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SPIRITUAL INTELLIGENCE OF SECONDARY SCHOOL TEACHERS IN RELATION TO THEIR JOB SATISFACTION

DR. ANITA MENON*

ABSTRACT

The present study investigates the spiritual intelligence of secondary school teachers in relation to their job satisfaction. The sample was drawn of 200 private and government secondary school teacher from Amritsar city. Job satisfaction scale and spiritual quotient scale were administered to achieve the targets. Pearson product moment correlation and t test were used to arrive at the following conclusions: (i) There exists significant difference between the spiritual intelligence of government and private secondary school teachers (ii) There exists no significant difference between the job satisfaction of government and private secondary school teachers (iii) There exists no significant difference between the spiritual intelligence of secondary school teachers with respect to gender (iv) There exists no significant difference in job satisfaction of secondary school teachers with respect to gender (v) There exists significant positive relationship between spiritual intelligence and job satisfaction of secondary school teachers.

Key Words: Spiritual intelligence and job satisfaction

"Educators should be chosen not merely for these qualifications, but more for their personality and character, because we teach more by what we are than by what we teach". WILL DURANT

Introduction

Teachers are the nation builders and educational institutions are the functional heads to make the foundations of a nation strong. It is here teachers undertake the task of giving training to the students. Teachers form an essential aspect of the Indian System of Education. Teacher is accepted as a guide and philosopher, a man of higher ideals in moulding the society, as

*Asstt. Prof., Khalsa College of Education, Amritsar

a person who imbibes, interprets and disseminates the culture and as a maker of future citizens of society. The teacher is accepted to function not only as a guide and facilitator for acquisition of knowledge but also an inculcator of values and transformer of inner being (Add Ref.)

They have to nourish the young minds to be a great one. This is not an easy task as only the best can bring out the best in us. Thus, to produce quality individuals, we need quality teachers. A quality teacher should be intellectually, spiritually, emotionally and physically balanced and harmonic. Intellect, emotions and spirituality depend on one another and make the individual complete. They are interwoven in the human self and in education at its best. Teacher must have high spiritual intelligence which will be the highest guidance to them to carry out their functions as educators with the highest regards. They must undertake the job as educators as noble as possible. This is the reason teachers are regarded someone very high in society.

Spiritual Intelligence

Spiritual Intelligence is described as our ultimate intelligence because it has transformative power. This is the intelligence we use when we wrestle with issues of good and evil and uses our creativity to image different ways of living. Spiritual Intelligence can be used to shift individuals and our cultures from the state of acting from lower motivations (fear, greed, anger, and self-assertion) to one of acting from higher motivations (Exploration, Cooperation, Power-within, mastery, and higher service).

Spiritual intelligence has a capacity to integrate all the intelligences. It is defined as the ability of individuals to behave with wisdom and compassion while maintaining inner and outer peace, regardless of the situations (Wiggles Worth, 2002). Zohar and Marshall, (2000) advocated that spiritual Intelligence is the intelligence with which we access our deepest meanings, purposes, and highest motivation.

In 1905 Alfred Binet and Theodore Simon developed the first moderrn intelligence test to measure Intelligence Quotient or 'I.Q. "I.Q.' is generally thought of as the analytical or mathematical intelligence and linguistic intelligence. Initially it was expected that 'I.Q.' would be a strong predictor of success in careers. Gardner (1999) opened the door to

discussion of "Multiple Intelligences" with his book, "Frames of Mind" in 1983. He listed seven different types of intelligences in that book which are:-

- Linguistic Intelligence
- Logical-Mathematical Intelligence
- > Musical Intelligence
- > Bodily Kinesthetic Intelligence
- > Spatial Intelligence
- Interpersonal Intelligence
- Intrapersonal Intelligence

Gardner later on added three more intelligence types to his earlier list-Naturalist intelligence, Spiritual Intelligence and Existential Intelligence in his book Intelligence Reframed: Multiple Intelligence for the 21st century (1999).

Spiritual Intelligence is the ultimate intelligence in which we address and solve problems of meanings and value, in which we can place our actions and own lives in a wider, richer, meaning giving context, and the intelligence with which we can assess that one course of action or one life path is more meaningful than another.

Emmons (1999) identified five core qualities of Spiritual Intelligence: People high in Spiritual Intelligence tend to have the capacity for transcendence, heightened consciousness, endowing everyday activity with a sense of the sacred, using spiritual resources on practical problems, and engaging in virtuous behavior (such as forgiveness, gratitude, humility, compassion and wisdom.

In the view of Noble (2000/2001) spiritual Intelligence is an inherent ability and she agreed with Emmons (2000) core abilities and added two others:-

- The conscious recognition that physical reality is embedded within a larger, multidimensional reality with which we interact, consciously and unconsciously, on moment basis.
- The conscious pursuit of psychological health, not only for ourselves but also for the sake of the global community.

Job Satisfaction

The teaching of a teacher largely depends upon the level of job satisfaction. Job satisfaction is about liking your job and finding fulfilment in what you do. It combines individuals' feelings and emotions about their jobs and how their

job affects their personal lives. Teacher job satisfaction refers to a teacher's affective relation to his or her teaching role and is a function of the perceived relationship between what one wants from teaching and what one perceives, it is offering to a teacher (Zembylas and Papanastasion, 2004).

The word job satisfaction is combination of two words job and satisfaction. Job is an occupational activity performed by individual in return for a momentary reward. A group of similar position is called job and satisfaction is defined as fulfilment of drives, feelings of expressing pleasure, contentment and optimism. Satisfaction is not about what happens to us; rather it is how we perceive what happens to us.

A teacher, who is happy with his/her job, plays a pivotal role in the up-liftment of society. Well adjusted and satisfied teacher can contribute a lot to the well being of his/her pupils. A dissatisfied teacher can become irritable and may create tension which can have negative influence on the students learning process and it consequently effects their academic growth. Job satisfaction implies the overall adjustment to work situation.

Job satisfaction is a complex variable and is influenced by situational factors of the job as well as the dispositional characteristics of the individual (Sharma & Ghosh, 2006). It is defined as the positive emotional response to the job situation resulting from attaining what the employee wants from the job. This implies that job satisfaction can be captured by either a one dimensional concept of Global job satisfaction or a Multi - dimensional faceted construct of job satisfaction capturing different aspects of a job satisfaction that can vary independently.

Job satisfaction is the result of various attitudes the person holds towards his job, towards related factors and towards life in general. According to Shahnawaz and Jafri (2009) "Job Satisfaction is a pleasurable educational state resulting from the appraisal of one's job, an affective reaction to one's job and an attitude toward one's job."In view of Zembylas and Papanastasion (2004) "Teacher job satisfaction refers to a teacher's affective relation to his or her teaching role and is a function of the perceived relationship between what one wants from teaching and what one perceives it is offering to a teacher."

Emergence of the Problem

The advancement in different spheres of life in 21st century has

created different problems and needs. Today, our youth require developing skills and competence to cope with external demands of the society. They need to develop the qualities of both heads and heart. Since education is viewed as an instrument to develop the cognitive qualities, tolerance and understanding of people. It should prepare the younger generation to understand the real purpose of their lives. The qualities related to three domains however develop in the schools are directly related with educators. Researches demonstrate that the affective competences of teachers have impact on student's learning, so the schools and teachers have more responsibilities in moulding the character of the students. They can help them to develop the core values of connectedness with the self and others, with the cosmos and with the history of humankind. This can be possible only if teachers are spiritually intelligent and encourage the spirituality to grow in classroom.

Spiritual Intelligence is said to be able to create a richer and more meaningful life (Amran and Dryer, 2007). Dincer (2009) mentioned that spiritual intelligence provides a sense of personal wholeness, goal and direction. He pointed out that educators with high levels of spiritual intelligence are able to mould teachers and students from all age groups to experience a wholesome life filled with self-respect and creativity. Teachers with spiritual intelligence are more satisfied with their jobs. If a teacher is satisfied, then only he/she can create congenial environment in the classroom as well as in the school premises.

Few studies have been conducted on the relationship of spiritual intelligence and job satisfaction of the teachers. But still the teaching profession needs more research works as to upgrade the status of the teachers in the society and in the community as well. So, the investigator felt the need to study the spiritual intelligence in relation to job satisfaction of secondary school teachers.

Objectives

- 1. To study the spiritual intelligence of government and private secondary school teachers.
- 2. To study the job satisfaction of government and private secondary school teachers.
- 3. To study the spiritual intelligence of secondary school teachers with

- respect to gender
- 4. To study the job satisfaction of secondary school teachers with respect to gender
- 5. To study the relationship between spiritual intelligence and job satisfaction of secondary school teachers.

Hypotheses

- 1. There exists no significant difference between the spiritual intelligence of government and private secondary school teachers.
- 2. There exists no significant difference between the job satisfaction of government and private secondary school teachers.
- 3. There exists no significant difference between the spiritual intelligence of secondary school teachers with respect to gender.
- 4. There exists no significant difference between the job satisfaction of secondary school teachers with respect to gender.
- 5. There exists no significant relationship between spiritual intelligence and job satisfaction of secondary school teachers.

Sample

A sample of 100 private and government secondary school teacher from Amritsar city were taken.

Tools Used

- 1. Job Satisfaction Scale by Bhatia, Muhar and Mudgil (1971)
- 2. Spiritual Quotient Scale (SQS) by Koradia, Singhal and Narang (2008)

Analysis of Hypotheses

Hypothesis I

There exists no significant difference between the spiritual intelligence of government and private secondary school teachers.

Table 1: Mean scores, standard deviation and 't' value of spiritual intelligence of government and private secondary school teachers

| Spiritual Intelligence of Teachers | N | Mean | S.D. | S.E. | Std. Error difference | df | t-value |
|------------------------------------------|-----|-------|-------|-------|-----------------------------|----|---------|
| Government | 100 | 85.80 | 5.570 | 0.788 | 1.459 | 98 | 4.290* |
| Private | 100 | 79.54 | 8.685 | 1.228 | 1.400 | 30 | 4.230 |

^{*}Significant at 0.01 level of significance

Data presented in table 1 reveals that the means score of spiritual intelligence for government teachers is 85.80 and private teachers mean score is 79.54. Table 1 shows that t-ratio of difference of means between spiritual intelligence scores of private and government teachers is 4.290 which is significant at 0.01 level. So, Hypothesis I, "There is no significant difference between the spiritual intelligence of government and private secondary school teachers" stands rejected. This means the government teachers are more spiritually intelligent than private teachers due to their work culture. Hence, Hypothesis I, "There exists no significant difference between the spiritual intelligence of government and private secondary school teachers" stands rejected.

Hypothesis II

There will be no significant difference between the job satisfaction of government and private secondary school teachers.

Table 2: Mean scores, standard deviation and 't' value of job satisfaction of government and private secondary school teachers

| Job satisfaction of Teachers | N | Mean | S.D. | S.E. | Std. Error difference | df | t-value |
|---------------------------------|-----|--------|---------|--------|-----------------------------|----|---------|
| Government | 100 | 274.86 | 343.951 | 48.642 | 48.739 | 98 | 0.888 |
| Private | 100 | 318.16 | 21.686 | 3.067 | 40.700 | 30 | 0.000 |

Table 2 shows that t-ratio of difference of means scores of job satisfaction scores of private and government teacher is 0.888 which is insignificant. So, hypothesis II, "There is no significant difference between the job satisfaction of government and private secondary school teachers" stands not rejected. It means that the teacher of both the schools that i.e. government and private are equally satisfied with their work culture. The above result is supported by the findings of the Mahajan (2012) who concluded that there is no significant difference between the job satisfaction of government and private secondary school teachers.

Hypothesis III

There exists no significant difference between the spiritual intelligence of secondary school teacher with respect to gender.

Table 3: Mean scores, standard deviation and 't' value of spiritual intelligence of male and female teachers

| Variable | Gender | N | Mean | SD | df | 't' –value |
|--------------|--------|-----|-------|-------|----|------------|
| Spiritual | Male | 100 | 82.10 | 8.170 | 98 | 0.719 |
| Intelligence | Female | 100 | 83.24 | 7.684 | 90 | 0.719 |

From the table 3 it s found that the value of 't' came out to be 0.719 which is insignificant. It means that means scores of spiritual intelligence of males and females do not differ significantly which means that both are equally spiritually intelligent. The above result is in tune with findings of Gill (2012) who concluded that there is no difference between the spiritual intelligence of male and female secondary school teachers.

Hypothesis IV

There exists no significant difference between the job satisfaction of secondary school teachers with respect to gender.

Table 4 : Mean scores, standard deviation and 't' value of Job satisfaction of male and female secondary school teachers

| Variable | Gender | N | Mean | SD | df | 't' –value |
|--------------|--------|-----|--------|---------|----|------------|
| Job | Male | 100 | 321.68 | 343.720 | 98 | 1.034 |
| satisfaction | Female | 100 | 271.34 | 17.111 | 90 | 1.004 |

It is clear from the table 4 that the value't' came out to be 1.034 which is not significant. It means that means cores job satisfaction of male and female teachers do not differ significantly. Hence, Hypothesis IV, "There is no significant difference between the job satisfaction of secondary school teachers with respect to gender" is not rejected.

Hypothesis V

There exists no significant relationship between spiritual intelligence and job satisfaction of secondary school teachers.

Pearson product moment correlation was applied on the spiritual intelligence and job satisfaction of secondary school teachers to test hypothesis V. The results of this analysis are being reported in Table 5.

Table 5: Showing coefficient of coefficient between spiritual intelligence and job satisfaction

| Variables | Correlation value of 'r' | Df | Inference |
|-----------------------------------------|--------------------------|----|-------------|
| Spiritual Intelligence Job Satisfaction | 0.254 | 98 | Significant |

From the table 5, the calculated value of 'r' came out to be .254 which shows positive relationship between spiritual intelligence and job satisfaction. It means that teacher who are more intelligent spiritually, will be more satisfied at their workplace. Therefore, hypothesis V, which states that "There will be no significant relationship between spiritual intelligence and Job satisfaction of secondary school teachers", is rejected.

The above results are in tune with the findings of the Yahayazedeh Joloudar, Soleiman, Lotfi-Goodarzi, Fatemeh (2012). The findings of the study showed that there were significant relationship between teacher's spiritual intelligence and their job satisfaction. Abbas Khorshidi and Malihe Ganeh Ebaadil (2012) also concluded that there is a positive and meaningful relationship between spiritual intelligence and job satisfaction of employees.

Findings and Conclusions

From the above analysis, following findings and conclusions are drawn:

- 1. There exists significant difference between the spiritual intelligence of government and private secondary school teachers It may be due to reason that the government teachers are more spiritually intelligent than private teachers due to their work culture.
- 2. There exists no significant difference between the job satisfaction of government and private secondary school teachers'. This may be due to that the teachers of both schools that i.e. government and private are equally satisfied with their work culture.
- 3. There exists no significant difference between the spiritual intelligence of secondary school teachers with respect to gender. It means that both are equally spiritually intelligent.
- 4. There exists no significant difference between the job satisfaction of secondary school teachers with respect to gender.
- 5. There exists significant positive relationship between spiritual intelligence and job satisfaction of secondary school teachers which indicates that if one increases the other also increases.

