men and Women in Transition: Patterns of Stress, Strain and Social Relations' highlight the patterns of stress and strain among men and women as well as single- and dual-career couples. They found that male and female managers did not differ significantly on various stress dimensions. Difference in gender was however found in strains. Women were characterised by anxiety, whereas men exhibited more symptoms of somatic problems comparing the single and dual couples. It was found that male managers with working spouses experienced higher workload than managers whose spouses were not working. In strains also single career male managers had less irritability than dual career male managers, and overall single career male managers had better psychological well-being than others. Working women managers had better physical well-being than their working husband did but had poorer psychological well-being.

Lewis (1999) in his study on 'Teachers Coping with the Stress of Classroom Discipline' examined that the teachers' estimations of stress arise from being unable to discipline pupils in the way. They would prepare overall maintaining discipline emerged as a stressor with those worst affected teachers who placed particular emphasis on pupil empowerment.

Shah (2003) in his study on 'Role Stress in the Indian Industry: A Study of Banking Organisations' describes adequate explanation of stress, and its nature, dimensions, causes, manifestations and coping up strategies. It was observed that most of the employees experience medium to

high level of stress at work. Role stagnation, inadequacy of role authority and role erosion is comparatively high-rated dimensions of job stress. The study further reveals that employees belonging to the clerical cadre relatively experience more stress on most of the dimensions.

Berhem *et al.* (2004) in their study on 'A New Model for Work Stress Patterns' describe that the role of ambiguity is the main source of work stress and self-knowledge as the main coping strategy to overcome work stress. Work stress is believed to be one of the most important factors affecting productivity.

Kang (2005) in his study on 'Stressors among Medical Representatives: An Empirical investigations' tries to investigate the various stressors related with the job of a medical representative. A sample of 140 medical representatives was taken for the purpose of the present study. The results showed interference of job in personal life, unsupportive colleagues, work load and continuous pressure for improved performance have been found to be causing stress among the medical representatives.

Devi (2006–2007) in her study on 'Occupational Stress: A comparative Study of Worker in different Occupations' describes identifying the degree of life stress and role stress (LS & RS) experienced by professional women. It also studies the effect of life stress and role stress on various demographic variables like age, experience and income. For the purpose of study, 180 women professionals (six different occupations) were chose. It was found that science and technology professionals and doctors experienced significantly greater life stress and role stress.

Dhanalakshmi (2008) in her study on 'Actors Predicting Stress of Employees in a Public Transport Corporation' measures the level of stress of the transport corporation employees and also studies the factors that could predict stress. It is found that the employees experience moderate level of stress. Further, stress is predicted by working environment and safety and security.

### **OBJECTIVES OF THE STUDY**

1. To analyse the factors influencing occupational stress among the higher secondary school teachers.
2. To study the demographic and academic characteristics among the higher secondary school teachers of government and private schools.

### **RESEARCH METHODOLOGY**

The present study is based on both primary and secondary data. Primary data have been collected by conducting a survey among 120 sample higher secondary teachers comprising headmasters and higher secondary school teachers of government and private schools. Secondary data have been collected from books, journals, newspapers, periodicals, reports, internet and unpublished records of Nagapattinam District of Tamil Nadu. Initial instrument was developed by generating 25 items after a thorough understanding of occupational stress among private and government higher secondary school teachers of Nagapattinam district in the state of Tamil Nadu. The first part of the questionnaire was related to personal details of

higher secondary teachers, second part relates with measuring of occupational stress among the teachers with the help of Statistical Package of Simple Percentage. All the closed-ended questions were designed to generate responses on a five-point Likert scale to measure the occupational stress indicated as 1 strongly disagree, 2 disagree, 3 no opinion, 4 agree and 5 strongly disagree.

### **SAMPLING DESIGN**

A sample of 120 teachers was taken to meet the sample adequacy, for conducting factor analysis number of sample teachers for the study were selected from the total population. For the purpose of the study (120 teachers), 20% of the samples were selected. Sample teachers were selected by using simple random sampling from three segments by using lottery method because of easy accessibility and affordability. This study is limited to particular teachers those who are handling the classes in higher secondary private and government schools and not to the teachers those who are handling classes in below higher secondary level and unaided higher secondary school teachers.

**Table 1: Sample size of higher secondary teachers and head masters**

Category	Head Masters	Higher Secondary School Teachers	Total
Government schools	3 (2.5%)	57 (47.5%)	60
Private schools	3 (2.5%)	57 (47.5%)	60
Total	6 (5%)	114 (95%)	120

*Source:* Primary data.

Table 1 shows that out of 120 higher secondary school teachers, 114 (95%) are teachers and the remaining 6 (5%) are head masters. Among the total teachers, 60 belong to government schools and the remaining 60 belong to private schools.

### **ANALYSIS AND INTERPRETATIONS**

The above Table 2 shows that (1) Age: (7.5%) of respondents belongs to the age of 25 below, (24.17%) of respondents belongs to the age group of 25-35, (38.33%) of respondents belongs to the age group of 35-45 and (30%) of respondents belongs to the age group of 45 and above. (2) Sex: (50.83%) of the respondents of female and (49.17%) of the respondent of male. (3) Income: The above table explains that the respondents below the monthly income 20,000 are 28 (23.33%), between the incomes of 20,000-30,000 are 27 (22.50%), between the incomes of 30,000-40,000 are 30 (25%) and above the incomes of 40,000 are 35 (29.17%). (4) Experience: 22 (18.33%) of respondents are having below 5 years of experience, 54 (45%) of respondents are having 5-10 years of experience, 28 (23.34) of respondents are having 10-15 years experience and 16 (13.33%) of respondents are having 15 and above years of experience. (5) Subjects: 44 (36.67%) of respondents are belongs to arts subject, 67 (55.83%) of respondents are belongs to science subject and 9 (7.50%) of respondents are belongs to vocational subject.

**Table 2: Demographical profile**

Demographical Profile		<i>n</i> =120	
		Frequency	Percentage
Age	<25	9	7.50
	25 to 35	29	24.17
	35 to 45	46	38.33
	>45	36	30.00
Gender	F	61	50.83
	M	59	49.17
Salary	<20,000	28	23.33
	20,000–30,000	27	22.50
	30,000–40,000	30	25.0
	>40,000	35	29.17
Experience	Up to 5 years	22	18.33
	5-10 years	54	45.00
	10-15 years	28	23.34
	15 years above	16	13.33
Subjects	Arts	44	36.67
	Science	67	55.83
	Vocational	9	7.50

**Measurement of Occupational Stress among Private and Government School Teachers**

From Table 3, it is observed that majority of the teachers, 62 (51.67%), had a high level of stress, 35 (29.17%) had a medium level of stress and the remaining 23 (19.16%) had a low level of stress.

**Table 3: Classification of higher secondary teachers (both government and private) by their level of occupational stress**

Level of Stress	No. of Teachers	Percentage
Low	23	19.16
Medium	35	29.17
High	62	51.67
Total	120	100.00

*Source:* Primary data.

**Table 4: Classification of private higher secondary teachers by their level of occupational stress**

Level of Stress	No. of Teachers	Percentage
Low	13	21.67
Medium	17	28.33
High	30	50.00
Total	60	100.00

Source: Primary data.

### Level of Occupational Stress among Private Higher Secondary School Teachers

Table 4 shows that 79 (42.70%) private teachers had a high level of occupational stress, 77 (41.60%) had a medium level of stress and the remaining 29 (15.70%) had a low level of occupational stress.

### Age and Level of Occupational Stress

Table 5 reveals that out of 2 (3.33%) private teachers, only 1 (1.66%) had a medium level of stress in the age group of below 25 years. Of the 19 teachers, 4 (6.67) in the age group of 25–35 years had low level of stress, 3 (5%) had a medium level stress and the remaining 12 (20%) had a high level of stress. Of the 18 teachers belong to the age group of 35–45 years, 2 (3.33%) had a low level of stress, 7 (11.67%) had a medium level of stress and the remaining 9 (15%) had a high level of stress. Among the 18 teachers in to the age group of above 45 years, 5 (8.34) had a low level of stress, 6 (10%) had a medium level of stress and the remaining 7 (11.67%) had high level of stress.

**Table 5: Classification of private higher secondary teachers on the basis of their age and level of occupational stress**

Age (in years)	Level of Stress			Total
	Low	Medium	High	
Below 25 years	2(3.33)	1(1.66)	2(3.33)	5(8.33)
25–35	4(6.67)	3(5.00)	12 (20.00)	19 (31.67)
35–45	2(3.33)	7(11.67)	9(15.00)	18(30.00)
Above 45	5(8.34)	6(10.0)	7 (11.67)	18(30.0)
Total	13(21.67)	17(28.33)	30(50.00)	60(100.0)

Source: Primary data.

### Gender and Level of Occupational Stress

Table 6 shows that among the total teachers, 25 teachers were male, 5 (8.33%) had a low level of stress, 7 (11.67%) had a medium level of stress and the remaining 13 (21.67%) had high level of stress. Of the 35 female teachers, 8 (13.37%) had a low level of stress, 10 (16.66) had medium level of stress and the remaining 17 (28.33) teachers had a high level of stress.



**Table 6: Classification of private higher secondary teaches on the basis of their gender and level of occupational stress**

Gender	Level of Stress			Total
	Low	Medium	High	
Male	5(8.33)	7 (11.67)	13 (21.67)	25 (41.67)
Female	8(13.37)	10 (16.66)	17 (28.33)	35(58.33)
Total	13(21.67)	17 (28.33)	30 (50.00)	60(100.0)

Source: Primary data.

### Salary and Level of Occupational Stress

It could be inferred from Table 7 that of the total private teachers, among 26 teachers who fall under the income group of below Rs. 20,000, 4 (6.67%) had a low level of stress, 7 (11.66%) teachers had a medium level of stress and the remaining 26 (43.33) had a high level of stress. Of the 19 teachers who fall under the income group of Rs. 20,000–30,000, 3 (5%) teachers had a low level of stress, 6 (10%) had a medium level of stress and the remaining 10 (16.67) had a high level of stress. Among 14 teachers who fall under the income group of Rs. 30,000–40,000, 5 (8.33) had a low level of stress, 4 (6.67) had a medium level of stress and the remaining 5 (8.33) had a high level of stress. Of the teachers who fall under the income group of above Rs. 40,000, 1 (1.67) had a low level of stress.

**Table 7: Classification of private higher secondary teachers on the basis of their salary and level of occupational stress**

Salary (in Rs.)	Level of Stress			Total
	Low	Medium	High	
Below 20,000	4(6.67)	7(11.66)	15(25.00)	26(43.33)
20,000–30,000	3(5.00)	6(10.00)	10 (16.67)	19(31.67)
30,000–40,000	5(8.33)	4(6.67)	5(8.33)	14(23.33)
Above 40,000	1(1.67)	–	–	1(1.67)
Total	13(21.67)	18(28.33)	30(50.00)	60(100.0)

Source: Primary data.

### Years of Experience and Level of Occupational Stress

Table 8 shows that among the total private school teachers, of the 12 who had the experience below 5 years, 3 (5%) teachers had a low level of stress, 3 (5%) had a medium level of stress and the remaining 6 (10%) had high level of stress. Of the 29 teachers who had years of experience between 5 and 10 years, 7 (11.67) teacher had a low level of stress, 8 (13.33%) had a medium level and the remaining 14 (23.33) had a high level of stress. Among the 13 teachers who had a years of experience between 10 and 15 years, 2 (3.33) teachers had a low level of stress, 4 (6.67%) had a medium level of stress and the remaining 7 (11.67%) had a high level of stress. Out of 6 teachers who had years of experience above 15 years, 1 (1.67%)

**Table 8: Classification of private higher secondary teachers on the basis of their years of experience and level of occupational stress**

Teaching Experience (in years)	Level of Stress			Total
	Low	Medium	High	
Below 5	3(5.00)	3(5.00)	6(10.00)	12 (20.00)
5–10	7(11.67)	8(13.33)	14(23.33)	29(48.33)
10–15	2(3.33)	4(6.67)	7(11.67)	13(21.67)
Above 15	1(1.67)	2(3.33)	3(5.00)	6(10.00)
Total	13(21.67)	17(28.33)	30(50.00)	60(100.0)

Source: Primary data.

teachers had a low level of stress, 2 (3.33) had a medium level of stress and the remaining 3 (5%) had a high level of stress.

#### **Subjects Handling and Level of Occupational Stress**

It is inferred from Table 9 that out of 23 teachers, 5 (8.33%) who were handling arts subjects had a low level of stress, 5 (8.33%) had a medium level of stress and the remaining 13 (21.67%) had a high level of stress. Of the 32 teachers, 6 (10%) who were handling science subjects had a low level of stress, 10 (16.67%) had medium level of stress and the remaining 16 (26.67%) had high level of stress. Out of five teachers, two (3.33%) handling vocational subjects had a low level of stress, two (3.33%) had a medium level of stress and the remaining one (1.67%) had a high level of stress.

**Table 9: Classification of private higher secondary teachers on the basis of their subjects handling and level of occupational stress**

Subjects Handling	Level of Stress			Total
	Low	Medium	High	
Arts	5(8.33)	5(8.33)	13(21.67)	23(38.33)
Science	6(10.0)	10(16.67)	16(26.67)	32 (53.34)
Vocational	2(3.33)	2(3.33)	1(1.67)	5(8.33)
Total	13(21.67)	17(28.33)	30(50.0)	60(100.0)

Source: Primary data.

#### **Level of Occupational Stress among Government Higher Secondary School Teachers**

Table 10 explains that 18 (30%) out of 60 government teachers had a medium level of occupational stress, 10 teachers (16.67%) had a low level of stress and the remaining 32 teachers (53.33) had a high level of occupational stress.

**Table 10: Classification of government higher secondary teachers by their level of occupational stress**

Level of Stress	No. of Teachers	Percentage
Low	10	16.67
Medium	18	30.0
High	32	53.33
Total	60	100.00

Source: Primary data.

### Age and Level of Occupational Stress

Table 11 reveals that out of 4 (6.66%) government teachers, 1 (1.67%) had low level stress, 2 (3.33%) had a medium level of stress in the age group of below 25 years. Of the 10 teachers, 2 (3.33%) in the age group of 25–35 years had low level of stress, 3 (5%) had a medium level stress and the remaining 5 (8.33%) had a high level of stress. Of the 28 teachers belong to the age group of 35–45 years, 5 (8.33) had a low level of stress, 8 (11.67%) had a medium level of stress and the remaining 15 (25%) had a high level of stress. Among the 18 teachers in to the age group of above 45 years, 2 (3.34) had a low level of stress, 5 (8.33) had a medium level of stress and the remaining 11 (18.33) had high level of stress.

**Table 11: Classification of government higher secondary teachers on the basis of their age and level of occupational stress**

Age (in years)	Level of Stress			Total
	Low	Medium	High	
Below 25 years	1(1.67)	2(3.33)	1(1.67)	4(6.66)
25–35	2(3.33)	3(5.0)	5(8.33)	10(16.67)
35–45	5(8.33)	8(11.67)	15(25.0)	28(46.67)
Above 45	2(3.34)	5(8.33)	11(18.33)	18(30.0)
Total	10(21.67)	18(28.33)	32(50.00)	60(100.0)

Source: Primary data.

### Gender and Level of Occupational Stress

Table 12 shows that of the 34 male teachers, 6 (10%) had a low level of stress, 10 (16.67%) had a medium level of stress and the remaining 18 (30%) had a high level of stress. Of the 26 female teachers, 4 (6.67%) had a low level of stress, 8 (13.33%) had a medium level of stress and the remaining 14 (23.33%) had a high level of stress.

### Salary and Level of Occupational Stress

It could be inferred from Table 13 that of the total government teachers, among 2 teachers who fall under the income group of below Rs. 20,000, 1 (1.67%) had a low level of stress and the remaining 1 (1.67%) had a high level of stress. Of the 8 teachers who fall under the income

**Table 12: Classification of government higher secondary teachers on the basis of their gender and level of occupational stress**

Gender	Level of Stress			Total
	Low	Medium	High	
Male	6(10.0)	10(16.67)	18(30.0)	34(56.67)
Female	4(6.67)	8(13.33)	14(23.33)	26(43.33)
Total	10(16.67)	18(30.0)	32(53.33)	60(100.0)

Source: Primary data.

**Table 13: Classification of government higher secondary teachers on the basis of their salary and level of occupational stress**

Salary (in Rs.)	Level of Stress			Total
	Low	Medium	High	
Below 20,000	1(1.67)	—	1(1.67)	2(3.33)
20,000–30,000	3(5.00)	2(3.33)	3(5.0)	8(13.33)
30,000–40,000	5(8.33)	5(8.33)	6(10.0)	16(26.67)
Above 40,000	1(1.67)	11(18.33)	22(36.67)	34(56.67)
Total	10(16.67)	18(28.33)	32(53.33)	60(100.0)

Source: Primary data.

group of Rs. 20,000–30,000, 3 (5.0%) teachers had a low level of stress, 2 (3.33%) had a medium level of stress and the remaining 3 (5%) had a high level of stress. Among 16 teachers who fall under the income group of Rs. 30,000–40,000, 5 (8.33%) had a low level of stress, 5 (8.33%) had a medium level of stress and the remaining 6 (10%) had a high level of stress. Of the teachers who fall under the income group of above Rs. 40,000, 1 (1.67%) had a low level of stress, 11 (18.33) had a medium level of stress and the remaining 22 (36.67%) had a high level of stress.

**Table 14: Classification of private higher secondary teachers on the basis of their years of experience and level of occupational stress**

Teaching Experience (in years)	Level of Stress			Total
	Low	Medium	High	
Below 5	1(1.67)	3(5.00)	6(10.00)	10(16.67)
5–10	3(5.0)	8(13.33)	14(23.33)	25(41.66)
10–15	4(6.67)	4(6.67)	7(11.67)	15(25.0)
Above 15	2(3.33)	3(5.0)	5(8.33)	10(16.67)
Total	10(16.67)	18(30.00)	32(53.33)	60(100)

Source: Primary data.

### **Years of Experience and Level of Occupational Stress**

Table 14 shows that among the total government school teachers, of the 10 who had the experience below 5 years, 1 (1.67%) teachers had a low level of stress, 3 (5%) had a medium level of stress and the remaining 6 (10%) had high level of stress. Of the 25 teachers who had a years of experience between 5 and 10 years, 3 (5%) teacher had a low level of stress, 8 (13.33%) had a medium level and the remaining 14 (23.33%) had a high level of stress. Among the 15 teachers who had a years of experience between 10 and 15 years, 4 (6.67%) teachers had a low level of stress, 4 (6.67%) had a medium level of stress and the remaining 7 (11.67%) had a high level of stress. Out of 10 teachers who had a years of experience above 15 years, 2 (3.33%) teachers had a low level of stress, 3 (5%) had a medium level of stress and the remaining 5 (8.33%) had a high level of stress.

### **Subjects Handling and Level of Occupational Stress**

Table 15 shows that out of 21 teachers who were handling arts subjects, 3 (5%) had a low level of stress, 6 (10%) had a medium level of stress and the remaining 12 (20%) had the higher degree of stress. Out of 35 teachers who were handling science subjects, 6 (10%) had a low level of stress, 11 (18.33%) had a medium level of stress and the remaining 18 (30%) had a higher degree of stress level. Of the four teachers who were handling vocational subjects, one (1.67%) had a low level of stress, one (1.67%) had a medium level of stress and the remaining two (3.33%) had a higher degree of stress.