Educational Implications

- 1. Spiritual intelligence is one of the significant and effecting factors for increasing job satisfaction.
- 2. Teachers who are spiritually intelligent will be able to inculcate high moral values among the students.
- 3. The job satisfaction of the teacher is of much value to the administrators who frame polices take decisions and create conditions in which teachers try to maximize their potential and thus drive greater job satisfaction.
- 4. Job satisfaction will provide information to educational administration to help them to understand the expectations and requisites of teachers in better way and explore the best possible way to maximize the job satisfaction of teachers.
- 5. Facilities must be provided in leisure period to study the inspirational books and some indoor games.
- 6. The interactions among the teachers and favourable environmental conditions of the management absolutely lead to job satisfaction and better spiritual intelligence of teachers.
- 7. The institution also provides opportunities for the teachers to participate in various aspects for their development and allow them to express their views freely.

Bibliography

Emmons. (1999). The psychology of ultimate concerns. Motivation and Spirituality in personality. Guilford Press.

Fletcher, C. and R. (2006). Performance management, Job satisfaction and organizational commitment. British Journal of Management. 7 (2). 169-179.

Gardner, H. (1983). Frames of Mind: The Theory of Multiple Intelligence. New York: Basic books.

Gardner, H. (1999). Intelligence reframed: Multiple Intelligence for the 21st century New York: Penguin Putman.

Gill. S. R. (2012). Spiritual intelligence in relation to Adjustment of secondary schools teachers. Unpublished M.Ed. thesis, Amritsar, Guru Nanak Dev University, Amritsar.

Heesbeen, T., Benneker, I, & Boeer, A (2008). Job Satisfaction Vs. Teacher owner: how to keep your teacher satisfied, Paper presented at Utrecht University.

Jaidka, M.I. (2005). A comparative study of Job Satisfaction among scheduled caste teachers in relation to their attitude towards teaching education. New Horizons, (1), 6.

Jain, M., & Purohit. P. (2006) A contemporary concern with Regard to living status of the senior citizens, Journals of the Indian Academy of Applied Psychology, 32 (3), 227-233.

King & David, B. (2007). The Spiritual Intelligence Project: Extracting Cognitive Ability from the Psycho Spiritual. Retrieved from http:///www/dbking.net/spirtualintelligence.

Lester, P.E. (1982). "Teacher Job Satisfaction questionnaire". New York, Long Island University. Brookville.

Noble, K. (2000). Spiritual Intelligence: A New Frame of Mind. Spirituality and Giftedness, 9, 1-29.

Olodube, N.P.(2006). Teachers Job Satisfaction, and Motivation for school effectiveness: An assessment, university of Helsinki Finland.

Orange, A.H. (2001). Teachers-shortages, teachers Job satisfaction, and professionalism: Teacher Assistants in Dutch Secondary Schools. ERIC (ED453194.

Singh, S.(1990). Organizational Stress and Executive Behaviors, New Delhi: Shri Ram Centre for Industrial Relations and Human resources.

Specters, P. (1985). Relationship between Job Satisfaction and Life satisfaction among B.T. Assistant teachers Eductracks 8 (9), 37.

Stansbury, K., and Zimmerman, J. (2000). Lifelines to the classroom: Designing support for Beginning Teachers, Knowledge Brief. Sam Francisco, CA: West Ed.

Vaughan, (2002). What is Spiritual Intelligence? Journal of Humanistic Psychology, 42 (2), 16-33.

Wigglesworth, (2002). Spiritual Intelligence and why it Matters. Retrieved from, http://www.Consciouspursuits.com

Wiggleswoth, W. (2006). Why Spiritual Intelligence is essential to mature leadership? Retrieved from http://www.conciouspersuits.com

Zembylas, M. & Papanastasion, E. (2004). Job Satisfaction among school teachers in Cyprus. Journal of Educational Administration, 42, 357-374.

Zohar, D., & Marshall, I. (2000). SQ: Connecting with our Spiritual Intelligence. New York: Bloomsbury.

STUDY OF STRESS MANAGEMENT AMONG TEACHERS IN RELATION TO SPIRITUAL INTELLIGENCE

Dr. AJAY KUMAR* KIRAN**

ABSTRACT

The study examined the stress management among teachers in relation to spiritual intelligence. Data was collected by multistage random sampling technique from a sample of 200 senior secondary school teachers of Ludhiana districts of Punjab. Standardized tools i.e Stress Management Scale (SMS) by Dr. Pushpraj Singh and Dr. Anjali Srivastava. (2001) and Spiritual Intelligence Scale (SIS) by Dr. Santosh Dhar and Dr. Upinder Dhar. (2010) were used in this study. The data was analyzed by employing mean, SD, t ratio and correlation. Results showed that there was significant difference between stress management of male and female school teachers and non significant difference between spiritual intelligence of male and female school teachers. It was further found that there was a significant relationship between stress management and spiritual intelligence. It could help in organizing guidance programme differently for male school teachers because there is difference between stress management of male and female school teachers.

Key Words: - Stress Management and Spiritual Intelligence **Introduction**

Man is a rational being, being a rational, always try to solve the problems or face the situations with courage that is not possible without intelligence. A person, who handles the entire novel or crucial situations very carefully, we call him an intelligent person. Intelligence helps every person i.e. a student, a shopkeeper, a leader and especially a teacher, to deal effectively with the situation and to take right decision at right time because teacher has to face

^{*}Assistant Professor, L.L.R.M.College of Education, Dhudike, Moga.

^{*}Research Scholar

many problems in school and has to give guidelines to the students.

Need and Importance of the Study

The purpose of the study is to see the effect of stress management among teachers in relation to spiritual intelligence. There is extreme scenario, all people are different, but all as one want to have more than they already have. Some are influenced by circumstances, crises and unexpected changes at the workplace. Thus everyone has stress. So spiritual practices tend to improve coping skill and social support, foster feelings of optimism and hope, promote healthy behaviour, reduce feelings of depression and anxiety and encourage a sense of relaxation. Both are very important variables as per as teachers are concerned. Need for a spiritual focus in education thus assumed significance. The focus on spiritual dimensions in educational process can help to faster in inherent potentials rights from early stages and bring the teachers closer to their true nature.

Operational Definition of key Terms

Stress Management - Stress management refers to a wide spectrum of techniques and psychotherapies aimed at controlling a person's levels of stress, especially chronic stress, usually for the purpose of improving everyday functioning. Stress management can be defined as interventions designed to reduce the impact of stressors in the workplace.

Spiritual Intelligence - Spirituality in its true sense means having faith in the basic goodness of man and pursing meaningful goals and purpose in life. Spiritual intelligence calls for multiple ways of knowing for the integration of the inner life of mind and spirit with the outer life of work in the world. In order to understand spiritual intelligence it is useful to first be clear on what we mean when we use these two words. Being spiritual: to be spiritual is to think, act and interact from an awareness of self as spirit not from soul not body. Being intelligent: intelligence is to use what you know in the right way at the right time in the right place with the right intention.

Statement of the Problem

"Study of Stress Management among Teachers in Relation to Spiritual Intelligence"

Objectives of the Study

The study was carried out with the following objectives:

1. To study the stress management of teachers.

- 2. To study the spiritual intelligence of teachers.
- 3. To find out the difference between stress management among teachers with respect to their genders.
- 4. To find out the difference between spiritual intelligence among teachers with respect to their gender.
- 5. To find out the relationship between stress management and spiritual intelligence of teachers.

Hypotheses

The study was carried out with the following hypotheses:

- 1. There will be no significant difference between stress management among teachers with respect to their gender.
- 2. There will be no significant difference between spiritual intelligence among teachers with respect to their gender.
- 3. There will be no significant relationship between stress management and spiritual intelligence among teachers.

Design of the Study

Methodology is the essential in systematic research. Methodology is a science of orderliness. It is a technique adopted for an orderly arrangement of facts and principles. The successes of any study depend largely on the suitability of method, tools and techniques used for the data. Survey is a procedure in which data is systematically collected from a population through a test of questionnaire. Investigator selected survey method to collect the data.

Sample

In the present study only 200 school teachers from schools of Ludhiana district were randomly selected. Out of selected teachers, 100 male teachers and 100 female teachers were taken.

Tool Used

In the present study, the following tools were used to collect data:

• Stress Management Scale (SMS) by Dr. Pushpraj Singh and Dr. Anjali Srivastava. (2001)

• Spiritual Intelligence Scale (SIS) by Dr. Santosh Dhar and Dr. Upinder Dhar. (2010)

Results and Discussion

Table 1 Showing the Stress Management of School Teachers.

| Group | Number of Teachers | Percentage |
|------------------------|--------------------|------------|
| High Stress Management | 98 | 49% |
| Low Stress Management | 102 | 51% |
| Total | 200 | 100% |

Table 1 shows that the stress management of male and female school teachers. 49% teachers having high stress management and 51% teachers having low stress management. It means that most of the teachers having the low stress management.

Table 2 showing the stress management of the male school teachers.

| Group | Number of Teachers | Percentage |
|------------------------|--------------------|------------|
| High Stress Management | 38 | 38% |
| Low Stress Management | 62 | 62% |
| Total | 100 | 100% |

Table. 2 shows the stress management of male school teachers. 38% male teachers having high stress management and 62% male teachers having low stress management. Most of the male teachers having low stress management. In means that most of the male school teachers having the low stress management.

Table 3 showing the stress management of female school teachers.

| Group | Number of Teachers | Percentage |
|------------------------|--------------------|------------|
| High Stress Management | 60 | 60% |
| Low Stress Management | 40 | 40% |
| Total | 100 | 100% |

Table 3 shows the stress management of female school teachers. 60% female teachers having high stress management and 40% female teachers having low stress management. It means that most of the female school teachers having high stress management.

Table 4 showing percentage schedule of comparison of stress management of male and female school teachers.

| Group | Number of Teachers | Percentage |
|------------------------|--------------------|------------|
| High Stress Management | 38% | 60% |
| Low Stress Management | 62% | 40% |
| Total | 100% | 100% |

Table 4 shows that the most of female the school teachers having high stress management as compare to the male school teachers.

Table 5 showing the spiritual intelligence of the school teachers. (N=200)

| Group | Number of Teachers | Percentage |
|-----------------------------|--------------------|------------|
| High Spiritual Intelligence | 101 | 51% |
| Low Spiritual Intelligence | 99 | 49.% |
| Total | 200 | 100% |

Table 5 shows the spiritual intelligence of school teachers. 51% school teachers having high spiritual intelligence and 49% school teachers having low spiritual intelligence. It means that most of the school teachers having high spiritual intelligence.

Table 6 showing the spiritual intelligence of the male school teachers. (N=100)

| Group | Number of Teachers | Percentage |
|-----------------------------|--------------------|------------|
| High Spiritual Intelligence | 48 | 48% |
| Low Spiritual Intelligence | 52 | 52% |
| Total | 100 | 100% |

Table 6 shows the spiritual intelligence of male school teachers. 48% male school teachers having high spiritual intelligence and 52% male school teachers having low spiritual intelligence. It means that the most of the male school teachers having low spiritual intelligence.

Table 7 showing spiritual intelligence of the female school teachers. (N=100)

| Group | Number of Teachers | Percentage |
|-----------------------------|--------------------|------------|
| High Spiritual Intelligence | 53 | 53% |
| Low Spiritual Intelligence | 47 | 47% |
| Total | 100 | 100% |

Table 7 shows the spiritual intelligence of female school teachers. 53% female school teachers having high spiritual intelligence and 47% female school teachers having low spiritual intelligence. It means that the most of the female school teachers having high spiritual intelligence.

Table 8 showing percentage schedule of comparison of spiritual intelligence of male and female school teachers.

| Group | Male (Percentage) | Female (Percentage) |
|-----------------------------|-------------------|---------------------|
| High Spiritual Intelligence | 48% | 53% |
| Low Spiritual Intelligence | 52% | 47% |
| Total | 100% | 100% |

Table 8 shows that more percentage of female school teachers having their high spiritual intelligence as compare to male school teachers.

Table 9 Table showing the mean, S.D., S.ED, t-ratio of stress management of male and female school teachers.

| Stress Management | Number of Teachers | Mean | SD | S.ED. | 't' –value | Level of Significance |
|----------------------|-----------------------|-------|-------|-------|------------|--------------------------|
| Male | 100 | 95.46 | 21.44 | 0.77 | 2 00 | Significant at 0.05 and |
| Female | 100 | 106 | 17.69 | 2.77 | 3.80 | 0.01 level |

Table 9 shows the stress management of male and female school teachers. The mean scores of male school teachers is 95.46 and the mean scores of female school teachers is 106. The S.D. of male school teachers is 21.44 and the S.D. of female school teachers is 17.69. The S.ED of male and female school teachers is 2.77. The calculated t-ratio is 3.80. But tabulated t-ratio at point 0.05 level is 1.97 and at 0.01 point level is 2.60. Our calculated t-ratio is 3.80 which is more than tabulated value at both levels. So there is significant difference between stress management of male and female school teachers at both 0.01 and 0.05 level. Hence hypothesis is rejected. It means that there is significant difference between stress management of male and female school teachers.

Table 10 showing the mean, S.D., S.ED, t-ratio of spiritual intelligence of male and female school teachers.

| Spiritual Intelligence | Number | Mean | SD | S.ED. | 't' –value | Level of Significance |
|---------------------------|--------|--------|-------|-------|------------|--------------------------|
| Male | 100 | 178.99 | 17.87 | 2.65 | 0.81 | Non |
| Female | 100 | 181.14 | 19.69 | 2.00 | 0.01 | Significant |

Table 10 show the spiritual intelligence of male and female school teachers. The mean score of male school teachers is 178.99 and mean score of female school teachers is 181.14. The S.D. of male school teachers is 17.87 and the S.D. of female school teachers is 19.69. The standard error of mean deviation S.ED of male and female school teachers is 2.65. The calculated rratio is 0.18. But tabulated t-ratio at point 0.05 level is 1.97 and at 0.01 point level is 2.60. Our calculated t-ratio is 0.18 which is less than tabulated value at both levels. So there is non significant difference between spiritual intelligence of male and female school teachers at both 0.01 and 0.05 level. Hence hypothesis is accepted. It means that there is non significant difference between spiritual intelligence of male and female school teachers.

Table 11 showing the co-efficient of correlation between stress management and spiritual intelligence.

| S. No. | Variables | No. of Teachers | Correlation | Level of Significance |
|--------|------------------------|-----------------|-------------|-----------------------|
| 1 | Stress Management | 200 | 0.15 | Significance at 0.05 |
| 2 | Spiritual Intelligence | 200 | 0.15 | and 0.01 level |

Table 11 represents the correlation between stress management and spiritual intelligence. The correlation between them is 0.15. It shows the low positive correlation between them. The tabulated value of 'r' at 0.05 level is 0.138 and 0.01 point level is 0.181. The calculated value of 'r' is greater than tabulated at both the levels. Hence hypothesis is rejected. It means there is a significant relationship between stress management and spiritual intelligence.

Major Findings and Conclusions

The findings related to objective no-1 and 2 are enlisted as no 1 to 6

- 1) 51% teachers were low on stress management.
- 2) 62% male teachers were low on stress management.
- 3) 60% female teachers were high on stress management.
- 4) 51% school teachers were having high spiritual intelligence.
- 5) 52% male school teachers were having low spiritual intelligence.
- 6) 53% female school teachers were having high spiritual intelligence

The findings related to hypotheses no 1 and 2 concerning significance of difference between means are listed from 7 to 8

- 7) There was significant difference between stress management of male and female school teachers.
- 8) There was non significant difference between spiritual intelligence of male and female school teachers.

The findings related to hypothesis no 3 concerning significance of correlation is listed to 9

9) There was significant relationship between stress management and spiritual intelligence.

Educational Implications

- 1) It could help in organizing guidance programme on stress management for teachers.
- 2) It could help the teachers to develop insight which further lead to self realization.
- 3) It could help in organizing guidance programme differently for male school teachers because there is difference between stress management of male and female school teachers.
- 4) These results could be very beneficial in the development of the personality of the teachers.

References

Robert Emmons (2000) "Definition of spiritual intelligence." Is spirituality an intelligence? The International Journal for the Psychology of Religion (10) 27-34.

Tee,S.C. (2011) "Definition of Spiritual Intelligence." The Role of Emotional Intelligence and Spiritual Intelligence at Work Place. Journal Of Human Resources Management Research. 204,1-9

Dhar, S. & Dhar, U.(2010) Manual for Spiritual Intelligence Scale. National Psychological Corporation, Kacheri Ghat, Agra.

Pushraj & Srivastava (2001) Manual for Stress Management Scale. Psychological Research Cell Tiwari Kothi, Belanganj, Agra.



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NATURE OF ERRORS COMMITTED BY CLASS VIII STUDENTS IN MATHEMATICS AND THEIR REMEDIES

PARAMJEET KAUR MANGAT*
SUMAN RANI**
RAMANDEEP KAUR***

ABSTRACT

The study examined the Nature of Errors Committed by Class VIII students in mathematics and their Remedies. Data was collected by purposive sampling technique from a sample of 200 students of VIIIth Class. Self prepared tool was used in the study. The data was analyzed by employing mean, SD and t-ratio. Result showed that Highest percentage of errors committed by students in 'Formula' which were 26.09%, 31.69% and 28.38% in respective of girls, boys and in total. Second and Third highest errors were found in Assimilation and Arithmetic respectively. It was further found that there was no significant difference in Rural and Urban Students. It was further found that the male students committed more errors than female students.

Introduction

Development in any country will mean the improvement in the equality of life of the people as a whole and also of the individual. Education enhances lives it ends generational cycles of poverty and disease and provides a foundation for sustainable development. Now our education system gives more emphasis to the academic achievement of a child. To improve the academic achievement of a student teacher may introduce various methods and techniques. Academic achievement of a student plays an important role in his whole life.

Academic achievement of a student depends upon various subjects. It is very important for students that they get good scores in each subject. Generally they get good scores in each subject rather than mathematics.

*Asstt. Prof., Sadbhavna College of Education for Women

**Asstt. Prof., Sadbhavna College of Education for Women

Students cannot able to get good scores in mathematics due to many reasons. Mathematics is a scoring subject. If a student understand it completely he can score good marks in it and improve his academic achievement.

Napolean said, "The progress and improvement of mathematics are linked to the prosperity of the state."

There are three main values of mathematics, Practical or utilitarian value, Disciplinary value, Cultural value.

Utilitarian Aim: Mathematics will be taught primarily for its practical values and aims. The students will be given mathematical knowledge and skills needed in his day-to-day life and enabled to make use of that knowledge and skill. This aim makes the study of mathematics functional and purposeful and establishes relation between the subject and practical life.

Disciplinary Aim: The subject has also to be taught for its disciplinary and intellectual values. It has to aim at providing training to the mind of the learner and developing intellectual habits in him.

Cultural Aim: This aim helps the learner to understand the contribution of mathematics in the development of civilization and cultural. It has enabled him to understand the role of mathematics in fine arts and in beautifying human life.

Adjustment Aim: It is help the learner to develop a healthy, purposeful, productive, exploratory and controlling adjustment with environment.

Social Aim: It is to help the learner to imbibe essential social virtues.

Moral Aim: It enables the learners to imbibe the attribute of morality.

Aesthetic Aim: It is to develop their aesthetic sensibilities, meet their varying interest and help them in the proper utilization of their leisure time.

International Aim: To develop in them international outlook and understanding.

Vocational Aim: It is to prepare them for technical and other vocations where mathematics is applied.

Inter-Disciplinary Aim: To give them insight into the application of mathematics in other subjects.

Self-Education Aim: It is to help them to become independent in learning.

Educational Preparation Aim: It is to prepare them for higher education in science, engineering, technology, etc.

^{***}M.Ed. Student, Sadbhavna College of Education for Women

Development of Powers Aim: It pertains to the development of powers of thinking, reasoning, concentration, expression, discovery, etc.

Harmonious Development Aim: Ultimately the overall aim of teaching all the subjects including mathematics is to ensure all-round and harmonious development of the personality of the child.

Despite its importance and applications in everyday life, mathematics is often considered as a difficult subject. Research has demonstrated that many students have learning difficulties and show poor performance in mathematics. One of the attributed reasons is the anxiety that an individual may have towards mathematics. So it is the duty of a teacher that he uses various methods and techniques to improve the academic achievement of students. Teacher can also develop interest about mathematics through various methods among students. Concept mapping is one of the methods which a teacher can use to make his teaching interesting and effective.

Mathematical errors are a common phenomenon in students' learning of mathematics. Students of any age irrespective of their performance in mathematics have experienced getting mathematics wrong. It is natural that analysing students' mathematical errors is a fundamental aspect of teaching for mathematics teachers.

Due to the challenge from the variety and complexity of students' mathematical errors, it is important that mathematics teachers require specific knowledge for analysing students' mathematical errors. However, although there is increasing interest in mathematics knowledge for teaching, there is still a lack of detailed understanding regarding how mathematics teachers are knowledgeable of students' mathematical errors.

The nature of errors which occur in children's mathematics work will vary greatly and will depend on different factors; the age of the child, their individual interpretation of concepts taught, past experiences, and the specific area of mathematics itself. It is however true to say that some errors are more common than others that many children will misunderstand particular algorithms, and we will see similar patterns emerging in their working. It is these more 'predictable' errors, in specific areas of the mathematics curriculum, on which we will concentrate.

1.1. The Nature of Errors

The nature of errors which occur in children's mathematics work will

vary greatly and will depend on different factors; the age of the child, their individual interpretation of concepts taught, past experiences, and the specific area of mathematics itself. It is however true to say that some errors are more common than others that many children will misunderstand particular algorithms, and we will see similar patterns emerging in their working. It is these more 'predictable' errors, in specific areas of the mathematics curriculum, on which we will concentrate.

As teachers of mathematics, we are all acutely aware of the need to analyse written work so that error patterns in children's work does not go unnoticed. Radatz (1979) classifies errors of five different types:

1. Errors of perseveration, in which single elements of a task or problem predominate. For example:

 $9 \times 60 = 560$

 $5 \times 13 = 63$

41 + 7 = 47

2. Errors of association, involving incorrect interactions between single elements. For example:

66 + 12 = 77

56 + 15 = 67

 $3 \times 9 = 36$

3. Errors of interference, in which different operations or concepts interfere with each other. For example:

3X9 = 12

18/6 = 12

4. Errors of assimilation, in which incorrect hearing causes mistakes in reading and writing, and so on. Such errors are often classified as errors resulting from lack of attention and concentration. For example:

When a student is being asked six more than a number, but replies six times a number.

5. Errors of negative transfer from previous tasks, in which one can identify the effect of an erroneous impression obtained from a set of exercises or word problems. For example:

Since x3 x4 = x7, then (x3)4 = x7

The classification of errors by Bright and Radatz are quite similar.

There are other studies that classify errors in similar methods, ranging from three to eight groupings. A sharp separation of the possible causes of a given error is often difficult because there is such a close interaction among causes.

Orton (1983) classified errors into three categories as follows:

- (1) Structural error: is an error which arises from some failure to appreciate the relationship involved in the problem or to grasp some principle essential to solution.
- (2) Arbitrary error: is that error in which the subject behaved arbitrarily and failed to take into account the constraints laid down in what was given.
- (3) Executive error: is that error where student fails to carry out manipulations, though the principles involved may have been understood.

Significance of the Study

Mathematics is one of the most important subjects which not only decides the carriers of many young students but also enhances their ability of analytical and rational thinking. There is not a single person in the world that is not using mathematics in any form. But most of the students fail to understand it without proper guidance and meaningful teaching. Mathematics consists of complicated and complex forms of relations.

The passing percentage of mathematics is very low as compared to other subjects. Practice makes a man perfect. The more we practice mathematics, the easier is to understand. By practice the students understood the formulae. As we know, mathematics is very interesting subject as well as difficult subject. So it is a responsibility of a teacher that he uses various methods, techniques and strategies to improve the mathematics mistakes of students.

This study will help in improve the learning performance of students in algebra. The study will focus on the errors committed by students in algebra. The result of the study will help the teachers to improve the teaching learning process and achievement of students in algebra. The results of the study will help in the formulation of policy regarding teaching mathematics.

This study reveals a diagnostic study of errors in Mathematics committed by class VIII students. It will study difference in committing errors in

mathematics between boys and girls. It will study the difference in committing errors in mathematics between rural and urban boys and girls. In our country very few studies have conducted in this field. So investigator has a keen interest to conduct a study and explore this area.

Statement of the Problem

The study will examine the ature of errors committed by class VIII students in mathematics and their remedies. The study is titled as: 'Nature of Errors Committed by Class VIII Students in Mathematics and their Remedies'.

Operational Definitions of the Terms Used

Nature of Error in algebra: Student's algebra error can be of five types. Error Committed by Student's with same characteristics and pattern, come under one category from given below:

- *Psychological
- *Errors in application of formula,
- *Errors of Arithmetic
- *Errors of Assimilation and
- *Procedural Errors.

Algebra: Branch of mathematics that substitutes letters for numbers. An algebraic equation represents a scale, what is done on one side of the scale with a number is also done to the other side of the scale. The numbers are the constants. Algebra can include real numbers, complex numbers, matrices, vectors etc. Moving from Arithmetic to Algebra will look something like this: Arithmetic: 3+4=3+4 in Algebra it would look like: x+y=y+x.

Remedies: Some Suggestion, Exercise and Precaution that corrects Errors. **Objectives of the study**

- 1. To Diagnose the Nature of Errors Committed by Class VIII Students in Algebra.
- 2. To Compare the Errors Committed by Urban and Rural Students.
- 3. To Compare the Errors Committed by male and female School Students.

Hypotheses of the study:

- 1. There exists no significant difference on errors committed by urban and rural students.
- 2. There exists no significant difference on errors committed by male and female students.

Delimitation

- 1. The study is delimited to 6 schools of Ludhiana and Sangrur District (3 from rural and 3 from urban area).
- 2. The study is delimited to Algebra only.
- 3. The study will be delimited to VIII class students only.

Method And Procedure

The selection of method and procedure for the research study depends upon the type and scope of the problem. The investigator has to study the nature of problem before finalizing the research methodology for it. After selection and formulation of hypotheses, there is a need to give practical shape to the research i.e. conducting the research work. For that research needs proper planning and utilization of applications of appropriate research design. Research design is the blue print of what is to be done and how it is done? It is the path which is followed by the researcher to reach the target. In simple language, a research design is stated as a plan of action, a plan of collecting and analysing data in an efficient manner. The ultimate success of a research work greatly depends upon the design of the study. It avoids aimless wandering, saves times and economizes the efforts of researcher.

Sampling

Investigator used purposive sampling technique to select the sample for this study. The sample for the study was selected from various schools of district Ludhiana and Sangrur. A sample of 200 students of class VIII was selected with the help of purposive sampling technique from the population of 200 school student of class viii. The selected sample was divided into 100 boys and 100 girls. The sample further divided into urban and rural boys and girls. For the purpose of the present study a self-made open ended questionnaire was constructed on one of the part of VIII class Mathematics' Algebra. The present tool is open ended response tool. The tool consisted of 25 items after the opinion of expert for the face validity. In first draft of the tool there were 30 items under 5 categories. According to the advice of the experts tools were modified. In final draft of the tool 25 items were selected under four categories and fifth category was related to psychological. After the tabulation statistical techniques are employed to get a precise and exact picture of the data. Statistics is a process by which data is gathered, described, organized and analysed in numerical terms. In research studies,

statistics is used not only to understand and compare but also to test hypotheses. For the purpose of present study, Standard deviation, Mean, percentage and t-test was employed to examine the difference in mean scores.

Tool Used: Self prepared tool was used.

Major findings of the study:

In the light of interpretation of the data, the researcher has to use all care and caution in formulating conclusions and generalizations. The final step of research demands critical and logical thinking in summarizing the findings of the study and compares them with the hypotheses formulated in the beginning. The researcher should not draw conclusions which are inconsistent among themselves or with external realities. Conclusions are as essential as investigation. They provide a finishing touch and review to the whole of the critical work. In the present study the investigator has tried to find 'Nature of Errors Committed by Class VIII Students in Mathematics and their Remedies'. On the basis of analysis and interpretation of data, following conclusions can be draw.

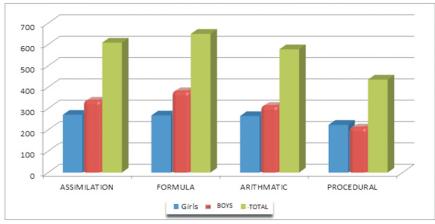


Fig. 1: Graph Shows Category Wise Students Fall Under Psychological Error
Out of total Sample of 200 students of VIII class (100 boys and 100
girls), 10 students are found to be in psychological category. Psychological
mean Mental deficiency, lack of proper mental state and learning disability.
Even Investigator is not able to evaluate the Performance of this type of
students. That is why these 10 students were excluded on first stage of

analysis. Now there were only 190 students (93 Boys and 97 Girls) remain in sample.

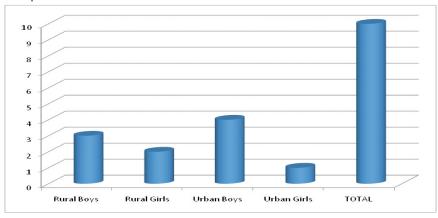


Fig. 2: Graph shows Error Analysis of VIII class Students in Algebra

The number of errors committed by boys as 1,245 and the number of errors committed by girls as 1028. Out of them 637 were committed by rural boys and 608 were committed by urban boys. On the other hand 499 and 529 errors were committed by rural and urban girls respectively. Total numbers of errors committed by students were 2273. Highest percentage of errors committed by students in 'Formula' which were 26.09%, 30.68% and 28.38% in respective of girls, boys and in total. Second and third highest errors were found in Assimilation and Arithmetic respectively.

Table 4.1: Significance of difference between rural and urban students

| | Mean | SD | N | t ratio |
|-------|-------|------|----|---------|
| Rural | 12.08 | 4.42 | 95 | 0.83 |
| Urban | 12.2 | 4.61 | 95 | 0.03 |

Non-Significant at 0.01 level

The Mean score of Rural students as 12.08 and S.D. as 4.42. The Mean score of Urban students is 12.2 and S.D. as 4.61. The calculated value is 0.83 which is less than the table value at .01 level of confidence. This shows that the performance level of rural students was better than urban

students. In other words urban students committed more error than rural students. Our calculated t-value is less than the table value which signifies there exists no significant difference in rural and urban students.

Table 4.2: Significance of difference between Male and Female students

| | Mean | SD | N | t ratio |
|-------|-------|------|----|---------|
| Rural | 13.53 | 4.66 | 95 | 2.73 |
| Urban | 10.82 | 3.93 | 95 | 2.73 |

significant at .01 level

The Mean score of Male students as 13.53 and S.D. as 4.66. The Mean score of Female students is 10.82 and S.D. is 3.93. The calculated value is 2.73 which is higher than the table value at .01 level of confidence. This shows that there exists significant difference among male and female students. Thus the performance level of female students was better than male students. In other words male students committed more error than female students.