**Table 15: Classification of government higher secondary teachers on the basis of their subjects handling and level of occupational stress**

Subjects Handling	Level of Stress			Total
	Low	Medium	High	
Arts	3(5.0)	6(10.0)	12(20.0)	21(35.0)
Science	6(10.0)	11(18.33)	18(30.0)	35(58.33)
Vocational	1(1.67)	1(1.67)	2(3.33)	4(6.67)
Total	10(16.67)	18(63.3)	32(15.8)	60(100.0)

*Source:* Primary data.

### **CONCLUSION**

The present study has provided comprehensive information about occupational stress among the teachers of government and private schools in Nagapattinam district in the state of Tamil Nadu. From the results of the study, it is clear that the higher secondary school teachers found to be highly stressed. The next finding of this study revealed that on the basis of type of school, private school teachers face more stress than the government teachers; this may be due to low salary and more burden of work in the private schools. Occupational stress in the workplace is becoming a major concern for all teachers, headmasters and government, owing to the occupational health and safety legislations requiring employers to practice duty of care by providing teachers with safe working environments which also cover the psychological well

being of their staff. The reduction of occupational stress will induce the teachers to provide efficient and effective service to the society. For the betterment of the educational institutions, the occupational stress among the higher secondary school teachers should be reduced. As a result of the benefits of a systematic and joint approach to reducing stress, there can be increased education standard, decrease in absenteeism, increased school enrolment, reduced drop-out rate, improved teachers morale, decrease in compensation claim and reduction in workplace accidents. The most important benefit in reducing occupational stress is that it will promote a pleasurable work environment for all. The study throws light on the fact that occupational stress is quite a personal matter and that the perception of the situation enables one to cope with it effectively, being aware of the causes of occupational stress and monitoring properly.

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## Gap Year: A Break in the Continuum of Education

Sharmiladevi J.C.<sup>1\*</sup>, Soumya Meher<sup>2</sup> and Karan Bajaj<sup>3</sup>

### ABSTRACT

*This study aimed to inquire into the feasibility of taking a gap year and estimate the number of people who have or are likely to take a gap year from the Symbiosis Centre for Management Studies, Symbiosis International University, Pune, Maharashtra, India. A survey was formulated containing a particular set of questions devised by us about the concept of a gap year and students' thoughts regarding the same. A sample population of 50 students was selected on a random basis in a haphazard manner, and their personal details and inputs were taken into consideration and studied upon.*

**Keywords:** Gap year, Students, Survey, Study break, Experiment, Experiential Learning, Choice of Learning

### INTRODUCTION

All work and no play made Jack a dull boy – almost all of us are aware of this Jack. In the dynamic world today, when there is enormous choice for anything under the sun, people want to have an experience of difference from the mundane practices, like taking a break in their usual routine. A gap year is one such break from the usual routine. A 'gap year' is essentially a break from the continuum of education usually taken between high school and college for the purpose of deepening personal, practical, and professional awareness. A gap year is simply taking time off with a purpose. It is not a time to do nothing, but it is an intentional time of reflection and discovery before a major transition in life.

Taking a gap year is very prevalent among students in few parts of the world such as United Kingdom (UK), Australia, New Zealand and Canada, and its popularity is increasing in the United States. It does not necessarily have to be for an entire year. The terminology also is used to refer to taking a semester 'off' as well (Melleby, 2012). The history of the 'gap year' dates back to the 1970s in the UK, which was observed as a way to fill the 7 or 8 month gap between final exams and the beginning of university. The purpose of that time was to contribute to the development of the student usually through an extended global experience.

The gap year eventually came to the United States in the early 1980s through the work of Cornelius H. Bull, who was the founder of Interim Programmes. Since its transition to the United States, gap years have acquired a life of their own –involving every manner of programme and opportunity imaginable, both domestically and internationally. It is usually a constructive

<sup>1</sup>Assistant Professor, <sup>2,3</sup>Student, BBA Third Year, Symbiosis Centre for Management Studies, Symbiosis International University, A4 701 Lunkad Amazon, Viman Nagar Rd, Clover Park, Viman Nagar, Pune-411014, Maharashtra, India

\*Corresponding author email id: sharmiladevi@scmspune.ac.in; jc.sharmiladevi@yahoo.co.in

period ranging from 1 to 12 months before a student goes to college or after he finishes high school. In some countries, it is also known as 'Year 13'. During this time, students may engage in travelling, taking certificate courses, volunteering, interning, sports and others. It is also a way for them to become independent and develop self-confidence and a sense of responsibility. This short period of freedom enables them to decide upon their future prospects and facilitates soul searching.

Jones (2004) defines a gap year as any period of time between 3 and 24 months which an individual takes out of formal education, training or the workplace, and where the time out sits in the context of a longer career trajectory. Gap years may be taken at various stages in a person's life, for example after university or as a career break. Gap years may also involve activities in one's home country, such as volunteering or working, to fund further study. Taking time out overseas is particularly popular. Even though not everyone is able to take their gap year overseas, it is clearly an aspiration for many. These experiences can encompass travelling, working, volunteering or a combination of the three, and they are defined as a means of self-development. Young people may also spend varying amounts of time overseas during their gap year, from long-term volunteering placements to short periods of travel interspersed with working.

#### **PURPOSE OF GAPYEAR**

Many students simply go through the usual cyclical motions—they go to high school, they go to college, they get a job and very few are reflective on why they are doing what they are doing. A gap year can provide a remarkable opportunity to take a time-out, to be forced out of a routine and into deeper engagement with life and learning. It is difficult to give the definitive number of young people engaged in gap years, as there is no single source of data that would be able to provide figures (Jones, 2004). Drawing upon a range of quantitative and qualitative data, a report for the former Department of Education and Skills, UK (Jones, 2004) suggests an annual participation rate of around 250,000. However, this includes young people in the age range of 16 to 25 and also a wide variety of gap year categories, including post-university, employment breaks and those taken in the UK (Jones, 2004: 46).

Gap years can be placed in the context of growth in popularity of long-term independent travel, valuing extended periods of budget travel without a fixed itinerary (O'Reilly, 2006). However, a specialised gap year industry has also emerged so that overseas experiences can be undertaken through structured placements. These are organised by charities or commercial companies, who coordinate overseas accommodation, activities, employment and/or volunteering. Furthermore, a gap year guidance industry has emerged, consisting of publishers (such as Lonely Planet), advisory websites (such as [gapyear.com](http://gapyear.com)) and industry organisations like the Year Out Group ([www.yearoutgroup.org](http://www.yearoutgroup.org)). Gap years have become an enshrined practice in the UK, encouraged by the education sector, government bodies and career guidance literature. As noted by Simpson (2005), the profile of gap year rose when the heir to the British throne Prince William undertook a volunteering placement volunteering tourism in Chile. Every year, British national newspapers run special features on gap years when examination results are released, offering advice and guidance on how young people can spend their time out.



Gap years are thus a popular activity and are well supported as a means of assisting with transitional periods. Sociologists suggest that youth transitions to adulthood are less certain than before. Rather than common prescribed paths, transitions are becoming increasingly individualised, flexible and complex, which means that today's young people have the task of successfully navigating their way with fewer frames of reference than previous generations. This is reflected in social policy, which has emphasised the need for young people to take individual responsibility for successful transitions and to construct their own personal project of self-development (Brooks, 2009).

The European policy initiatives aimed at the transition from education to work emphasise: employability (individuals need to ensure that they meet employer demands), lifelong learning (education and employment are no longer directly linked but an ongoing process), and activation (individuals need to be motivated) (Brooks, 2009). Gap years have emerged in this context, so that they are aimed at increasing young people's employability through developing beneficial skills, are defined as an informal learning experience and provide evidence of young people being active in their development. Johan (2009) argues that gap year travel meets the needs of young people for time, place and space to negotiate their sense of belongingness and their emerging sense of identity in approaching adulthood.

### **REASONS FOR GAP YEAR**

There are many reasons for which students take a gap year. A gap year brings focus and helps to know likes and dislikes, plans for the future and even the reason why one wants to be in school with a simple change in environment (Frank, n.d.). Time off can give students added focus and enthusiasm when they return to school. If a student isn't ready for college, time off can cultivate maturity and self-discipline. Admission counsellors at professional schools are of the opinion that taking time off for school is rarely a disadvantage for an applicant. They often choose the student who took a year off and is ready to become fully engaged in school over the one who has been on autopilot.

Deciding how to use gap year is important. It ranges from travel abroad to cultural exchange, internship, and it depends upon individual's interest. Few students also undertake mini projects. It makes economic sense for students to explore their interests before college, advocates of gap years say freshmen are less likely to party too much, fail courses or change majors repeatedly –all of which can result in more time needed to graduate, and more expense (Mohn, 2006). Taking a gap year can be a time for students to think more thoroughly about why they are going to college, why they are studying and what their future career plans might be.

In India, students after their higher secondary education are mostly clueless and stressed out and often listen and guided by their parental and peer guidance, or take up those courses in colleges/universities which is highly demanded by the industry and corporates. Very rarely, a student takes a gap year, and such practices are often viewed as an inability on the part of the students as he/she is not enrolled in any formal education. Educational research in this particular area is also very rare as this phenomenon is new to India. This paper makes an attempt to find out the feasibility of taking a gap year in the Indian scenario. In this research paper, we have attempted to adapt the global trend of taking a gap year in the Indian scenario, along with a detailed assessment of taking a gap year in the global as well as the Indian scenario.