Remedies

The most outstanding characteristics of any research are that it may contribute something new to the development of the concerned. The present price of research has its recommendations for teachers, students, school and society. The major findings of the study and hence the conclusions drawn helped the researchers to suggest and recommend the following measures for improving the achievement in mathematics.

- 1. It was suggested that programmed instruction material should prepared on difficult chapters of Mathematics. Because many problems are of unique type and varies from individual to individual. Some students solve problems quickly and some students taking too much time to solve problems. It will help in individualized instruction and learning with self-pace. With the help of programmed instruction we can solve individualised problems and provide a better chance for individualised learning.
- 2. A teacher should have in depth knowledge of new teaching methods, technologies, and teaching strategies which can help the teacher to solve the problems of individual.
- 3. A teacher should have to provide proper drill and practice to the

- students. Because practice is very essential for mastery in the subject of mathematics.
- 4. Teacher training is a very essential part of our education system. So teacher training colleges should have to adopt new training strategies so that they can train the prospective teacher for new teaching methods, technologies, and teaching strategies.
- 5. Schools have to adopt approaches of constructivism in teaching. It will enable the child to solve their own problems.
- 6. Daily life and practical examples should be given to the students for effective learning.
- 7. Teaching method and strategies are to be modified according to interest and needs of the students.

Remedies for Psychological Error

- 1. Peer group teaching should be introduced.
- 2. Small group activities should be organized like quiz competition, puzzles, oral and written test.
- 3. Teacher should have knowledge about individual differences so that teacher can prepare his lesson according to the needs of the students.
- 4. A teacher has to use different type of media/stimulus according to learning style of the students for making his/her teaching effective for each and every student.
- 5. Programmed learning should be used to teach mathematics because it is based upon the individual differences.
- 6. Concrete examples should be given to the child for the proper concept formation.

Remedies for Errors in Assimilation

- 1. In the starting of the year a teacher have to provide orientation classes for mathematical language.
- 2. A teacher has to prepare sheets/notes (for students) regarding mathematical sign and symbols.
- 3. Teacher should have to use dictation method to reduce the error of assimilation.

Remedies for Arithmetic Error

Error in addition, subtraction and multiplication are surely the most

commonly error of all. The great number of that kind of errors suggests that students are careless and unconcerned that students think sign errors do not matter but sign errors certainly do matters, great deal. So teacher should pay special attention to that kind of errors. So the teacher has select the examples of that kind of common errors before classroom and provide instruction to students about that.

Remedies for Application of Formula

- 1. A teacher has to prepare sheets/notes (for students) regarding mathematical formulas.
- 2. Assignments should be given to the students. The assignments should preferably arise out of the activities, needs and interests of the pupils.

Remedies for Procedural Error

- 1. These are to do with the incorrect execution of rules, rather than misunderstanding what they mean. So students should have knowledge about execution of rules.
- 2. Teacher should emphasise on self-study. Self-study is individuals own independent study.
- 3. Group work is a via-media between class teaching and the individual's independent work.
- 4. Proper home work should be given to the child. Home work should be duly checked and corrected. If it is not checked the students may fall into the bad habit of evading it or copying it.

Suggestions:

- Sample size can be increased to reach more concrete results.
- Similar study can be conducted on college students and university students etc.
- Similar study can be analysed by different statistical techniques for verifying the results.
- Similar study can be conducted in other subjects.
- BIBLIOGRAPHY
- Amy M. Walker. (2012). The Relationship Between Reading Fluency And Mathematical Word Problem Solving: An Exploratory Study. The College of Graduate and Professional Studies Department of Curriculum, Instruction, and Media Technology

- Indiana State University Terre Haute, Indiana.
- Arora, R.A. (1998). Diagnostic Study Of Errors In Math Among Xi And Xii Grades Students At Different Level Of Intelligence. Published M.Ed. Dissertation G.N.D.U., Amritsar.
- Boulton-Lewis, G.M., Cooper, T.J., Atweh, B., Pillay, H., & Wilss, L. (2000). Readiness for algebra. In Tadao Nakahara and Masataka Koyama (Eds.), Proceedings of the 24th conference of the International Group of the psychology of Mathematics Education Vol. 4 (pp. 89-96). Hirishima, Japan.
- Chifamba, P. Napocensia, D.(2012). Analysis of Errors And Misconceptions In The Learning Of Calculus By Undergraduate Students. Jonatan Muzangwa, Peter Chifamba: Acta Didactica Napocensia, ISSN 2065-1430.
- Garret, H.E and Woodworm, R.S. (1997). Statistics in Psychology and Education, Bombay: Vakils and Jeffers Gray, E., & Tall, D. (1994). Duality, ambiguity and flexibility: a proceptual view of simple arithmetic. Journal for Research in Mathematics Education, 26, 115-141.Pvt. Ltd.
- Gunawardena Egodawatte (2011) Secondary School Students' Misconceptions in Algebra, Unpublished Ph.D. Thesis Department of Curriculum, Teaching and Learning Ontario Institute for Studies in Education University of Toronto.
- Jordan, N. C. (2002). Achievement growth in children with learning disabilities in mathematics: Findings of a two-year longitudinal study. Journal of Education Psychology, 94, 586-597.
- Kaur, J. and Renu (2010). Impact of concept mapping on the academic achievement of ninth grade students in mathematics, M.Ed. dissertation, Lovely Institute of Education, lovely perofessonal University.
- Liebenberg, R. (1997). The usefulness of an intensive diagnostic test. In P. Kelsall & M. de Villiers (Eds.), Proceedings of the Third National Congress of the Association for Mathematics Education of South Africa: Vol. 2 (pp.72-79). Durban: Natal University.
- Lopez-Real, F.(1995). How Important Is The Reversal Error In Algebra? Retrieved From Hong Kong University: Http:// Www. Merga. Net. Au/ Documents /RP_Lopezreal_1995.Pdf
- Mason, J., Graham, A & Johnston-Wilder, S. (2005). Developing

- Thinking in Algebra, London: Paul Chapman Publishing.
- National Policy on Education (1986) Government of India Document. New Delhi: Ministry of Human Resource Development.
- R. Dhanya. (1999). Learning disabilities in addition in Algebra diagnosis and prevention. Unpublished M Ed Thesis, University of Kerala, Thiruvananthapuram.
- Reenee M Newman. (1998). Diagnosing Math Learning Disabilities/ Recommended Practices. [Online] Available http://www.dyscalculia.org/Edu502.html.
- Richard D. G. Hall (2002) Philosophy Of Mathematics Education Journal 15 An Analysis Of Errors Made In The Solution Of Simple Linear Equations.
- Sidhu, K.S. The Teaching of Mathematics . Sterling Publisher Private limited. ISBN 81 207 17473.
- Singh, A.(2002). "A Study of Intelligence as Determinant Of Error Pattern In Problems." Unpublished M.Ed. Dissertation, Punjab University, 2002.
- S. Jayasree. (1997). A diagnostic study of the difficulties of pupils of standard VIII in expanding using identities. Unpublished M.Ed. Thesis, University of Kerala, Thiruvananthapuram.
- Walia, J.S. Development of Education System in modern india. Paul Publication gopal nagar Jalandhar.
- Warren, E. (2003). The role of arithmetic structure in the transition from arithmetic to algebra. Mathematics Education Research Journal, 15, 122-137.
- Wu, H. (1999, October). Some Remarks on the Teaching of Fractions in Elementary School. University of California, Berkeley, CA. Accessed 1 November 2006 at http:// www. math. berkeley. edu/wu/fractions2.pdf.
- Ysseldyke, J. E., Thurlow, M. L., Langenfeld, K. L., Nelson, J. R., Teelucksingh, E., & Seyfarth, A. (1998). Educational results for students with disabilities: What do the data tell us? Technical Report No. 23. Minneapolis, MN: National Center on Educational Outcomes.
- Zahid, (1995). A study of the causes of students' conceptual problems in learning algebra. unpublished Masters theses Aga khan university institute for educational development AKU-IED, Karachi.

REMEDIATION INSTRUCTION OF THE SPECIAL CHILDREN

Amit Popli*

ABSTRACT

Remedial Instruction is a necessary part of learning for the children of special needs especially learning disabled. Such children are screened out and various remedial measures are supposed to be taken. This article suggests various programmes, techniques etc. which help the persons who deal with such children. These programmes and techniques are used for remediation and make the special children more special in the field of education by making them aware, competitive and stand on their own feet in the society.

Education is a fundamental right to every child. Programmes on Universalization of Primary Education are being carried out worldwide. In India, DPEP (District Primary Education Programme) and SSA (Sarva Shiksha Abhiyan) is actively doing work in this field.

The number of schools in the country has increased from 2, 31,000 in 1950 to 201,457,062 in 2013 (with enrolment from 19.2 million to 304 million). Out of 200 million children in the age group of 6-14 years, only 141 million attend school. Out of the major reasons for drop out is low level of achievement by the children. Low achievement is due to the learning problems among students. To help such children in learning, it is essential to understand the learning process, how and why learning difficulties occur and what measures can be taken for correcting such problems.

Children with Learning Problems

- · Specific Learning Disabilities or Specific Learning Difficulties (Such children cannot learn efficiently due to specific breakdown in the learning process, involving listening, thinking, perceiving, memory and expression).
- Slow Learners (Such children show difficulty in learning as they have below average intelligence or having borderline intelligence).
- Mildly Mentally Retarded (Such children show poor scholastic

*Assistant Professor, D. A. V. College of Education, Abohar (Punjab).

performance due to emotional disturbance or social or cultural disadvantage. **Criteria for Classifying Children with Learning Problems**

- Exclusionary Clause:- It is applied to distinguish children with learning or other disabilities such as visual impairment, hearing impairment, mental retardation etc. If typical symptoms are diagnosed, out of 10, 8 children are found to have borderline intelligence.
- Discrepancy Clause:- It is applied to classify a child to be having a need for supportive education, discrepancy between the class placement and achievement level is used. These levels are independent level, instructional level, frustration level etc.
- Ability Deficit Level:- It is based on psychological processes involved in learning such as auditory and visual perceptual deficits, motor and language disorders etc.

Characteristics of Learning Disabled Children

- Visual perception
- Auditory perception
- Visual motor activities
- Conceptualization
- Memory
- Attention
- Poor comprehension
- Disorganization
- Low self-esteem
- Unpredictable behavior
- Moody
- Difficulty in problem solving
- Confused
- Attention and concentration difficulties
- Socialization difficulties
- Low frustration tolerance
- Poor impulse control
- Continuous restlessness
- Poor in studies (reading, spelling, counting etc.)
- Poor motor co-ordination

Current Status in India

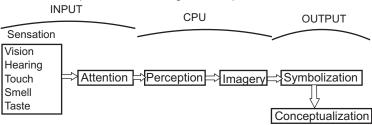
About 12.59 million children in school going age in India are disabled. Specific learning problems do not get detected in many children. Such children continue to stay and struggle in the mainstream school without detection. No retention policy leads the child to a class, which may be much above his/her ability level, thus, widening the discrepancy between actual performance of the child and expected performance of that class. So, a 35% marks in each subject is generally adequate to pass the examination, which the child with learning problem manages to get with extra coaching, parental pressure etc.

Approximately 10% of the children are estimated to have learning problems, out of which 4.6% of school aged students are identified as severely learning disabled.

Learning Problems

The learner characteristics contribute to their scholastic performances positively or adversely. Learning is a multidimensional phenomenon. There tends to be a relationship between the information processing and functioning of the system to enable a child to learn. All children make an effort to learn, but some, due to specific reasons fail to learn effectively.

Let us compare human being to a computer:-



Learning problems at each stage of sensation, perception, imagery, symbolization and conceptualization must be checked, if one has to assist a child in learning. Careful diagnosis is essential for appropriate remediation.

Remedial Instruction

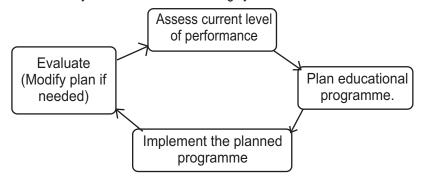
Assessment of children with learning problems is a real challenge as they do not have visible disabilities. About 10% of children in schools are

estimated to have learning disabilities, out of which about 6% are with mild problems, which if identified early, can be corrected by the regular class teachers. Various checklists are used to screen the children with learning disability according to their level.

Individualized Educational Programme

General information is necessary to get an insight into the overall profile of the student. The resource teacher will largely use the findings of the specific educational tests for remedial planning. A justified blending of general and specific information will help in individualized programme planning of the student. It is called IEP (Individualized Educational Programme).

Remedial teaching is a continuous process with testing and testing links to form a cycle called clinical teaching cycle.



Perceptual Motor Training

Perceptual Motor Training will help the child in matching perceptual information; he/she receives to the earlier motor information. To improve the perceptual motor functions, the activities include use of walking board, fine motor activities, auditory motor match, rhythmetic activities, symbol recognition etc. This approach suggests that modifying learning environment to reduce distraction improves learning.

Multisensory Approach

Multisensory Approach was used by Madam Montessori on the children with mental retardation. Today, it is popular in regular schools. It is a method uses more than one sense of the children to learn.

Metacognitive Training

Metacognitive thinking means thinking about one's own thinking process. It is one's awareness of how one solves problems, how one remembers or comprehends written materials. It allows a student to use effective learning strategies, monitor and regulate their own activities.

Role of Teacher

- Retreat if needed
- Initial assessment
- Periodic evaluation
- Specific material development
- Provide consultation to other teachers
- Co-ordination with parents
- Teaching in small groups
- Individualized teaching
- Programme planning
- Co-ordination with regular class teaching & administration

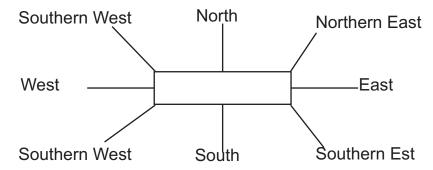
Techniques of Remediation

- SQ3R- It was given by Robinson (1961). It involves 5 steps- Survey, Question, Read, Recite, and Review.
- **REAP-** It was introduced by Eanet and Manzo (1976). REAP acronyms for Read, Encode, Annotate, and Ponder.
- **EVOKER-** It was introduced by Pank (1963). It refers to Explore, Vocabulary, Oral reading, Key ideas, Evaluation and Recapitulation.
- Self-Instruction and Monitoring- It involves 3 steps-
 - External speech of adult.
 - Own overt speech/expression.
 - Own covert speech.
- **Self-Monitoring-** This is a widely used technique, where a student is trained to generate his/her own questions for a given topic. This enhances comprehension and recall.
- Reciprocal Teaching- This is an approach that builds a dialogue between the teacher and learners for the purpose of finding meaning to a text. One important element of this technique is scaffolding where the teacher models and demonstrates how to use the four strategies (summarize, generate questions, clarify and predict) and uses guided

practice by prompting the student to summarize, self-question, clarify and predict step by step.

Attributional Retraining- This is a technique specifically useful for those with poor or maladaptive motivational patterns, which is attributed to insufficient effort or ineffective strategies. This involves a student say loudly the factors responsible for his/her failure or success. The specified wording of the students in this attribution statement is very critical for the effectiveness of the programme.