Academic research into the gap year has emerged from a variety of disciplines including tourism studies, geography and sociology of youth and education. A general overview of the gap year sector can be found in a report on behalf of the former Department of Education and Skills on gap years for 16–25 years old, which attempts to define the practice, provide information on access and participation, assess the benefits, review the sector and consider issues of quality and accreditation in the provision of gap year products (Jones, 2004).

Research by Snee (2009, 2010) utilised blogs written by young people to document their gap years and communicate their experiences to their friends and family back home, alongside interviews with a sub-set of the bloggers. This included young people who undertook structured placements only, who undertook independent travel only and who undertook a mixture of the two. Rather than concentrating on structured placements or backpacking, the researcher was interested in the stories of young people who took time out between school and university that were self-described as overseas gap years. One of the objectives of the research was to examine how the gappers described the places, they visited to understand the reason for being away during a gap year is preferable than to stay at home.

Simpson (2005) offers a critical account of the gap year industry that provides volunteering placements in the 'third world', finding the lack of engagement with issues surrounding development problematic and not sufficiently addressed by these organisations. Her work suggests that the historical legacy of colonial expansion has impacted on how gap year programme are organised, such as putting forward models of development based on individual effort rather than encouraging an understanding of the systems and structures of global inequalities. Simpson further argues that young people focus on the differences encountered on volunteering programme, and that taking part tends to confirm the extent to which participants already know about these places. For example, her study of young gappers volunteering in Peru found that they reproduced the idea that local people were 'poor but happy', a discourse which does little to actually challenge poverty. For Skills and career development, Simpson suggests that the practice of taking a gap year is an indicator of the professionalisation of youth travel, which has shifted from being an alternative activity to a training ground for future professionals.

### **BENEFITS OF GAPYEAR**

How would a gap year help a student stand out? Jones (2004) summarises the perceived benefits of gap years (including those based at home) as follows:

- improved educational performance,
- formation and development of educational and career choices,
- reduced likelihood of future 'drop out' from education, training or employment,- please remove this benefit from list
- improved 'employability' and career opportunities,
- non-academic skills and qualifications,
- social capital,

- life skills and
- developing social values.

Many of these benefits, as noted by Heath (2007) and King and Ruiz-Gelices (2003), overlap with the personal qualities and soft skills that have been identified as increasingly required in graduate employment (Brown *et al.*, 1997; Brown and Hesketh, 2004) suggest that a degree is no longer enough to be employable, and candidates need to demonstrate activities that shown their 'drive, determination and creative thinking'.

Therefore, existing literatures suggests that gap years can add to an individual's 'personality package' that shows they are employable. There is, however, little concrete evidence to support the view that young people who undertake gap years do better at university or are more successful in employment, although it seems somewhat accepted that this is the case. This does not necessarily mean that young people do not gain these skills or benefit from undertaking gap years. We might question, however, the taken for granted nature of this self-development. Moreover, we might want to think carefully about the social groups who are associated with these attributes and inequalities of access to the sorts of experiences that are seen to develop them. Until recently, gap years were also seen as a practice associated with privileged youth (Heath, 2007).

Existing literature review indicates that the awareness about gap year is still poor in India, which gives the researchers an opportunity to take a study to fill the existing gap in the literatures of research on education. The objective of this research is to identify the feasibility of taking a gap year, because the knowledge about gap year is very poor in India.

## **RESEARCH METHODOLOGY**

Objectives of the study

1. To inquire into the feasibility of taking a gap year.
2. To highlight the efforts of Indian society towards the promotion of taking a gap year among students.
3. To estimate the number of people who have or are likely to take a gap year.

So in this research, the primary data are collected from a questionnaire which consists of 10 questions related to awareness, purpose and motivation of gap year. The sample consists of 50 students studying in undergraduate programme in Symbiosis Centre for Management Studies, Symbiosis International University, Viman Nagar, Pune. Random sampling technique is used in this research. This research falls under applied research with descriptive research design. Our sampling framework consisted of a well-defined sample population of students from the Symbiosis Centre for Management Studies in Pune. The demographic profile of our sample population consisted of 15 females and 35 males in the Symbiosis Centre for Management Studies, Pune, who were between 18 and 25 years of age.

## **STATISTICAL TECHNIQUES OF DATA ANALYSIS**

The researchers utilised and incorporated the utilisation of tables and pie charts as their statistical technique, after acquiring data through the use of a survey questionnaire.

## DATA ANALYSIS AND INTERPRETATION

The data were collected through the use of a survey questionnaire which was distributed to a sample population that was selected on a random basis.

<b>Gender</b>	Males	35
	Females	15
	Total	50
<b>Age Group</b>	Age 18	4
	Age 19	12
	Age 20	25
	Age 21	5
	Age 22	2
	Age 25	2
	Total	50