Semantic Mapping- Semantic Mapping or Concrete Mapping helps the students to make insightful judgment or content selected to be presented in an order to recall information when needed. One way of semantic mapping is associating the content in a clock dial.



•Advanced Organizer Technique- This technique revolves around the idea that if the student is aware of what he is going to read in advance, in terms of what it is about, what is the main idea, what is the purpose of reading and so on. The act of reading is easy by the student. Therefore, a discussion by the teacher and the student on the lesson to be done with the opportunity for the student to think followed by reading is the technique here. For example, if it is a lesson about picnic, the teacher and students can discuss on the topic picnic.

A child may be good in any area and if identified and given due attention, he may be celebrated as a good sportsmen, musician, artist, stage entertainer or public relation officer. Students are like unpolished stars, which come in varied sizes and shapes. It is a good teacher, who shines them to bring out the best in them.

"The real issue in Education is to see that when the child leaves the school, he is well established in goodness, both outwardly and inwardly".

-J. Krishnamurthy.

References

Bettinger, E., & Long, B. T. (2005). Remediation at the community college: Student participation and outcomes. New Directions for Community Colleges, 129, 17-26.

Brants, L., & Struyven, K. (2009). Literature Review on Online Remedial Education: A European Perspective. Industry and Higher Education, 23(4), 269-275.

Burley, H., Butner, B., & Cejda, B. (2001). Dropout and stopout patterns among developmental education students in Texas community colleges. Community College Journal of Research and Practice, 25, 767-782.

Crews, D. M., & Aragon, S. R. (2004). Influence of a community college developmental education writing course on academic performance. Community College Review, 23, 1-18.

Rienties, B., Tempelaar, D. T., Dijkstra, J., Rehm, M., & Gijselaers, W. H. (2008). Longitudinal study of online remedial education effects. In N. P. Barsky, M. Clements, J. Ravn & K. Smith (Eds.), Advances in Business Education and Training 1: The Power of Technology for Learning (pp. 43–59). Dordrecht: Springer.

Worley, J. (2003). Developmental reading instruction, academic attainment and performance among underprepared college students. Journal of Applied Research in the Community College, 10, 127-136.

^http://www.wcb.ns.ca/wcbns/index_e.aspx?DetailId=771

^http://eae.alberta.ca/planning/choosing/upgrading.aspx

AWARENESS OF RTI ACT AMONG TECHNOCRATS: A CASE STUDY OF INFOSYS ENGINEERS, CHANDIGARH

Anu Jasrotia* Promila Kanwar**

Abstract

'Right to know' is closely linked with other basic rights such as freedom of speech and expression and right to education. Right to know leads to transparency and transparency is one of the essential of good governance. Therefore, in order to promote good governance transparency and accountability in administration "The Right to Information Act 2005" came into being. Right to Information Act encompasses important political and economic dimensions as it embraces freedom to lead life with dignity. The Act provides effective access to information for citizens of India, which is under the control of the public authorities. The present paper would assess the level of awareness about the provisions of the RTI Act among the technocrats.

Introduction

The enactment of the Right to Information Act, 2005 is a historic event in the annals of democracy in India. Information is power and now every citizen has the right to access information "held by or under control of" the public authorities. The Act came into effect on 12 October, 2005, is one of the most significant legislations enacted by the Parliament of India. The Act enables the establishment of an unprecedented regime of right to information for the citizens of the country. It overrides the 'Official Secrets Act' and similar laws/rules. It strikes at the heart of the paradigm long practiced by Government officials and public functionaries that 'confidentiality is the rule and disclosure is an exception'. The Act seeks to

^{*}Research Scholars, Department of Public Administration, Panjab University, Chandigarh.

establish that "transparency is the norm and secrecy is an exception" in the working of every public authority. It aims to ensure maximum openness and transparency in the machinery and functioning of Government at all levels: Central, State, and Local. The right to information is expected to lead to an informed citizenry and transparency of information which are vital to the functioning of a democracy. It will contain corruption and enable holding Governments and their instrumentalities accountable to the governed. The Act mandates a legal-institutional framework for setting out the practical regime of right to information for every citizen to secure access to information under the control of public authorities. It prescribes mandatory disclosure of certain information to citizens, and designation of Public Information Officers ("PIOs") and 'Assistant Public Information Officers ("APIOs") in all public authorities to attend to requests from citizens for information within stipulated time limits. It also mandates the constitution of a Central Information Commission (CIC) and State Information Commissions (SICs) to inquire into complaints, hear second appeals, and guide implementation of the Act.

Therefore, India's RTI Act is generally claimed as one of the best law with an excellent implementation track record. It is also one of the most empowering and most progressive legislations passed in the post Independent India. From the day the Act came into force, enlightened citizenry had stated using the law by making information requests in order get the police to act or get their entitlements of food grain under public distribution system or expose the corrupt officials. Most radical provision of the Act is that the information seeker needs not to give any reason for it or prove his locus standi. Further, during the period of the implementation of the RTI Act i.e. October 2005 onwards, it has become evident that there are many anticipated and unanticipated consequences of the Act. These have manifested themselves in various forms, while some of the issues pertain to procedural aspects of the Government; others pertain to capacity building and so on. The most important aspect to be recognized is that there are issues to be addressed at various ends for effective implementation of the There have been many discussions and debates about the effectiveness and impact of the Act. The Civil Society Organizations and Government agencies have been engaging themselves in the debate over various aspects of the Act and its effectiveness and interpretations. There is a broad consensus that the implementation of the Act needs to be improved to achieve the objectives. At the same time there is evidence to suggest that the information seekers too have to learn how to use the Act more effectively.

Moreover, lack of adequate public awareness, especially in rural areas, lack of proper system to store and disseminate information, lack of capacity of the public information officers (PIOs) to deal with the requests, bureaucratic mindset, attitude etc. are still considered as major obstacles in implementation of the law.

Objective of the Study

To assess the level of awareness about the provisions of the RTI Act among the Engineers of Infosys Limited, Chandigarh- Information Systems (IS) Department.

Research Methodology

The present study was conducted in the Information System (IS) Department of Infosys Limited, Chandigarh. Both primary and secondary data was collected. The primary data has been collected from the sample of the Engineers working in Infosys Ltd out of the total of 180 Engineers in the Information System Department, the sample of 51 Engineers was taken on the basis of quota sampling. For secondary data various books, journals, articles, and websites were browsed. Interview Schedules were prepared for the respondents to draw their responses. The collected data was analyzed and the findings were tabulated and interpreted.

Analysis of the Statements

Table 1: You are aware that the Indian Parliament has passed the RTI Act in 2005, providing every citizen with the Right to Information.

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 28 | 2 | 30 | 93% | 7% |
| Female | 18 | 3 | 21 | 86% | 14% |
| Total | 46 | 5 | 51 | 90% | 10% |

Table 1 highlighted that 90 per cent of the respondents were aware that the Indian Parliament has passed the RTI Act in 2005, providing every citizen with the Right to Information whereas only 10 per cent were not aware. Interestingly more of female Engineers were not aware of this provision.

Table 2: You are aware that all Ministries/Departments/Agencies of the Central/State (or UT) Government are statutorily required to provide the requisite information within 30 days of making the application, which cannot exceed 40 days in any case.

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 18 | 12 | 30 | 60% | 40% |
| Female | 11 | 10 | 21 | 52% | 48% |
| Total | 29 | 22 | 51 | 57% | 43% |

Table 2 accentuated that only 57 per cent of the respondents were aware that all Ministries/Departments/agencies of the Central/State (or UT) Government are statutorily required to provide the requisite information within 30 days of making the application, which cannot exceed 40 days in any case. On the other side, 43 per cent of the respondents were not aware of this provision.

Table 3: You are aware that fee is charged for the disclosure of information under RTI Act by the concerned Public Authority.

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 10 | 20 | 30 | 33% | 67% |
| Female | 3 | 18 | 21 | 14% | 86% |
| Total | 13 | 38 | 51 | 25% | 75% |

Table 3 stated that only 25 per cent of the respondents were aware of the fee that is charged for the disclosure of information under the RTI Act whereas 75 per cent of the respondents were unaware about this provision.

Table 4: You are not required to disclose any reason for asking the desired information under the RTI Act

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 16 | 14 | 30 | 53% | 47% |
| Female | 10 | 11 | 21 | 48% | 52% |
| Total | 26 | 25 | 51 | 51% | 49% |

Table 4 reflects that the responses were nearly equally divided as 51 per cent of the respondents knew that no reason is required to ask for any information under RTI whereas 49 per cent of the respondents were unaware about it.

Table 5: You can request for more than one information in a single application.

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 14 | 16 | 30 | 47% | 53% |
| Female | 11 | 10 | 21 | 52% | 48% |
| Total | 25 | 26 | 51 | 49% | 51% |

Table 5 reflected nearly equally divided responses to the question as 49 per cent of the respondents knew that they can seek more than one information in a single application and on the other hand 51 per cent of the respondents were not aware about the provision.

Table 6: You are aware that if the same nature of information is sought by more than one person, then it has to be made available to all such applicants.

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 13 | 17 | 30 | 43% | 57% |
| Female | 11 | 10 | 21 | 52% | 48% |
| Total | 24 | 27 | 51 | 47% | 53% |

Table 6 represents that 47% of the respondents were aware that if the same nature of information is sought by more than one person, then it has to be made available to all such applicants whereas 53 % of the respondents were not aware about it.

Table 7: The application under the RTI Act can be filed in a plain paper.

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 18 | 12 | 30 | 60% | 40% |
| Female | 11 | 10 | 21 | 52% | 48% |
| Total | 29 | 22 | 51 | 57% | 43% |

Table 7 disclose that 57 per cent of the respondents were aware that that application can be filed on a plain paper under RTI Act and 43 per cent had no idea about it.

Table 8: There is definite time period for the supply of information prescribed under the RTI Act.

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 18 | 12 | 30 | 60% | 40% |
| Female | 13 | 8 | 21 | 62% | 38% |
| Total | 31 | 20 | 51 | 61% | 39% |

Table 8 reflected that 61 per cent of the respondents were aware about the definite time span for the supply of information whereas 39 per cent of the respondents were unaware about this provision.

Table 9: Private bodies are not covered under the RTI Act.

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 10 | 20 | 30 | 33% | 67% |
| Female | 11 | 10 | 21 | 52% | 48% |
| Total | 21 | 30 | 51 | 41% | 59% |

Table 9 states that 41% of the respondents support that private bodies are not covered under the RTI Act and on the other hand 59% of the respondents did not favour and had no idea about it.

Table 10: You are aware that no fee is charged from the Below Poverty Line (BPL) card holders.

| Respondents | Yes | No | Total | %Yes | %No |
|-------------|-----|----|-------|------|-----|
| Male | 8 | 22 | 30 | 27% | 73% |
| Female | 12 | 9 | 21 | 57% | 43% |
| Total | 20 | 31 | 51 | 39% | 61% |

Table 10 points out that 61 per cent of the respondents were not aware that no fee is charged from the Below Poverty Line (BPL) card holders and only 39 per cent of the respondents knew about it.

Findings

- 1. Majority of the respondents were aware of the RTI Act 2005.
- 2. The study highlighted that there was not much awareness among the respondents about the time span within which the information had to be provided under the RTI Act.
- 3. There were few respondents who were aware of the fee charged for the disclosure of information under the RTI Act from the applicant.
- 4. Findings revealed that responses were nearly equally divided regarding the provision that the applicant was not to disclose the reasons for seeking the information under the Act.
- The responses to the statement whether the applicant can seek for more than one information in a single application were nearly equally divided.
- 6. It was found that majority of the respondents were not aware about the provision that same nature of information has to be supplied by the authorities to all theses applicant who seeks it.
- 7. Another finding affirmed that higher proportion of the respondents were not aware that application can be filed on a plain paper.

- 8. One of the prominent finding avowed that greater part of the respondents were aware about the definite time span in which the information had to provided by the authorities to the applicants under RTI Act.
- 9. An additional key finding was that majority of the respondents were not conscious that the private bodies did not come under the scope of the RTI Act and only the government authorities are covered.
- 10. Lastly, one of the chief finding exposed that majority of the respondents were not aware of the fact that no fee was charged from the Below Poverty Line (BPL) card holders.

Out of the ten questions asked from the respondents, there were two answers in which higher proportion of the respondents were aware about particular aspect of RTI. In the other eight answers the respondents gave equally divided responses which accentuate more towards less awareness of the RTI Act.

If this is the situation among the Engineers i.e. the well educated strata of the society, we can very well envisage the situation of the uneducated lot like the poor people or the people living in the villages or any other remote/rural areas.

Suggestions

- \cdot Government should take the initiative to make the people aware about the RTI Act through media, conferences or seminars.
- Right to Information Act should be included as a part of the curriculum in schools up to the college level, so that general masses are very well sentient of their rights.
- Non Governmental Organizations should also come forward to make the public in the rural, remote areas and also illiterates conscious about the RTI Act.

Conclusion

RTI is a powerful tool that can deliver significant social benefits. It can provide a strong support to democracy and promote good governance, by empowering the citizen's ability to participate effectively and hold government officials accountable. Rather than just providing information,

RTI Act in most of the countries has served to be an effective watchdog ensuring all those coming in purview of the Act to work in accordance with rules and regulations, without any irregularities. However, stricter implementation of this law requires not only political will but also active role of civil societies, RTI activists. Currently, the RTI Act in India is passing through a decisive phase, much more needs to be done to facilitate its growth and development. Mere protest against the lack of implementation of this law alone is not sufficient, one needs to encourage this initiative taken, for the law to grow and mature. There is dire need to generate awareness about the Act and its provisions among the masses to ensure that benefits of the Act percolates down to 'commoners'.

www.http://www.rtigateway.org.in

lbid.

www.cuts-international.org/cart/pdf/Analysing_the_Right_to_ Information_Act_in_India.pdf

Opcit.

Opcit.

Opcit.

Further References:

- 1. N.K. Acharya, Commentary on Right to Information Act, 2005, Asia Law House, Hyderabad, 2006.
- 2. Wadia Angela, Global Source book on right to Information, Kanishka Publishers Distributors, New Delhi, 2006.
- 3. Srinivas Madhaav, Transport Revolution- Right to Information, Asia Law House, Hyderabad, 2008.
- 4. Niraj Kumar, Sunil Kumar, Treatise on Right to Information Act, 2005, Bharat Law House Pvt. Ltd, New Delhi, 2006.

CYBER CRIME AWARENESS AMONG UNIVERSITY STUDENTS

Karandeep Kaur*

Abstract

The present study was conducted with an objective to study the cyber crime awareness among university students. For this investigation, descriptive study was conducted. A sample of 200 university students pursuing masters in sciences and humanities were selected from Punjabi university, Patiala. The scale to measure cyber crime awareness was self constructed by investigator which consist of 55 items. The data thus collected was subjected to 't' test. The study reveals no significant gender difference, locale difference and stream-wise difference in the cyber crime awareness among university students.

Keywords: Cyber crime awareness

Introduction

A remarkable trend in field of education during the last five decades in the advanced countries has been a use of Information and Communication Technologies (ICT) which make education more functional and productive. Hence, Educational sector is the one that has radically revised the teaching and learning strategies with the one aim to provide the better service to the learners and to develop the current capacity building of the nations through the intensive use of the Information and Communication Technologies. There are wide range of offences that can be committed through communication technology that are cyber bullying, cybercrime, hacking etc. Internet has grown rapidly over the last decade, given rise to many avenues in field of education, business, entertainment. However with every boon there is a curse too. This curse is cyber crime - illegal activities committed through internet.

*Research Scholar, Punjabi University, Patiala.

Cyber Crime

Alshalan (2010) "Cybercrime is a crime that is hidden, uses networks (non physical means), and sometimes leads to profits." Wall (2008) defines cybercrime as "crimes that are mediated by networked computers and not just related to computers." "Cybercrime is a harmful activity that takes place in virtual environments and made the 'hi-tech low-life' hacker narrative a norm in the entertainment industry" (Wall, 2005). Cyber crimes are commonly considered as falling into one of two categories: new offences committed using new technologies, such as offences against computer systems and data, dealt with in the Computer Misuse Act 1990; and old offences committed using new technology, where networked computers and other devices are used to facilitate the commission of an offence: In the former are crimes such as hacking or breaking into computer systems to steal or alter data; in the latter, crimes such as the transfer of illegal images or fraud (Campbell, 2010). There are large number of other offences committed through the internet, such as harassment, threatening behaviour and other anti-social activity. Cyber criminals can operate from anywhere in the world. targeting large numbers of peoples. Dimc and Dobovšek (2010) state that, "certain types of cybercrime are so widely performed that they have become socially acceptable (e.g. piracy)." It seems we do not fear certain types of crime, we have limited or no knowledge of other types, but fear certain offences, which are (over) exposed by the media, even though it is unlikely, we will ever become victims of these and decreasing fear of cybercrime can only be achieved by educating users of the cyberspace (Mesko and Bernik, 2013)

Objectives

- 1. To study and compare the level of cyber crime awareness among male and female university students.
- 2. To study and compare the level of cyber crime awareness among urban and rural university students.
- 3. To study and compare the level of cyber crime awareness among science and humanities stream university students.

Hypothesis

- 1. There is no significant difference in the cyber crime awareness among male and female university students.
- 2. There is no significant difference in the cyber crime awareness among urban and rural university students.
- 3. There is no significant difference in the cyber crime awareness among science and humanities stream university students.

Methodology

Tool used

In order to study cyber crime awareness among university students self prepared questionnaire on cyber crime awareness was used by the investigator. The tool consisted of 55 items. Each statement is set against a five point scale of 'Strongly Agree' , 'Agree', 'Undecided', 'Disagree' and 'Strongly disagree' and weights of 5,4,3,2 and 1 were given to the statements.

Sample

The random sampling technique was used in the present study. A sample of 200 university students were selected from Punjabi university. Further the students pursuing masters in science and humanities streams were taken.

Design

The raw data for the study was obtained with help of descriptive survey method.

Analysis And Interpretation

Descriptive statistics like mean and standard deviation were used to examine the nature of distribution of scores. T-test was used to find out the significant difference among data.

TABLE 1 Cyber crime awareness among male and female university students

| Category | N | Mean | S.D | t-value | |
|----------|-----|--------|-------|---------|--|
| Male | 100 | 173.21 | 12.83 | 0.30 | |
| Female | 100 | 172.52 | 12.74 | 0.38 | |

NS- Not significant at 0.05 level

Table 1 Indicates the significant mean difference in cyber crime awareness among male and female university students. Mean value and Standard deviation of cyber crime awareness among male university students are 173.21 and 12.83 respectively. Mean value and Standard deviation of cyber crime awareness among female university students are 172.52 and 12.74 respectively. Further the calculated t-value is 0.38, which is not significant at 0.05 level of confidence. It is concluded that cyber crime awareness among male and female university students do not differ significantly from each other. Hence the hypothesis states that "There exists no significant difference in the cyber crime awareness among male and female university students" is accepted.

TABLE 2 Cyber crime awareness among urban and rural university students

| Category | N | Mean | S.D | t-value |
|----------|-----|--------|-------|---------|
| Urban | 100 | 173.11 | 12.77 | 0.27 |
| Rural | 100 | 172.62 | 12.80 | 0.27 |

NS- Not significant at 0.05 level

Table 2 Indicates the significant mean difference in cyber crime awareness among urban and rural university students. Mean value and Standard deviation of cyber crime awareness among urban university students are 173.11 and 12.77 respectively. Mean value and Standard deviation of cyber crime awareness among rural university students are 172.62 and 12.80 respectively. Further the calculated t-value is 0.27, which is not significant at 0.05 level of confidence. It is concluded that cyber crime awareness among urban and rural university students do not differ significant difference in the cyber crime awareness among urban and rural university students" is accepted.

TABLE 3 Cyber crime awareness among science and humanities stream university students.

| Category | N | Mean | S.D | t-value |
|------------|-----|--------|-------|---------|
| Science | 100 | 173.01 | 12.75 | 0.16 |
| Humanities | 100 | 172.72 | 12.83 | 0.10 |

NS- Not significant at 0.05 level

Table 3 Indicates the significant mean difference in cyber crime awareness among university students of science and humanities stream. Mean value and Standard deviation of cyber crime awareness among university students of science stream are 173.01 and 12.75 respectively. Mean value and Standard deviation of cyber crime awareness among university students of humanities stream are 172.72 and 12.83 respectively. Further the calculated t-value is 0.25, which is not significant at 0.05 level of confidence. It is concluded that cyber crime awareness among university students of science and humanities stream do not differ significantly from each other. Hence the hypothesis states that "There exists no significant difference in the cyber crime awareness among science and humanities stream university students" is accepted.

Conclusion

Criminal activities over internet are increasing day by day. Also in teaching and learning the use of internet is inevitable and one should face the risk factors attached to it. The level of cyber crime awareness vary from one individual to another. The study revealed no significant gender difference, locale difference and stream-wise difference in the cyber crime awareness among university students. Mean score of cyber crime awareness among male university students (173.21) were more than mean score of cyber crime awareness among female university students (172.52), whereas cyber crime awareness among urban university students and who opted science stream were more than mean score of cyber crime awareness among rural university students and who opted humanities stream. Hence teachers should make more effective efforts to aware university students about cyber crime by organizing seminars, debates on illegal activities committed through internet. So that university students become aware of cyber crime and use internet more effectively in education.

References

Alshalan, A. (2010). Cyber-crime fear and victimization: An analysis of a national survey. Retrieved August 2, 2013, from http://www.cse.msstate.edu/~dampier/study%20materials/NationalCrimeStats.pdf

Campbell, A. (2010). Cyber Crime Strategy. Ireland: TSO (The Stationery Office).

Dimc, M. & Dobovšek, B. (2010). Perception of cyber crime in Slovenia. Journal of Criminal Justice and Security, 4: 378-396.

Gonçalves, A. M. & Pedro, N. (2012). Innovation, e-learning and higher education. World Academy of Science, Engineering and Technology. Retrieved October 25, 2013, from http://waset.org/journals/waset/v66/v66-46.pdf.

Mesko, G. & Bernik, I. (2013). Cybercrime: Awareness and fear slovenian perspectives. Faculty of Criminal Justice and Security. University of Maribor Ljubljana. http://www.academia.edu/1470364/Cybercrime_Awareness_and_Fear_Slovenian_Perspectives.

Rajasekar, S. (2011). Cyber crime awareness scale. Agra: National psychological corporation.

Wall, D. S. (2008). Cybercrime and the culture of fear. Information, Communication & Society, 11(6): 861-884.

Wall, D. S. (2005). The Internet as a conduit for criminals. Information technology and the criminal justice system. Thousand Oaks, CA: Sage.

CONSTRUCTIVISM – A PRACTICAL APPROACH

AMANJOT KAUR*

Introduction

Constructivism is the name given to a set of theories about learning which fall somewhere between cognitive and humanistic views. It is a psychological theory of learning which argues that humans generate knowledge and meaning through the experiences. This word is applied both to the learning theory and epistemology - both to how people learn, and to the nature of knowledge. It is important to note that Constructivism is not a particular pedagogy. It is basically a theory based on observation and scientific study which says that through experiencing things and reflecting on those experiences people construct their own concepts and knowledge about the world. However, Constructivism is often associated with pedagogic approaches that promote active learning or learning by doing.

NCREL North Central Regional Educational Laboratory describes constructivism as an approach to teaching and learning based on the premise that cognition (learning) is the result of "mental construction." In other words, students learn by fitting new information together with what they already know. Constructivists believe that learning is affected by the context in which an idea is taught as well as by students' beliefs and attitudes. Constructivist teaching is based on the research about the human brain and what is known about how learning occurs.

Constructivism is a theory of knowledge with roots in philosophy, psychology and cybernetics. A constructivist's leading theorist, E. von Glasersfeld comments:

"Constructivism does not claim to have made earth-shaking inventions in the area of education; it merely claims to provide a solid conceptual basis for some of the things that, until now, inspired teachers had to do without theoretical foundation."

His comments remind us that constructivism is more than a theory of

*Asstt. Prof., Lyalpur Khalsa College of Education, Jalandhar

learning. It is a way of looking at the world that is broad enough to allow for multiple interpretations and can explain complex and abstract phenomenon and which can guide our actions.

Constructivists (Von Glaserfeld, 1990) advocate models for learning based on the belief that students construct their own knowledge and understanding. The basis of learning is a set of all prior experience and the derived knowledge and understanding. As students learn, they constantly engage in the process of revising their prior learning based on new experience. Von Glasersfeld (1995) indicates that the learner interprets and constructs a concept based on his experiences and interactions with his environment. Von Glasersfeld focuses: "To the constructivist, concepts, models, theories and so on are viable if they prove adequate in the contexts in which they were created".

We have to recognize that only knowledge exists is which we construct for ourselves as we learn. Learning does not understand the "true" nature of things, nor is it remembering dimly perceived perfect ideas, but rather a personal and social construction of meaning out of the unstructured sensations. People make sense out of their world by taking in information from the environment and assimilating it into their pre-existing schemas and understandings (Bransford & Vye, 1989). Learners undergo conceptual change by directly confronting misconceptions (Wilson & Cole, 1991a). Some constructivists have aligned themselves with the situated cognition movement (Brown, Collins, & Duguid, 1989), asserting that because cognition depends on our experience base, cognitive apprenticeships and other authentic teaching methods are preferable (Clancey, 1992). The roots of many constructivist beliefs are traceable to postmodern philosophies which depart from the rationalist, objectivist, and technocratic tendencies of modern society.

Constructivism in Education

Constructivism is based on the belief that learners actively create, interpret and reorganize knowledge therefore the instructional strategy should be such as in which students should participate in experience that accommodate these ways of learning. Such experiences include- inquiry

activities, discovery, problem solving, discussions with peers and teachers, collecting and interpreting information from different sources, expressing their understanding in diverse ways etc.

1. Role of a constructivist teacher

- 1. Encourage and accept student's autonomy, initiative and encourage students to engage in dialogue with the teacher and with one another.
- 2. Teacher's role must shift from authority and control to guidance, support and facilitator.
- 3. Teacher's role is interactive, rooted in negotiation providing tools such as problem-solving and inquiry-based learning activities with which students formulate and test their ideas, draw conclusions and inferences and pools and convey their knowledge in a collaborative learning environment.

2. Evaluation according to constructivism

In the Constructivist paradigm uniform standards of evaluation can not be used for all students. A criterion based and continuous evaluation must be used. Different methods of assessment such as perform based tests, pictorial assessment, reflective questing, concept mapping, vee diagram, team projects, student self assessment as portfolio, checklist, rating scale, student journal can be used.

Objectives of the Study:

- 1. To develop self learning modules on some selected topics of biology for IX class students.
- 2. To study the efficacy of constructivism on students in terms of academic confidence.
- 3. To study the efficacy of constructivism on students in terms of study skills.
- To study the interactional effects of constructive approaches on academic confidence and study skills of secondary science students.
- 5. To study the effects of constructivism on academic achievement of secondary school students.

Hypotheses:

- There will be no significant difference in the pretest scores on Academic confidence of secondary school students.
 - There will be no significant difference in the pretest scores of girls and boys on Academic confidence of secondary school students.
 - b) There will be significant difference in the pretest scores of on Academic confidence of secondary school students of rural and urban areas.
- 2. There will be no significant difference in the pretest scores on Study skills of secondary school students.
 - There will be no significant difference in the pretest scores of girls and boys on Study skills of secondary school students.
 - b) There will be significant difference in the pretest scores of on Study skills of secondary school students of rural and urban areas.
- 3. There will be significant difference between group of students taught with traditional method and experimental group taught with constructive approach.
- 4. There will be significant difference in academic confidence of the students exposed to experimental group as compared to the students exposed to traditional method of teaching.
- There will be significant difference in study skills of the students exposed to experimental group as compared to the students of control group

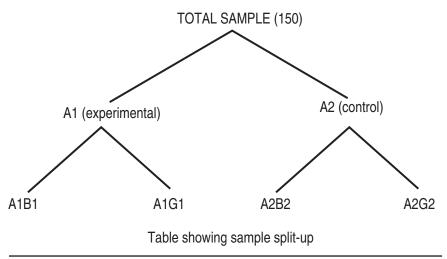
Tools:

 Study skill inventory developed by Dennis H. Congos, formerly of Central Piedmont Community College, Charlotte, North Carolina will be used for the collection of data. There are total of 51 questions based on 8 areas i.e. 8 questions from text book reading, 5 of note taking, 9 of memory, 13 of test preparation, 10 of concentration and 6 of time management. 2. Academic confidence scale constructed by Paul sander and Lalage sanders (2003), University of Wales institute, Cardiff U.K. will be used to measure the participants self efficacy. The instrument has a response arrangement of very confident (5) and not at all confidence (1). This scale consists of 24 questions based on 6 factors- studying, understanding, attendance, grades, verbalizing and clarifying.

Sample:

In every research, investigator has to collect data from sample, since population under study is very large. It is not possible for the investigator to collect data from total population.

A sample of 150 students will be raised through randomization from four schools. From these schools sections will also be randomly selected. Each of this section will be randomly assigned to group I and II. Then block sample will be taken from each section. This will control the medium of instruction, board, socio-economic status of the group. Age will also be controlled and equivalence shall be obtained by matching the academic achievement in science on the basis of annual exams of the previous class. The whole sample will be randomly divided into two groups A1 experimental group and A2 control group. Both groups will be further divided into A1B1(experimental boys) and A1G1(experimental girls).



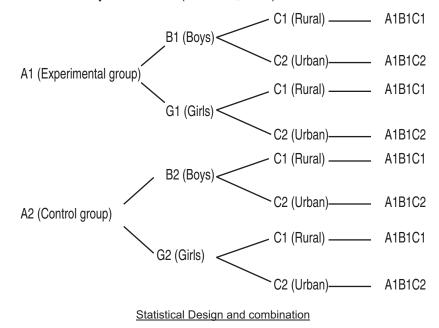
Research Design:

The present study is experimental in nature. To study the effect of constructive approaches on academic confidence and study skills is the major aim. The aim is demanding experimentation for a stipulated period of time. Initially the groups will be equated by restricting Board (P.S.E.B.), Age (14-17yrs), medium of instruction, socio-economic status of the school. The experimental and control group will not be equivalent groups in terms of intelligence so a Pretest-Posttest Non-equivalent control group design(Campbell et al, 1963) is selected by the investigator.