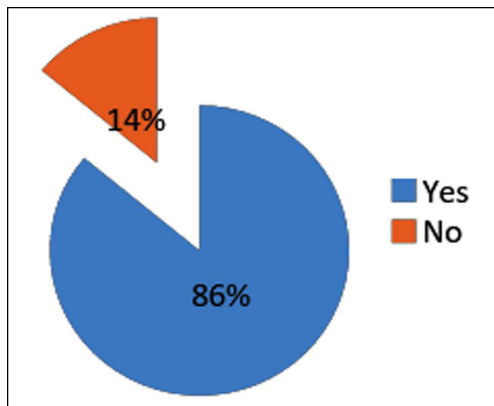


Figure 1: Whether they know the meaning of a gap year

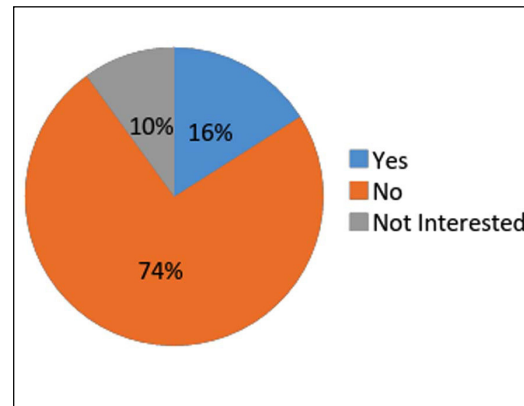


Figure 2: Whether they have taken a gap year before

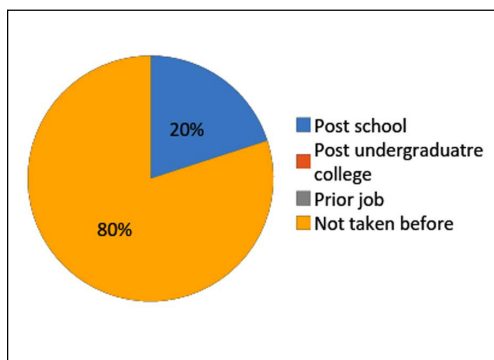


Figure 3: When did they take the gap year

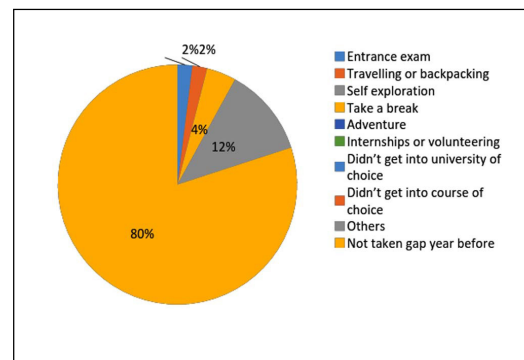


Figure 4: Purpose of gap year

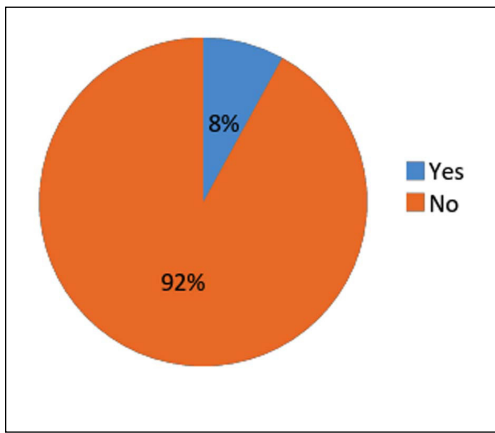


Figure 5: If they regret not taking a gap year

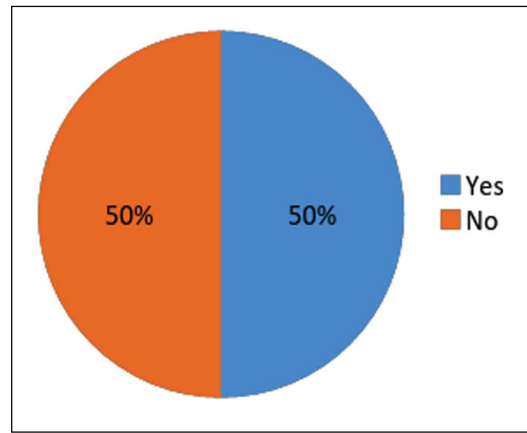


Figure 6: Intend to take gap year in future

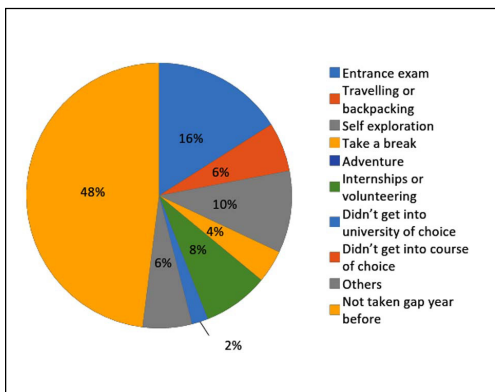


Figure 7: Purpose of future gap year

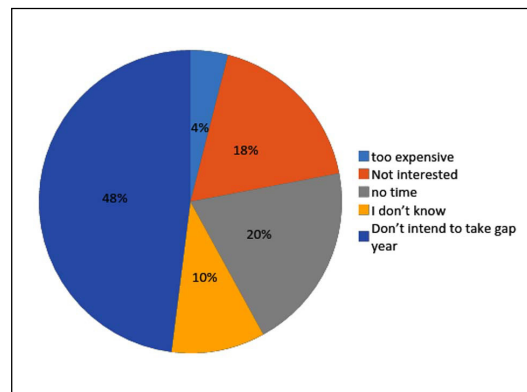


Figure 8: Reason for not taking gap year

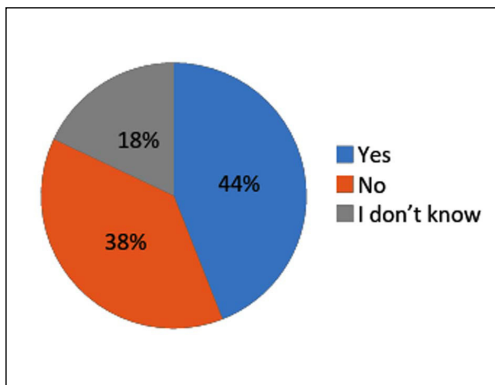


Figure 9: Will they purpose given motivation

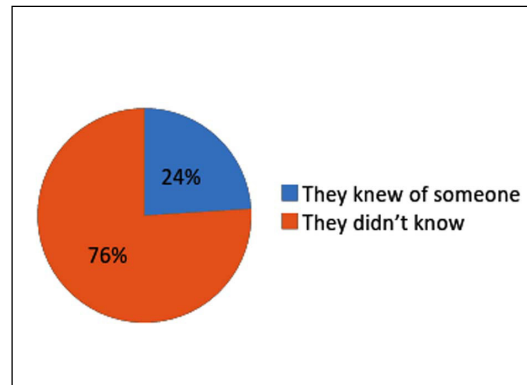


Figure 10: If they know anyone who has taken

## **FINDINGS OF THE STUDY**

The findings that were identified following the interpretation of the analysis of data obtained are as follows:

1. A percentage of 14 people regrettably did not know the meaning of 'gap year' prior to the survey.
2. Only 16% of people have taken a gap year, with the majority of people having not taken a gap year in the past.
3. The people who have taken a gap year in the past have taken it post schooling with the main purpose of self-exploration or to take a break.
4. A majority of the people do not regret taking a gap year with a small portion of 8% who regret not taking one.
5. When asked about potential future gap year plans, the results were more or less evenly distributed among 'yes' and 'no'.
6. A majority of people stated that the main purpose for their taking a gap year possibly in the future was to prepare for entrance exams, with a small portion towards exploration or internships abroad.
7. A percentage of 44 of people would like to pursue a gap year, provided they have sufficient motivation to do so.
8. Gap years are not as popular as it is observed that most people are not aware of anyone who has taken a gap year before.

## **CONCLUSION**

Results of the study makes us to conclude that the awareness of gap year is still very less, and most students want to take their education without taking any gap, although the study indicates that 50% of the sample population want to take a gap. The trend of a 'gap year', though not as popular in India as it is in other countries, is being increasingly supported by certain institutions in India, such as Udaipur-based Swaraj University, which offers a programme and focuses on self-directed learning, and Mahindra United World College, Pune, These Institutions are offering an Experiential Learning Programme which includes volunteering in several organisations. One major limitation was that the research was conducted for a limited population sample size of 50 students only.

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### Annexure

#### Questionnaire

NAME: \_\_\_\_\_

AGE: \_\_\_\_\_ Gender: M/F

MOBILE NO: \_\_\_\_\_

EMAIL ID: \_\_\_\_\_

Definition of a 'Gap Year' or 'Drop Year':

*A 'gap year' is the term given to students taking a year off from either continuing their education or entering the job market.*

#### Survey Questionnaire

1. Did you know the meaning of the term 'gap year', prior to this survey?
  - a. Yes
  - b. No
2. Have you taken a gap year before pursuing undergraduate or postgraduate education?
  - a. Yes
  - b. No
  - c. Not interested in taking a gap year
3. If yes, when did you opt for a gap year?
  - a. Post-school, before undergraduate education
  - b. Post-undergraduate education, before postgraduate education
  - c. Prior to working (job).
4. What was the purpose of your gap year? (Omit this question if your answer was 'no' or 'not interested' for the second question)
  - a. Preparation for an entrance exam
  - b. Travelling or backpacking
  - c. Self-exploration or soul searching
  - d. To take a break before the next phase of your life
  - e. It's an adventure
  - f. To pursue an international internship or volunteer abroad
  - g. Didn't get into university of choice
  - h. Didn't get selected for course of choice
  - i. Others
5. If you haven't taken a gap year, do you regret for not doing so?
  - a. Yes
  - b. No



6. *Do you intend to take a gap year in the future?*
  - a. Yes
  - b. No
7. *If yes, what will be the primary purpose of your gap year?*
  - a. Preparation for an entrance exam
  - b. Travelling or backpacking
  - c. Self-exploration or soul searching
  - d. To take a break before the next phase of your life
  - e. It's an adventure
  - f. To pursue an international internship or volunteer abroad
  - g. Didn't get into university of choice
  - h. Didn't get selected for course of choice
  - i. Others
8. *If no, why would you not take a gap year?*
  - a. Too expensive
  - b. Not interested
  - c. I have no time
  - d. I don't know
9. *If given the motivation, would you pursue a gap year?*
  - a. Yes
  - b. No
  - c. I don't know
10. *Do you know anyone who has taken a gap year? If yes, please provide details regarding his or her reasons for the same?*

**All information provided on this form will remain confidential and will only be used for the purpose of a research paper.**

*List of Respondents*

Sl.No.	Name of Respondent	Age	Gender
1	Mayank Ojha	19	M
2	Faria Mariam	20	F
3	Ritam Rastogi	20	M
4	Varad Vatsal	20	M
5	Barbie Singla	20	F
6	Shashank Banerjee	21	M
7	Nafeesah Nasreen	18	F
8	Vinayak Bajaj	19	M
9	Akshit Singla	20	M
10	Ishan Sarna	19	M

Sl.No.	Name of Respondent	Age	Gender
11	Arijit Ghosh	20	M
12	Ameya Shirode	20	M
13	Avneet Singh Sahi	20	M
14	Aditya Khosla	19	M
15	Jeeval Batra	19	M
16	Shrey Khanna	20	M
17	Keshav Goyal	20	M
18	Aatman Pawar	20	M
19	Ali Hashmi	21	M
20	Simran Tuteja	19	F
21	Soumya Meher	19	F
22	Vinay Ramesh	20	M
23	Aditya Krishna	20	M
24	Neha Bhanawat	19	F
25	Devya Mishra	20	F
26	HirdyeshPunj	20	M
27	Mahipal Rajpurohit	20	M
28	Srinidhi Padukone	19	F
29	Somya Sinha	20	F
30	Talitha Nelson	19	F
31	Himakshi Sehgal	20	F
32	Karan Bajaj	22	M
33	Roni Roy	21	M
34	Sushant Bhondekar	22	M
35	Dhaval Nimkar	20	M
36	Sunchit Joshi	19	M
37	Anusya Das	19	F
38	Gunit Singh	20	M
39	Anmol Patel	20	M
40	Anirudh Agrawal	20	M
41	Shreyas Nambiar	25	M
42	Naman Jain	21	M
43	Swetaketu Tyagi	25	M
44	Anubhuti Arya	20	F
45	Vishal Keswani	21	M
46	V. Anirudhan	19	M
47	Jishnu Nanda	18	M
48	Shreya Bhatt	18	F
49	Anurag Manjhi	20	M
50	Usha Bhatta	20	F

*Gap Year: A Break in the Continuum of Education*

Sl.No.	Question	Options	Tally
1	<i>Understood meaning</i>	a. Yes	43
		b. No	7
2	<i>Taken a gap year before</i>	a. Yes	8
		b. No	37
		c. Not interested	5
3	<i>When did they take it?</i>	a. Post-school	10
		b. Post-undergraduate college	0
		c. Prior job	0
		d. Not taken before	40
4	<i>Purpose of taken gap year</i>	a. Entrance exam	1
		b. Travelling or backpacking	1
		c. Self-exploration	0
		d. Take a break	2
		e. Adventure	0
		f. Internships or volunteering	0
		g. Didn't get into university of choice	0
		h. Didn't get into course of choice	0
		i. Others	6
		j. Not taken gap year before	40
5	<i>Regret for not taking</i>	a. Yes	4
		b. No	46
6	<i>Gap year in the future</i>	a. Yes	25
		b. No	25
7	<i>Purpose of future gap year</i>	a. Entrance exam	8
		b. Travelling or backpacking	3
		c. Self-exploration	5
		d. Take a break	2
		e. Adventure	0
		f. Internships or volunteering	4
		g. Didn't get into university of choice	1
		h. Didn't get into course of choice	0
		i. Others	3
		j. Not taken gap year before	24

*Contd.....*

Sl.No.	Question	Options	Tally
8	<i>Why not?</i>	a. Too expensive	2
		b. Not interested	9
		c. No time	10
		d. I don't know	5
		e. Don't intend to take gap year	24
9	<i>Pursue gap year given motivation</i>	a. Yes	22
		b. No	19
		c. I don't know	9
10	<i>Anyone they know</i>	a. They knew of someone	12
		b. They didn't know	38

## Occupational Stress and Coping Strategies among Teaching Professionals: An Empirical Study in Technical Institutions in India