The layout is

$$O_1 \times O_2$$
 O_1 , O_3 = Pretests $O_3 \times O_4$ O_2 , O_4 = Posttests

This design is often used in classrooms where experiment and control group are assembled groups as intact classes. The difference between the mean of the O_1 and O_2 scores and the difference between mean of the O_3 and O_4 scores (mean gain scores) are tested for statistical significance. Analysis of Co-variance may also be used (Best et al, 2002).



Procedure:

Development of module: The modules will be developed on some selected topics. Different steps to be taken in development of modules -

- 1. Assess need for developing a module
- 2. Decide format
- 3. Selection of topics
- 4. Identification of characteristics of learners
- 5. Writing objectives
- 6. Writing the entry behavior of learner
- 7. Selecting and sequencing the content
- 8. Preparing a criterion test
- 9. Preparation of first draft
- 10. Validation by experts
- 11. Final draft

The prepared module will be standardized. A pilot study would be taken on 30 students as preliminary tryout. Item analysis will be done. Kelley's criterion of 27% upper to 27% lower will be followed. Then final tryout will be done. Content validity and concurrent validity will also be checked. Feedback will also be taken from subject experts, administrators, educationists and subject teachers who are dealing with this group of students. Based on the feedback the module would be modified and final draft would be prepared.

In pre-test phase Academic Performance Scale(ACS) and Study Skill Inventory(SSI) will be administered to the sample. The administration of these tests will be carried out as per norms and instructions given in their manuals. These tools will help the investigator to assess the academic confidence and study skills among secondary school students in P.S.E.B schools.

During experimental phase, Group II will be taught through traditional method i.e. lecture method and Group I through constructive approach(power point slides, experiments, real-world problem solving activities, reading and appreciation skills, projects, group works and modules). The lessons based on these methods of teaching will be planned

from their course of study in science at class IX level. The content matter will be given central importance. Same lessons will be taught to both groups. The treatment will be conducted by the investigator herself along with the subject teacher of the school. Investigator will orient the science teachers with constructive approach which will be used to teach the students of IXth class. This training will be given in phases (I-IV). The experimentation would continue for one session.

Immediately after the treatment will be over the subjects will be administered the ACS and SSI (which will be used in pre-test) as post test. The data collected will be tabulated and subjected to statistical analysis. ANOVA would be used on gain scores and results would be interpreted to verify the hypotheses. Qualitative and Quantitative interpretations will be made.

References:

Clark, Joe. Ann Keeley (1990) Self directed learning skills and clinical performance: A comparison of traditionally taught and learning contract taught nursing students. The university of southern Mississippi (1990) in Dissertation Abstracts International 51(07) Jan. 1991.

Cook, M.L. (1994) The design of course module for addiction counselors using a system approach for training (SAT) format International university Florida, Dissertation Abstracts International-A, 55(04) 1994.

De Antelo, M.N.O., (1981). Competency based individualized learning module: A methodology of In-service education of Bolivian supervisors, quoted in Sharma, S.S., 1992 Development of teaching modules for Hindi teachers, Common wealth publishers, New Delhi.

Dutt, S.(1989). Effect of problem solving strategies on problem solving ability in science of high school students in relation to anxiety level, cognitive style and intelligence. Ph.D Edu. Pan. Univ., Chandigarh.

Dey, N.(2009). Influence of emotional intelligence on academic self-efficacy and achievement; Psycho-lingua 2009, 39(2): APH publishing corporation, New Delhi, pp-171-174.

Gupta, S. (1995) Study of the effects of teaching through various information processing models on learning of concept in science in relation to self

concept, cognitive style and achievement motivation. Ph.D Edu. Pan. Univ., Chandigarh.

Hooper, W.A.F.(1982). An experimental study in the use of modular approach for teaching biology in standard IX, quoted in Sharma, S.S: 1992 Development of teaching modules for Hindi teachers, Common wealth publishers, New Delhi.

Jayalakshmi, T.K. (1985). Systematising Instructional modules in Educational Psychology at B.Ed level. Ph.D. Edu., MSU.

Khalwania, N.S.(1986)Effectiveness of concept based science curriculum in developing cognitive strucures and acquisition of process skills among high school students. Ph.D Edu., P.U., Chandigarh.

Kishore, L. (1986) Effect of mastery learning strategy upon achievement and scientific attitude of students. Ph.D Edu. Pan. Univ., Chandigarh.

Kalra,B.(1993) Scientific creativity in relation to intelligence personality, cognitive style and selected environmental catalysists. Ph.D Edu. Pan. Univ., Chandigarh.

Mahapatra, B.C. (1995). Development of software package for chemistry to class IX students of

Madhya Pradesh state. Ph.D, Edu., Devi Ahilya Vishwavidyalaya.

Nanavati, U.R. (1981) A Study of the effectiveness of learning package on population education, Fourth survey of research in education, Vol.I, 1983-88, P 602.

Narula, T.R.(1994) Self learning modules in Applied Physics- their effectiveness on achievement in relation to gender and personality of polytechnic students of Haryana, Master of Engineering Education thesis,TTTI,Chandigarh.

Osborne, R., and Freyberg, P. (1985) Learning in science: The implication of children science. Hienemann Publishers.

Pecoraro, A.G. (1992) Development of a module on interpersonal skills and its evaluation in two teaching modes, quoted in Sharma, S.S: 1992 Development of Teaching modules for Hindi teachers, commonwealth Publishers, New Delhi.

Puri, K. (1984) Study in relation to locus of control, environmental facilities,

drive and academic achievement of secondary school students. Ph.D Edu. Pan. Univ., Chandigarh.

Pluangnuch, N. (1995) Comparative study of school climate and satisfaction a mediating variables of educational environment and their relationship with students academic achievement in demonstration and non-demonstration schools of Thailand. Ph.D Edu. Pan. Univ., Chandigarh.

Rup, P.(1968)Construction and standardisation of an achievement test in everyday science for class VIII students of the punjab and to construct a scale to assess the attitude of these students towards learning of a science. Ph.D Edu. Pan. Univ., Chandigarh.

Ramesh.(1984) Development of objective based science curriculum and to study its efficacy in the acquisition of process skills among high school science students. Ph.D Edu. Pan. Univ., Chandigarh.

Rani,G.(2003) Effectiveness of teaching strategies in the acquisition of science concepts in relation to intelligence, cognitive styles and gender differences. Ph.D Edu. Pan. Univ., Chandigarh.

Roberts, Stanley, E (2004). Effects of traditional, programmed learning sequenced, and contract activity package instruction on sixth- grade students' achievement and attitudes. Dissertation Abstracts International 65(2) p. 400, Aug. 2004.

Sharma, S.S. (1992). Development of teaching modules for Hindi teachers, commonwealth publishers, New Delhi.

Sharma, J.P. (1982) Developing Instructional material in Civics at 10+2 level for pre-service and in service teachers, quoted in Sharma, S.S. 1992 Development of teaching modules for Hindi teachers, commonwealth publishers, New Delhi.

Sween.(1984) Academic achievement of high school students in relation to the instructional design, intelligence, self-concept and achievement. Ph.D Edu. Pan. Univ., Chandigarh.

Todd,P.G. (1972). Development and evaluation of a module for individualized self directed instruction at college level, quoted in Sharma,S.S.,1992 Development of teaching modules for hindi teachers, Common wealth publishers, New Delhi.

Vig, S (2005). Effetiveness of self-learning modules in acquisition of process skills in relation to cognitive styles and study habits of IX class students. Ph.D Edu., P.U., Chandigarh.

Visser, Yusra Laila. (2003). The effect of Problem based and Lecture-based Instructional strategies on learner problem solving performance, problem solving processes and attitudes. Dissertation Abstracts International-A 64(10), Apr. 2004.

Yadav, P.S. (1984). Effect of Mastery learning strategy on pupil's achievement in mathematics, their self concept and attitude towards mathematics. Ph.D Edu.Kurukshetra university, Kurukshetra.

www.sources:

http://www.informaworld.com

http://www.sciencedirect.com

http://www.sciencedirect.com

http://www.educ.cam.ac.uk

http://www.tojet.net/articles/6310.pdf

http://www.pu.edu.pk

http://www.editlib.org

http://www.questia.com/googleScholar

http://eprints.gut.edu.au/1761/1/1761.pdf

http://www3.interscience.wiley.com/journal/112759504

www.waier.org.au/forums/2009/abstracts.html

http://eric.hoagiesgifted.org/faq/science.html

http://www.springerlink.com/content/h18358k752803n26/

REGULATORY FRAMEWORK FOR MICRO FINANCE IN INDIA

Kuldeep Kaur*

ABSTRACT

The regulation of microfinance is becoming increasingly topical and significant to microfinance institutions (MFIs). Regulators around the world seem to be increasingly aware of the necessity of implementing legislative and regulatory frameworks allowing the microfinance industry enough flexibility to innovate and grow, whilst maintaining rules and restrictions to protect low income and often vulnerable microfinance clients. This paper provides an overview of the legislative and regulatory frameworks for microfinance. These policy initiatives are relevant to all actors operating or considering to operate in microfinance, from MFIs to governments, nongovernmental organisations (NGOs) and commercial banks. Various policies, guidelines, actions / initiation and programmes of the government and Reserve Bank of India are the indicatives of the recognition and role of the microfinance in the socio-economic development of rural sector in India. Various policy initiatives and regulations for MF-NBFCs regarding registration requirements, capital adequacy ratio, credit rating, interest rates, management, disclosures, formation of SHGs etc. are framed to give a further fillip to the microfinance movement in India. A pilot project for linking about 500 SHGs with banks was launched by NABARD in 1992. NABARD provides refinance to these financial institutions/ banks for on lending to SHGs. This project has been proved as a big landmark in the field of microfinance. The Micro Finance Institutions (Development and Regulations) Bill 2012 addresses all legal forms of microfinance institutions, providing a comprehensive legislation for the sector. Bill gives the central govt. authority to delegate certain RBI powers to the NABARD or any other central Govt. agency. The designation of RBI as the sole regulator would be a positive step forward for the Micro Finance sector. New regulation

recognizes designation of RBI as the sole regulator for all microfinance institutions. MFIN is a self-regulatory organization created by 44 NBFC-MFIs in India, who share an interest in protecting and building the integrity of the sector. This was in response to controversies such as multiple lending and lack of transparency by MFIs. MFIN has already taken some steps such as building a credit bureau, creating task forces for transparency and establishing a code of conduct.

Keywords: Government, Micro Finance, NBFCs, RBI, Regulation **Introduction**

The regulatory framework in a country can have a huge impact on the viability of microfinance. The forms of legal organisation of an institution, exemptions available to them, registration requirements, interest role caps, capitalisation etc. are all determined by the legal framework. Microfinance regulation refers to the set of legal rules that apply to microfinance. Regulation and supervision ensure that MFIs are run prudently and cases of poor people losing their money due to fraud or incompetence are minimised. There is a plurality in the regulatory mechanism - RBI, GOI and State Governments. It is a known fact that the Reserve Bank of India is a super regulator for the financial system . Various polices, guidelines, actions / initiation and programmes of the government and Reserve Bank of India are the indicatives of the recognition and role of the microfinance in the socio-economic development of rural sector in India.

Sound and unambiguous legislative framework is a prerequisite for an efficient regulatory system. At present, In India, there are about 60 Acts and multiple rules and regulations. Government of India has constituted a financial sector legislative reforms commission (FSLRC) to rewrite and streamline the financial sector laws, rules and regulations to bring them in harmony with India's fast growing financial sector. This paper has made an attempt to highlight the policies, guidelines and directives which are framed for effective regulation of microfinance activities in India.

Some of the fundamentals of regulation should be worthy of recall. They are discussed as under.

1. Policy Guidelines Issued by Government

Many important policy initiatives were taken by the Government of

India, the most significant of which was the nationalisation of 14 commercial banks. These nationalised banks would be allowed to open urban bank branch provided it first opens four rural branches. Simultaneously, the concept of priority sector lending was developed and as a matter of policy it was formalised by RBI in 1972. This policy initiative had a significant impact and in just six years (by 1975), 10,882 rural and semi-urban branches of commercial books had been opened1.

These institutions need to be "local" in character so that they and their staff can develop a bonding or a lasting relationship with the local population. Thus, the Regional Rural Banks (RRB) were born, with ownership of Central Government (50%) the State Government (15%) and a sponsoring commercial bank (35%). RRBs were started with a small capital base of only Rs. 25 lakh, generally operated in two or three districts, serving about 40 lakh people and were mandated, when created, to have only weaker sections of the population as their clients. Right from the day of its birth, every RRB was scheduled bank and fully regulated by the central bank of the country. RRBs were the first legal and fully regulated microfinance institutions (MFIs) set up anywhere in the world.

Major Government Policy Guide Lines

As per government policy - any financial institution that undertakes microfinance activities, but is not registered as a section 25 company, qualifies as a non-banking finance company and all related regulations apply. The regulation will include registration with the RBI, imposition of prudential norms and compulsory credit rating of deposit taking non-banking finance company.

- Micro-finance institutions registered as section 25 companies can engage in microfinance activity without registering with the RBI or obtaining its permission, microfinance activity is limited to business loan up to Rs. 50,000. Section 25 companies are not allowed to accept deposits.
- With respect to the microfinance activities of a society, the registrar has no responsibility for prudential regulation, financial performance or solvency. The registrar can only intervene if there is a major dispute regarding the management of society, or if registrar suspects fraud against

the society's creditors or other unlawful or unauthorised activities.

Microfinance in India can take many forms and have numerous applicable regulations and responsible regulators. In case of societies and trusts, microfinance activities are largely unregulated and unsupervised.

- Non-banking finance companies and cooperatives are permitted to accept deposits. NBFCs must adhere to additional stringent regulations and cooperatives are only permitted to accept deposits from their members, not from the general public.
- No microfinance institution registered as NBFs accept deposits because regulation requires that institution must obtain an investment grade rating, which no microfinance institution has obtained.
- In the Finance Bill for the year 2005-06, the microfinance sector has been allowed access to ECB, provided they (i) should have a satisfactory borrowing relationship for atleast three years with a scheduled commercial bank authorised to deal in foreign exchange and (ii) would require a certificate of due diligence as 'fit and proper' status of the board / committee of management of the borrowing entity from the designated authority.
- All the entities taking up microfinance are allowed to receive grants and subsidised loans from domestic sources. However, in order to obtain grants from foreign sources, institutions must be registered with the ministry of Home Affairs under the foreign contribution (Regulation) Act 1976.
- Since, microfinance is largely recognised as a charitable activity, the entire grant meant to support the corpus fund of the society is exempted from taxation. Since private trusts taking up micro-finance activities are also subjected to the same provisions of Income Tax Act, their grant income may also be exempted from the taxation. This provision does not apply to cooperative societies, cooperative banks and NBFCs.
- Non Banking Finance Company (NBFCs) can obtain foreign capital in the form of equity subject to approval by the Foreign Investment Promotion Board (FIPB).
- · Cooperative Societies and Cooperative banks, with their distinctly forprofit constitution can, theoretically, obtain funds from capital market. NBFCs can also access capital markets subject to their adhering to prudential and

reporting norms of RBI. Both types of institutions need to report their capital market transactions periodically to the central bank on prescribed formats.

- All the legal entities involved in the business of microfinance are subject to make disclosure on such areas as the Statutory Liquidity Ratio (SLR), Cash Reserve Ratio (CRR), details of public deposits, Asset Liability Management (ALM), Income recognition and asset classification to RBI.
- For consumer protection specially in the context of credit markets, mechanisms are available in the domain of the micro-finance industry. These include (a) existing consumer protection laws, (b) redressal mechanism (c) recovery and bankruptcy process and (d) education.
- In the budget speech of finance minister in 2005, "The government intends to promote MFIs in a big way. Commercial banks may appoint MFIs as "Banking Correspondents" to provide transaction services on their behalf."