Monica Bedi<sup>1\*</sup> and Bodige Mamatha<sup>2</sup>

### ABSTRACT

*Stress is a natural and unavoidable aspect of life experienced by all individuals in both professional and personal life. Reducing occupational stress has become the greatest challenges to the health of working people and to the well-being of their work organisations. With the advent of technology and globalisation, the nature of work in various organisations has gone through drastic changes over the century. It is still changing at whirlwind speed. These changes have touched all professions including teaching. Teachers' role has now become highly competitive and achievement oriented. Increasing demands of the workplace have increased stress. The major stress factors are anchored in the in-class structure and in the organisational structure. A long-term consequence of stress results diminished quality of work life due to physical, emotional and attitudinal exhaustion in the individual. In the present study, an attempt is made to identify sources of stress and consequent stress levels among technical institution teachers and to identify the coping strategies used by teachers to cope with stress effectively. Teachers from technical institutions including engineering and non-engineering disciplines and with varied experience constituted the sample of the study. Occupational Stress Index (OSI) by Srivastava and Singh was used to collect data. Teachers were found to be moderately highly stressed on sub-scales of role overload, role conflict, responsibility for persons, powerlessness and others of OSI.*

**Keywords:** Coping strategies, Globalisation academicians, India, Occupational stress, Quality of work life, Technical education

### INTRODUCTION

Stress in the workplace is a growing problem, with extensive costs to individuals, organisations and society (Cotton and Hart, 2003), and the teaching profession is no exception. The role of occupational stress has long been concerned in the development of negative outcomes for both individuals and organisation (Abouserie, 1996; Cox *et al.*, 2002; Chaplain, 1995; Hakanen *et al.*, 2006; Santavirta *et al.*, 2007). Researchers found that stress can lead to three major types of strains, namely psychological, physical and behavioural. High levels of occupational stress leads to poor psychological health, decreased job satisfaction, decreased organisational commitment, increased burnout, increased job insecurity, poor physical health, decreased job

<sup>1</sup>Assistant Professor, University Business School, Panjab University, Chandigarh, India

<sup>2</sup>Research Scholar, Department of Business Management, Osmania University, Hyderabad, Telangana

\*Corresponding author email id: monica@pu.ac.in

performance (Mulkins, 1991; Manthei and Gilmore, 1996; Wagner, 2001; Whitener, 2001; Williams *et al.*, 2001). Teaching has become a stressful activity and they are now facing work-related stress. In recent years, stress among teachers in technical institutions as a problem has increasingly received international recognition (Brewer and McMahan-Landers, 2003). Among technical institution teachers, the occupational stress is higher, in which 53% of polytechnic teachers reported experiencing stress often or almost always at work (Hardie-Boys, 1996; Blix *et al.*, 1994). There were many stressful things in changing academic environment in technical institutions. Increased student enrolments, massive cuts in human resources and constant restructuring are changes leading to a considerable impact on all teachers. Lack of organisation support (McMahan-Landers, 2003)<sup>1</sup> increasing workload, interruptions to work and poor management (Hardie-Boys, 1996 and also check footnote one) are reported among the major stressors for polytechnic teachers. Unproductive levels of stress might be harmful to teachers and can produce a range of undesirable, expensive and debilitating consequences, which affect both individuals and organisations. On the individual level, stress leads to unwanted feelings and behaviours (e.g. job dissatisfaction, lower motivation, low employee morale and less organisational commitment), physiological diseases and psychological diseases. On the organisational level, consequences of occupational stress reduces loss in employee performance/productivity, high labour turnover, loss of valuable staff, increased sick-leave, more internal conflicts and dysfunctional workplace climate. Stress can adversely effect teachers' motivation and performance and thus their quality of work life, thereby placing academic future in jeopardy. Moreover, it seems that improved quality of work life is brought about by reducing teachers' level of psychological distress. The increasing incidence of occupational stress makes it a key construct to evaluate and understand. This will help in developing specialised intervention strategies to attempt to reduce the incidence of stress in the workplace. The present study attempts to investigate occupation stress among technical institution teachers.

## REVIEW OF LITERATURE

### Occupational Stress

The area of occupational stress has rapidly grown over the last two decades. Occupational stress is 'the inability of an individual to cope with on the job work pressures' (Rees, 1995). It occurs because of mismatch of managers' knowledge, skills, abilities, attitudes and work demands and pressures in organisations (Holmlund-Rytkönen and Strandvik, 2005; Slaski and Cartwright, 2002). Occupational stress is also referred to as 'any condition or characteristic of the work environment which threatens the individual's psychological and physiological homeostasis' (McDonald and Korabik, 1991). According to the study by Antoniou *et al.* (2006), job stressors mainly fall into two categories that is *exogenous pressures* (i.e. adverse occupational circumstances, extreme work pressures, lack of cooperation and team work etc.) and *endogenous pressures* (i.e. human being personality characteristics, perception etc.).

Adolescence is an age of stress and strain and full of ups and downs. Guiding those amateur minds is a challenge for teachers. A study by Goldenburg and Waddell (1990) identified academic

<sup>1</sup>Ramage J, 2001. *The Identification of Workplace Stressors by Academic Staff at Hutt Valley Polytechnic*. Victoria University: Graduate School of Business and Government Management. Unpublished manuscript.

pressure as source of stress. It includes heavy workload, role ambiguity, conflicting job demands, frequent interruptions and striving for publication. A national survey conducted in the United States of America indicated that the proportion of workers who reported feeling highly stressed had more than doubled between 1985 and 1990 (Spielberger and Reheiser, 1994). In Britain, a national survey conducted by the Policy Studies Institute (1993) noted that one-third of the respondents reported significant levels of stress because of their work, and more than half felt that their levels of stress had increased over the years. A study by Fisher (1994) indicated that psychological stress is a feature of occupational life for university staff. An increasing number of academics in higher education institutions have to perform a number of roles simultaneously such as teaching, planning and running tutorials, laboratories and seminars and dealing with students' personal problems, whilst at the same time, carrying out research, conducting personal experiments, attempting to obtain research funding, writing papers and books and attending conferences. Researchers have consistently reported time pressures (Astin, 1993; Thompson and Dey, 1998), high self-expectations (Gmelch *et al.*, 1986), research and publication demands (Smith *et al.*, 1995) as significant sources of job stress. In addition, the frequent technological advances of modern society along with the ongoing change that those advances spur have yielded increased stress. Shahu and Gole (2008) studied that the two major factors causing stress were found to be role overload and working conditions. Teachers as such are loaded with their work and family pressure, and turbulent mindsets of the students add to the level of stress of the teachers. Stress level increases as they have to manage time, handle administrative and interpersonal relationships (Galloway *et al.*, 1986). Around 20% teachers experience psychological distress, whereas 9% suffer from severe psychological stress. The stress level manifolds with adverse relationship with colleagues and unaccepted students behaviour (Louden, 1987). Negative student-teacher relationship paramount's the teachers stress level (Yoon, 2002). Researches in the areas of gender differences and work experience differences in occupation have become a topic of significance to organisations. A general tendency exists in the literature according to which females experience higher levels of occupational stress regarding gender-specific stressors and have different ways of interpreting and dealing with problems related to their work environment (Antonioni *et al.*, 2006; Davidson *et al.*, 1995; Fotinatos *et al.*, 2005; Offerman and Armitage, 1993; Tung, 1980). A study by Sharpley *et al.* (1996) found that males have statistically significant lower job-stress scores. Ganster and Schaubroeck (1991) pointed that women experience greater level of stress as they are more vulnerable to the demands of work, discrimination and gender-based barriers in the workplace and problems in managing subordinates (McDonald and Korabik, 1991). Female teachers tend to have a tendency to be more stressed as compared with the male colleagues as they have to balance work and family (Brember and Marie, 2002). Research also found that females reported significantly more stress as a result of organisational politics than their male counterparts (Nelson *et al.*, 1990). Cultural diversity and cross-cultural dimensions also add to the amount of stress experienced by a teacher (Miller and Travers, 2005). Victimisation of the teachers emotionally and physically is also being experienced by the teaching community adding to the stress level (Dworkin and Haney, 2006). There also exists a significant difference among government institution teachers and private institution teachers on the level of stress (Memeon, 2008). The performance expectation level of the teachers is also increasing, and this performance pressure and role ambiguity builds up stress among teachers (Alam, 2009). Undoubtedly, it can be

concluded that teaching has become a very demanding and challenging profession wherein stress level is increasing day by day, and some immediate action needs to be taken to control it.

### **Coping Strategies**

Stress is a mental and physical condition, which affects an individual's productivity, effectiveness, personal health and quality of work. Job stress victims experience lowered quality of work life and job satisfaction. The harmful and costly consequences of stress demonstrate the need for strategies to limit stressors within the organisation. Coping strategies are those responses that are effective in reducing an unwanted load (i.e. the psychological burden). The effectiveness of coping strategy rests on its ability to reduce immediate distress as well as to contribute to more long-term outcomes such as psychological well-being. Folkman and Lazarus (1988) suggested eight coping strategies used by the people to combat stress: (i) confrontive coping describes aggressive efforts to alter the situation and suggests some degree of hostility and risk taking; (ii) distancing describes cognitive efforts to detach oneself and to minimise the significance of the situation; (iii) self-controlling describes efforts to regulate one's feelings and actions; (iv) seeking social support describes efforts to seek informational support, tangible support and emotional support; (v) accepting responsibility acknowledges one's own role in the problem with a concomitant theme of trying to put things right; (vi) escape avoidance describes wishful thinking and behavioural efforts to escape or avoid the problem; (vii) planful problem solving describes deliberate problem-focused efforts to alter the situation, coupled with an analytical approach to solving the problem and (viii) positive reappraisal describes the efforts to create positive meaning by focusing on personal growth. It also has a religious dimension. However, Rosalind Murray-Harvey (1999) identified only four main categories of coping strategies: personal, professional, social and institutional and a number of subcategories associated with these main categories. Corresponding to personal coping strategies, he identified five specific strategies such as cognitive strategies, physical strategies, behavioural strategies, emotional strategies and rational/time organisation strategies. Under professional coping strategies, he listed three strategies, namely knowledge of the curriculum and what they were expected to teach. Usage of self-management skills professional qualities. Only two strategies were identified for social coping: discussion with people who were identified as friends and involvement in social events. Institutional coping strategies were human and system-related strategies involving both the school and the university. According to Weiten and Lloyd's (2006) view, people tend to use one of the three main coping strategies: appraisal-focused, problem-focused or emotion-focused. Cooper and Kelly (1993) reported that teachers also use coping strategies such as alcohol, smoking and medication to overcome stress arising from work overload and handling peer relationships, and that these strategies were common among male teachers. McCormick (1997) found that higher level of stress was associated with 'immature' defensive coping responses.

### **OBJECTIVES OF THE STUDY**

The objectives of the study were

- (a) To explore sources of occupational stress.
- (b) To examine average stress results (ASRs) for different categories of employees.



- (c) To study relationship between individual differences and occupational stress.
- (d) To study relationship between individual differences and coping strategies.

### **METHODOLOGY**

Survey method of research was used to conduct the study. Employees were grouped into different categories on the basis of gender and year of experience for the assessment of the relationship between individual differences and self-reported occupational stress. The stress data were collected by means of the 'occupational stress index (OSI) questionnaire', developed by Srivastava and Singh. The stress-measurement questionnaire consisted of 46 items, and used a five-point Likert-type numerical scale ranging from strongly disagrees to strongly agree. It has 12 sub-scales, namely role overload, role ambiguity, role conflict, unreasonable group and political pressure, responsibility for others, under participation, powerlessness, poor peer relations, intrinsic impoverishment, low status, strenuous working conditions and unprofitability. The stress-reaction questionnaire has 48 items evaluated on five-point scale, and it describes eight stress reaction styles. The questionnaire identifies stress coping modalities on dimensions such as distancing, confrontive coping, positive reappraisal, seeking social support, accepting responsibility, escape-avoidance, planful problem solving and self-controlling. A self-report measure was administered to 140 employees. There were 67 male and 73 female teachers with experience ranging from 2 years to 30 years. Except descriptive statistics calculations, to test the relationship between different categories of employees and their perceived levels of job stress, chi-square analysis was used. Calculations and tests were conducted using Statistical Package for the Social Sciences (SPSS).

### **RESEARCH FINDINGS**

The findings of the study are discussed under three sections:

- (a) Sources of occupational stress.
- (b) ASRs for different categories of employees.
- (c) Relationship between individual differences and occupational stress.
- (d) Relationship between individual differences and coping strategies.

#### **Section A: Sources of Occupational Stress**

Descriptive statistics (mean and percentages) and chi-square were used for analysis. The data collected were analysed using SPSS. Mean values of polytechnic teachers on various sub-scales in relation to gender and experience are given in Table 1. Table 1 shows that respondents feel moderate stress. About 70% of the respondents felt that work overload leads to moderate stress among them. Workload concerns the work demands of the job in qualitative and quantitative terms. Quantitative workload means that a person has too much to do. Qualitative workload means that the academic cannot easily do job tasks because tasks are too difficult for him. More than 60% of them feel that low status, poor peer relations, responsibility for

**Table 1: Sources of occupational stress**

S.No.	Sub-Scales (Occupational Stress)	Low (%)	Moderate (%)	High (%)
1	Role overload	22.1	73.1	4.8
2	Role ambiguity	37.5	46.2	16.3
3	Role conflict	37.5	53.85	8.65
4	Unreasonable group and political pressures	25.0	61.5	13.5
5	Responsibility for persons	23.1	65.4	11.5
6	Underparticipation	23.1	28.8	48.1
7	Powerlessness	22.1	64.4	13.5
8	Poor peer relations	5.8	65.4	28.8
9	Intrinsic impoverishment	21.2	63.5	15.4
10	Low status	23.1	68.3	8.7
11	Strenuous working conditions	41.3	40.4	18.3
12	Unprofitability	22.1	57.7	20.2

persons, powerlessness, intrinsic impoverishment, unreasonable group and political pressures causes moderate stress. Moreover, 53.85% feel stress due to role conflict. The role incompatibility could be reflected in role conflict in terms of the conflict between teaching and research responsibilities and conflict between the permanent need for self-improvement and continuing education. A percentage of 57.7 feel that the teaching job is unprofitable. However, with the coming of seventh pay commission, one can assume that this will be no longer source of stress for the teachers.

### **Section B: Average Stress Results for Different Categories of Employees**

To find out whether employees differ in their average level of stress perceived as a consequence of their gender and work experience, employees were grouped into four subgroups and divided using two individual differences (gender and work experience). ASRs for different categories of respondents are given in Table 2.

### **Section C: Relationship between Individual Differences and Occupational Stress**

As said before, individual differences that were explored whether they relate to the level of stress experienced by individuals were gender and work experience. Results of the chi-square analysis, conducted with the purpose of determining the significant findings related to the variables explored, are given in Tables 3 and 4. Chi-square analysis showed that gender and work experience are significantly related to the levels of stress perceived. Precisely, analysis revealed the following results:

There is significant difference in stress perceived by men and women. This finding does correspond with the prevailing findings around the globe, as Indian males and females did perceive significantly differential job stress, although women average (ASR = 22.608) is greater

**Table 2: Average stress results for different categories of employees**

S. No.	Sub-scales (Occupational Stress)	Males	Females	Less than 7 Years	7–14 Years	More than 14 Years
1	Role overload	33.06	32.11	30.9	32.34	34.41
2	Role ambiguity	19.74	21.24	20.39	20.34	19.59
3	Role conflict	26.5	26.92	27.16	26.17	26
4	Unreasonable group and political pressures	22.47	22.43	20.32	23.4	22.69
5	Responsibility for persons	18.09	16.05	15.68	17.91	17.79
6	Underparticipation	22.26	26.43	24.77	23.53	21.93
7	Powerlessness	17.62	18.86	18.71	17.79	17.1
8	Poor peer relations	23.5	24	26.77	22.21	21.93
9	Intrinsic impoverishment	21.71	22.54	21.29	22.17	21.79
10	Low status	15.68	17.62	16.9	15.7	16.14
11	Strenuous working conditions	19.26	20.49	19.55	19.62	19.17
12	Unprofitability	11.79	10.59	10.39	11.4	11.93
	<b>Total mean stress</b>	<b>20.97</b>	<b>21.61</b>	<b>19.6</b>	<b>19.73</b>	<b>20.87</b>

**Table 3: Relationship between gender and occupational stress**

S. No.	Sub-scales (Occupational stress)	Males			Females			$\chi^2$	Signi- ficance
		Low (% )	Moderate (% )	High (% )	Low (% )	Moderate (% )	High (% )		
1	Role overload	22.4	71.6	6.0	21.6	75.7	2.7	.589	.745
2	Role ambiguity	46.3	40.3	13.6	21.6	56.8	21.6	<b>6.238</b>	<b>.044*</b>
3	Role conflict	37.5	53.85	8.65	35.1	51.4	13.5	1.719	.423
4	Unreasonable group and political pressures	38.8	55.2	6.0	24.3	59.5	16.2	.375	.829
5	Responsibility for persons	19.4	65.7	14.9	29.7	64.9	5.4	2.976	.226
6	Underparticipation	31.7	31.7	37.3	8.1	24.3	67.6	<b>10.522</b>	<b>.005*</b>
7	Powerlessness	25.4	62.4	11.9	16.2	67.6	16.2	<b>6.371</b>	<b>.041*</b>
8	Poor peer relations	9.0	67.2	23.9	–	62.2	37.8	5.014	.081
9	Intrinsic impoverishment	23.9	61.2	14.9	16.2	67.6	16.2	.840	.657
10	Low status	26.9	67.2	6.0	16.2	70.3	13.5	2.772	.250
11	Strenuous working conditions	41.8	41.8	16.4	40.5	37.8	21.6	<b>10.164</b>	<b>.006*</b>
12	Unprofitability	19.4	65.4	14.9	27.0	59.5	13.5	1.926	.382

Table 4: Relationship between work experience and occupational stress

S. No.	Sub-scales (Occupational Stress)	Less than 7 Years			7-14 Years			More than 14 Years			$\chi^2$	Significance
		Low (%)	Moderate (%)	High (%)	Low (%)	Moderate (%)	High (%)	Low (%)	Moderate (%)	High (%)		
1	Role overload	26.7	73.3	–	21.7	73.9	4.3	17.9	71.4	10.7	4.023	.403
2	Role ambiguity	36.7	43.3	20.0	34.8	52.2	13.0	42.9	39.3	17.9	1.601	.807
3	Role conflict	30.0	63.3	6.7	45.7	43.5	10.9	32.1	60.7	7.1	3.616	.460
4	Unreasonable group and political pressures	43.3	53.3	3.3	19.6	63.0	17.4	14.3	67.9	17.9	<b>9.605</b>	<b>.048*</b>
5	Responsibility for persons	33.3	56.7	10.0	19.6	69.6	10.9	17.9	67.9	14.3	2.704	.608
6	Underparticipation	13.3	30.0	56.7	23.9	28.3	47.8	32.1	28.6	39.3	<b>14.080</b>	<b>.007*</b>
7	Powerlessness	13.3	63.3	23.3	23.9	67.4	8.7	28.6	60.7	10.7	3.177	.529
8	Poor peer relations	–	46.7	53.3	8.7	69.6	21.7	7.1	78.6	14.3	<b>8.043</b>	<b>.038*</b>
9	Intrinsic impoverishment	26.7	63.3	10.0	15.2	67.4	17.4	25.0	57.1	17.9	2.478	.649
10	Low status	16.7	70.0	13.3	32.6	58.7	8.7	14.3	82.1	3.6	6.298	.178
11	Strenuous working conditions	40	36.7	23.3	43.5	41.3	15.2	39.3	42.9	17.9	.905	.924
12	Unprofitability	33.3	43.3	23.3	17.4	67.4	15.2	17.9	57.1	25.0	5.255	.262

than men average (ASR = 21.40). Moreover, the study revealed significant differences among males and females with respect to four sub-dimensions of the OSI that is role ambiguity ( $\chi^2 = 6.238, p \leq .044$ ), underparticipation ( $\chi^2 = 10.522, p \leq .005$ ), powerlessness ( $\chi^2 = 6.371, p \leq .041$ ) and strenuous working conditions ( $\chi^2 = 10.164, p \leq .006$ ).

It was found that significant difference in stress is perceived by teachers with different work experience. The study revealed significant differences among males and females with respect to four sub-dimensions of the OSI that is unreasonable group and political pressures ( $\chi^2 = 9.605, p \leq .048$ ), underparticipation ( $\chi^2 = 14.080, p \leq .007$ ), poor peer relations ( $\chi^2 = 8.043, p \leq .038$ ). The values of mean for underparticipation and poor peer relations indicate teachers with less than 7 years of experience are more stressed than teachers with more experience. There appear to be a variety of reasons which contribute to making the beginning years most difficult in a teacher's career. It is during this period that they acquire a true realisation of the role of the teacher and the countless responsibilities that go with it, including responsibilities to students, parents, school administrators, the community at large, teacher colleagues and to themselves. The reason may be because teachers with less experience are not given much responsibility and they feel stressed. With experience, they are given more responsibility and so feeling of underparticipation is not felt. Likewise, for the sub-scale of poor peer relations as teachers grow in experience, they become more mature in their relationship with their peers. The study supports the hypothesis that younger and relatively new-in-the-profession teachers present higher levels of stress and burnout (Byrne, 1991).

### Coping Strategies

#### *Section D: Relationship between Individual Differences and Coping Strategies*

Nonetheless, if teachers are to survive in this environment, they must develop their own coping strategies. These self-defence mechanisms safeguard teachers' mental health as the level of stress is regulated and adjusted to an acceptable level. Table 5 shows that teachers use a wide range of coping strategies. These results are consistent with the findings of studies

**Table 5: Relationship between gender, work experience and coping strategies**

S.No.	Coping Strategies	Gender		Work Experience		
		% of Use	$\chi^2$	Significance	$\chi^2$	Significance
1.	Confrontive coping	45	2.836	.419	13.199	.001*
2.	Distancing	57	9.009	.044*	11.725	.008*
3.	Self-controlling	49	10.411	.034*	9.847	.043*
4.	Seeking social support	68	7.828	.050*	14.553	.006*
5.	Accepting responsibility	60	5.569	.234	11.710	.020*
6.	Escape avoidance	54	3.286	.193	4.909	.179
7.	Planful problem solving	59	2.923	.404	8.595	.072
8.	Positive reappraisal	53	10.132	.038*	3.419	.490

conducted on other professions (Manning and Osland, 1989). It seems that strategies are used simultaneously, or in sequence, to support each other. It can also be seen from Table 5 that coping strategy 'seeking support' (68%) is mostly used by teachers, followed by 'accepting responsibility' (60%) and 'planful problem solving' (59%).

Results of the chi-square analysis, conducted with the purpose of determining the significant differences related to the coping strategies with gender and work experience, are also given in Table 5. There is significant difference in coping strategies used by men and women to overcome stress. The study revealed significant differences among males and females with respect to four coping strategies that is distancing ( $\chi^2 = 9.0098, p \leq .044$ ), self-controlling ( $\chi^2 = 10.411, p \leq .034$ ), seeking social support ( $\chi^2 = 7.828, p \leq .050$ ) and positive reappraisal ( $\chi^2 = 10.132, p \leq .038$ ). There is significant difference in coping strategies used by teachers with different work experience. The study revealed significant differences among males and females (having different experiences) with respect to five coping strategies that is confrontive coping ( $\chi^2 = 13.199, p \leq .001$ ), distancing ( $\chi^2 = 11.725, p \leq .008$ ), self-controlling ( $\chi^2 = 9.847, p \leq .043$ ), seeking social Support ( $\chi^2 = 14.533, p \leq .006$ ) and accepting responsibility ( $\chi^2 = 11.710, p \leq .020$ ).

#### CONCLUSION AND LIMITATIONS OF THE STUDY

The main objectives of the present study were to identify sources of stress and consequent stress levels in teachers in technical universities and to identify the coping strategies used by them, as well as examining the relationship between stress levels across gender and work experience. The findings of the study reveal that polytechnic teachers feel moderate to high stress. The main causes of stress at work appear to be underparticipation and poor peer relations. ASRs indicated that female teachers feel more stress in comparison to males. The study also found that young teachers experience more stress in terms of role ambiguity, role conflict, underparticipation, powerlessness, poor peer relations and low status. As experience on the job increases, the above-said stress decreases but teachers start finding them overload with work. The policy makers should take steps to create environment in institutions and also prepare teachers to cope with stress in an effective way. It is suggested to improve work conditions so as to increase the level of satisfaction of the academic with his/her work and thus to lower the level of stress to introduce them to more appropriate ways of managing stress. Teachers should discourage themselves from using distancing, escape avoidance strategies and should be encouraged to confront and appraise stressors and try to learn to manage stress by active coping. To bring this change, there is need of cognitive restructuring on the part of teachers. Teachers should also be given skill training in interpersonal communication, classroom management and time management. Further additional measures such as arranging workshops to educate teachers to learn relaxation techniques, yoga and others can be taken by the administration to help teachers in coping stress. There is need to organise a counselling service for academics and to organise stress management courses. Cognitive techniques of stress management interventions such as visualisation, meditation and affirmation may be used to transform the individuals' perceptions of both the quantum and quality of stressors. Another solution might be to recruit more research assistants and tutors to help in doing research and teaching and, thus, ease the time constraints and other pressure on

lecturers. It is suggested that individual-based approaches be the first line of defence against the potential hazards of organisational job stress, to be followed by broader organisational interventions.

The limitations of this study should be kept in mind when interpreting the findings. One should be cautious in generalising the results of this study, as only a small number of teachers were included from each of the institutions in the research. A larger sample size would help in the generalising the findings, especially if the sample's variability is large. Although the study used validated and usable measures, the data collected were from self-report measures that have their obvious limitations, perceptual biases are a concern.

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#### Address for Correspondence

Principal, Ram-Eesh Institute of Education, Plot No. 3, Knowledge Park-1, Greater NOIDA,

Gautam Budh Nagar, U.P.-201310-06, India

Ph.: +91-120-2322657-58-59 Fax- +91-120-2322656

E-mail: principal\_rie@rameeshinstitutions.org, info@rameeshinstitutions.org

## **Contributors**

Rajesh Baghel	M.Com, M.Ed., Ph.D. (Edu.), 2202/7 AVC, Agra, Uttar Pradesh
Anuradha Sekhri	Research Investigator, Institute for Development and Communication (IDC), Chandigarh, Punjab, India
Sunaina Shenoy	Post doctoral Research Scholar, Graduate School of Education, University of California, Berkeley, Berkeley, California, USA
Philip M. Prinz	Professor, Graduate College of Education, San Francisco State Univ., San Francisco, California, USA
Himanshu Verma	Lecturer, Ashtavakra Institute of Rehabilitation Sciences and Research, East Rohini, New Delhi-110085, India
Janaki B.	ASLP, Chaitanya Therapy Centre, Mogapair, Chennai, Tamil Nadu
Aparna Ravichandran	Lecturer, AYNISHD (SRC), Manovikas Nagar, Secunderabad-500009, Telangana, India
Santhi Prakash	Assistant Director and Special Educator, AYNISHD (SRC), Manovikas Nagar, Secunderabad-500009, Telangana, India
Ravindra Kumar	Assistant Professor, School of Education (SoE), Central University of South Bihar, Gaya, Bihar
Shalini Singh	Assistant Professor, Department of Education, V.M.L.G. College, Ghaziabad, Uttar Pradesh, India
K. Saravanan	Research Scholar, Commerce, Bishop Heber College (Autonomous), Trichy-17, Tamil Nadu, India
K. Muthu Lakshmi	Associate Professor, Commerce, Bishop Heber College (Autonomous), Trichy-17, Tamil Nadu, India
Sharmiladevi J.C.	Assistant Professor, Symbiosis Centre for Management Studies, Symbiosis International University, A4 701 Lunkad Amazon, Viman Nagar Rd, Clover Park, Viman Nagar, Pune-411014, Maharashtra
Soumya Meher	Student, BBA Third Year, Symbiosis Centre for Management Studies, Symbiosis International University, A4 701 Lunkad Amazon, Viman Nagar Rd, Clover Park, Viman Nagar, Pune-411014, Maharashtra
Karan Bajaj	Student, BBA Third Year, Symbiosis Centre for Management Studies, Symbiosis International University, A4 701 Lunkad Amazon, Viman Nagar Rd, Clover Park, Viman Nagar, Pune-411014, Maharashtra
Monica Bedi	Assistant Professor, University Business School, Panjab University, Chandigarh, India
Bodige Mamatha	Research Scholar, Department of Business Management, Osmania University, Hyderabad, Telangana, India

Plot No. 3, Knowledge Park-1, Greater Noida, Gautam Budh Nagar, U.P.-201310-06, India

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