State Level Regulations

Various requirements have been enacted to restrict and control microfinance practices at the state level. Most prominent state level regulations are the Money lending Act and the Andhra Pradesh Micro-Finance Institution (regulation of money lending) Ordinance, 2010. The money lending Act, though originally intended to restrict the interest rates charged by money lenders, has been applied to micro-finance institutions in some states. The Andhra Pradesh Ordinance was enacted in 2010 during the repayment crisis in Andhra Pradesh, greatly restricting microfinance institutions by including measures such as district by district registration, required collection near local government premises, and forced monthly repayment schedules. The another landmark of the Andhra Pradesh Government is the legislation enacted in 2010-11. The legislation stipulated mandatory registration of MFIs, disclosure of effective interest rates to the borrowers, ceilings on the interest rates and strict penalties for coercive recovery practices.

In the eleventh plan document the Government recognised the importance of strengthening SHG initiatives and proposed of HLC (High Level Committee) to conduct a review of SHG related policies and programmes.

2. RBI's Directives & Support for Effective Regulation of Micro-Finance Programmes in India

Realising the importance of credit in the socio-economic development process, the Reserve Bank of India has taken various policy initiatives for giving a further fillip to the microfinance movement in India. A summary of major initiatives is being presented as follows:-

- The Self Help group (SHG) Bank Linkage Programme A working group under the chairmanship of Shri S.K.Kalia (managing Director, NABARD) set up by the RBI in 1994 came up with wide range recommendations on SHG and bank linkage as a potential innovation in the area of banking with the poor. As a follow up of the recommendations of the working group, banks were advised in April 1996 as under.
- a) SHG lending as Normal Lending Activity Banks were advised to include SHG Linkage in their corporate strategy/ Plan Training, curriculum of their officers and staff were required to implement it as a regular business activity and monitor/ review it periodically.
- b) Separate segment under Priority Sector Banks should report their lending to SHG as a separate dept., via," Advances to SHG" irrespective of the purpose for which the members of SHG's have been disbursed loans. Lending to SHG's should be treated as part of the lending to weaker section.
- c) Inclusion in Service Area Approach
 Banks will identify branches having potential for linkage and provide support to them and include SHG lending with in their Service Area Plan, But SHG Linkage is a credit innovation and not a targeted credit programme.
- d) Margin and security Norms
 According to the operational guidelines of NABARD, SHG's may be sanctioned saving linked loans' by bank in the ratio of 1:4 (i.e. saving: loan) this ratio can be beyond the limit of 4 in case of matured SHG.
- e) Documentation
 A simple system requiring minimum procedure and documentation is

a precondition for augmenting flow of credit to SHG's. The loan application forms procedures and documents should be made simple. It would help in providing prompt and hassle free credit.

- f) Training
 Bank officers / staff both at field level and controlling office level banks
 may initiate suitable steps to internalize the SHG's linkage project and
 organize short duration programmes for the field level functionaries.
- g) Monitoring and Review of SHG Lending
 Due to emerging potential of SHG's it is decided to review their
 progress at the state level bankers's committee (SLBC) Level and by
 banks at regular intervals. A progress report may be sent to NABARD
 (Micro credit innovations department) Mumbai in prescribed format
 on a half yearly basis as on 30th September and 31st March each
 year.
- h) Presence of defaulters in SHG's

 The default by a few members of SHG to the financing bank should not ordinarily come in the way of financing SHG's by banks provided the SHG's is not in default to it. However, the bank loan may not be utilized by the SHG for financing a defaulter member to the bank.
- 2) NBFC's engaged in micro financing Activities Amendment of RBI Act, 1934 in 1996 required mandatory registration of co's undertaking financial services with the RBI, compulsory credit rating of deposit taking NBFC's and their compliance to prudential norms. As per section (45-la) of the Banking Regulation Act, no NBFC can commence or carry on the business without obtaining certification of registration form the RBI and having net owned funds (NOF) (Share holders equity + internally generated reserves) of Rs. 20 million. In addition to the requirements of RBI, All NBFC's have to comply with the provisions of Companies Act relating to Board of Directors, share capital, mgt structure, audit, maintenance and publication of books of accounts and general conduct etc. Important prudential norms to be complied include capital Adequacy Ratio (CAR) based on the risk weight of assets (15%), accounting standards, asset classification, provision for bad and doubtful debts, disclosure in balance sheet ceiling on credit / investment etc. Not less

than 15% of their deposits should be invested in specified securities and approved Govt. securities.

3) Opening of Saving Bank Accounts

RBI advised the banks in 1998 that SHG's which were engaged in promoting and saving habits among their members would be eligible to open savings bank accounts and that such SHG's need not necessarily have availed of credit facilities from banks before opening savings bank accounts.

4) Interest Rates

Subsequent to the monetary and credit policy announcement for the year 1999-2000, banks were also advised that interest rates applicable to loans given by banks to micro credit organisations or by the micro credit organisations to SHGs/ member beneficiaries, would be left to their discretion.

RBI's 2004 Master Circular on Micro Credit states that interest rates on loans from banks to MFIs or from MFIs to SHGs and individuals are left to the discretion of the loaning agency.

Comparison of Rates of Various Sources

| Various Sources | Quoted interest rate | Effective Interest rate incl. transaction costs | Details |
|---------------------------------------|----------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Bank loans to SHGs | 12% - 13.5% | 21% - 24% | Number of visits to banks, compulsory savings and costs incurred for payments to animals/staff/local leaders |
| MFI loans to micro borrowers | 15% - 24% | 15% - 24% | No transaction costs except time |
| Moneylenders, landlords, trader | 36% - 120% | 48% - 150% | No transaction costs except time spend in meetings |

Source: RBI, 2004.

5) Mainstreaming and enhancing outreach
In April 1999, the word microcredit was used for the first time in the

credit policy. The statement said, "Micro-credit Institutions are important vehicles for delivery of credit to self employed persons, particularly women in rural and semi-urban areas." And further: "A special cell was set up in RBI in order to liaise with NABARD and microcredit institutions for augmenting the flow of credit to this sector. The time frame for the cell was one year and its proposals were given the highest attention." The credit policy drew a distinction between small loans given by banks and the loans given to MFIs for on-lending. This opened bank finance to the MFIs, who were largely dependent on donor money. The recommendations made by the Task Force were being 'processed' by NABARD in consultation with RBI and Government as appropriate.

The mid-term review reiterated the importance of MFIs and asked banks to include microcredit in their corporate strategy to be reviewed on a quarterly basis. Banks were advised to follow the under noted guidelines in Feb, 2000 by RBI

- The banks may formulate their own model(s) or choose any intermediary for extending micro credit. They may choose suitable branches/pockets/arrears where micro credit programmes can be implemented. Micro credit extended by banks to individual borrower directly or through any intermediary would be reckoned as part of their priority sector lending.
- ii) Banks can deal with micro credit organizations having proper credentials, track record, system of maintaining accounts and records with regular audits in place and manpower for closer supervision and follow up.
- Banks may prescribe their own lending norms for loan and savings products and the related terms and conditions including the size of the loan, unit cost, unit size, maturity period, grace period, margins etc. to provide maximum flexibility in regard to micro lending. Such credit should, therefore cover not only consumption and production loans for various farm and non-farm activities of the poor but also include their other credit needs such as housing and shelter improvements.

- iv) Micro credit should be included in branch credit plan, block credit plan and state credit plan of each bank. Micro credit should also form an integral part of the bank's corporate credit plan and should be reviewed at the highest level on a quarterly basis.
- v) A simple system requiring minimum procedures and documentation is a precondition for augmenting flow of micro credit. Hence, banks should make arrangements to expeditiously sanction and disburse micro credit by delegating adequate sanctioning powers to branch managers.
- Several non-banking finance companies (NBFC's) and residuary non-banking companies (RNBC's) also started entering the micro finance sector, gradually recognizing the potential in the sector. In January 2000, all NBFC's and RNBC's were advised by the Reserve Bank that those NBFC's which were engaged in micro financing activities, Licensed under section 25 of the companies Act, 1956 and which were not accepting public deposits were exempted from the purview of Sections 45-IA (registration), 45-IB (Maintenance of liquid assets) and 45-IC (transfer of a portion of profits to Reserve Fund) of the Reserve Bank of India Act, 1934.
- 7) Delivery Issues
 The Reserve Bank constituted four informal groups in October 2002
 to examine various issues concerning micro finance delivery. On the
 basis of the recommendations of the groups and as announced in
 Paragraph 55 of the Governor's Statement on mid-term Review of the

Paragraph 55 of the Governor's Statement on mid-term Review of the Monetary and Credit Policy for the year 2003-2004, banks have been advised as under:-

- i) Banks should provide adequate incentives to their branches in financing the Self Help Groups (SHGs) and establish linkages with them, making the procedures absolutely simple asset free and easy while providing for total flexibility in such procedures to suit local conditions.
- ii) The group dynamics of working of the SHGs may be left to

themselves and need neither be regulated nor formal structures imposed or insisted upon.

8) ECB's under Automatic Route

Based on the recommendations of the Advisory Committee on 'Flow of Credit to Agriculture and Related Activities from the Banking System' (Chairman: Prof. V. S. Vyas), which submitted its final report in June 2004, it was announced in the Annual Policy Statement for the year 2004-05 that in view of the need to protect the interest of depositors, MFIs would not be permitted to accept public deposits unless they complied with the regulatory framework of the Reserve Bank. However, as an additional channel for resource mobilisation, the Reserve Bank in April 2005 enabled NGOs engaged in micro finance activities to access the external commercial borrowings (ECBs) up to US\$ 5 million during a financial year for permitted end use, under the automatic route.

9) Services of Intermediaries through BF/BC Models
In order to examine issues relating to rural credit and micro finance,
an internal group (Chairman: Shri H.R. Khan) was set up in 2005.
Based on the recommendations of the group and with the objective of
ensuring greater financial inclusion and increasing the outreach of the
banking sector, banks were permitted in January 2006 to use the
services of NGOs/SHGs, MFIs (other than NBFCs) and other civil
society organisations as intermediaries in providing financial and
banking services through business facilitator and business
correspondent models.

10) Constitution of Co-ordinated forum

All Regional Directors of the Reserve Bank were advised in April 2006 that whenever issues relating to micro finance were noticed in the areas under their jurisdiction, they may offer to constitute a coordination forum comprising representatives of SLBC convenor banks, NABARD, SIDBI, State Government officials, and representatives of MFIs (including NBFCs) and NGOs/SHGs to facilitate discussion on the issues affecting the operations in the

sector and find local solutions to the local problems.

11) Banking Correspondents

observations:

In January 2006, the Reserve Bank permitted banks to utilize the services of NGO's, MFI's (other than NBFC's) and other Civil Society organization as intermediaries in providing financial and banking services through the use of business facilitator (BF) and business correspondent (BC) models. The BC model allows banks to do 'cash in cash out' transactions at a location much closer necessity for saving mobilisation from the poor while relying on the financial strength of the bank to safe guard the deposits. Union Finance Minister in the Union Budget 2008-2009, made the announcement that Banks were permitted to engage retired bank employees, ex-servicemen and retired government employees as business correspondents (BCs) with effect from April 24, 2008.

- 12) Financing of MFIs by banks
 In May, 2006, A Joint fact finding study on microfinance conducted by
 Reserve Bank and a few major banks made the following
- Some of the microfinance institutions (MFIs) appear to be focusing on relatively better banked areas; Competing MFIs were operating in the same area, resulting in multiple lending and overburdening of rural households.
- 2) The MFIs were disbursing loans to the newly formed groups with in 10-15 days of their formation, in contrast to the practice obtaining in the SHG-Bank Linkage programme which takes about 6-7 months for group formation / nurturing / handholding. As a result, cohesiveness and a sense of purpose were not being built up in the groups formed by these MFIs.
- 3) Banks, as principal financiers of MFIs do not appear to be engaging to ensure better transparency and adherence to best practices. In many cases, no review of MFI operations was undertaken after sanctioning the credit facility.
 - In Nov. 2006 these findings were brought to the notice of the banks to

enable them to take necessary corrective action where required.

- 13) Total Financial inclusion and credit Requirement of SHGs
 It was required by Honourable Finance Minister in budget announced
 of year 2008-2009 that Banks will be encouraged to embrace the
 concept of Total Financial Inclusion. Government will request all
 scheduled commercial banks to follow the example set by some
 public sector banks and meet the entire credit requirements of SHG
 members, namely, (a) Income generation activities, (b) social needs
 like housing, education, marriage, etc. and (c) debt swapping.
 Consequent upon this, in April 2008.
- Bank Loans to MFI for on Lending
 Hinging on the recommendations of Malegam committee, RBI on May
 2011 released its circular on regulation after deciding to consider micro finance sector as a separate category.
- a) Most significant was the Cap on interest rate MFI's were not allowed to charge interest rate beyond 26% on reducing balance basis with a peak up of not more than 12%.
- b) Bank credit to MFIs extended on or after April 2011 for on Lending to individuals and members of SHGs/JLG was covered under priority sector Advance provided not less than 85% of total assets of MFI (other than cash balances with banks and financial institutions, government securities and money market instruments are in the form of "qualifying assets". In addition aggregate amount of loan, extended for income generating activity should not be less than 75% of the total loans of MFIs.
- c) A Qualifying Asset shall mean a loan given by MFI, which satisfies following criteria:-
- i) The loan is sanctioned to the borrower whose household annual income in rural areas is less than 60,000/- and in non-rural area it is less than 120,000/-
- ii) Loan does not exceed 35,000/- in first cycle and 50,000/- in the subsequent cycles.
- iii) Total liability of the borrower is not more than 50.000/-

- iv) Loan exceeding 15,000 will have minimum tenure of 2 yrs with the option of prepayment on delayed payment without penalty.
- v) Loan is without collateral, repayable by weekly fortnightly or monthly installments with borrower's choice.
- d) The Loan is without collateral and is routed preferably through SHG / JLG so that social and peer pressure for repayment replaces armtwisting tactics.
- e) Only three components are to be included in pricing of loans namely, 1% of the gross loan amount as processing fee, the interest charge and actual insurance premium Administrative charges for insurance should adhere to IRDA guidelines.
- f) The banks should obtain from MFI, at the end of each quarter, a chartered Accountants certificate which will certify that all the above mentioned conditions are followed.
- 15) REVISED REGULATORY NORMS FOR MF-NBFCs, 2012
 RBI decided to make certain modifications in the directions issued on Dec. 02, 2011. These revised regulatory framework was issued on Aug 4, 2012 by RBI. These modifications were as under:-
- 1) The Central Bank has done away with the 26% Cap on lending rates due to the dynamic nature of the cost of funds for microfinance but has said that margins will be capped. The maximum variance between the minimum and maximum interest rate cannot exceed 4%. RBI also cut the minimum amount of money to be lent to income generating assets to 70% from 75%.
- New entities looking to start at NBFC MFI need a minimum fund of Rs. 5 Crore, while existing ones should have net owned funds of Rs. 3 Crore by March 31, 2013 and Rs. 5 Crore by March 31, 2014. In case of failure to comply with these norms, loans to the microfinance sector will be restricted to 10% of total assets. NBFC's in the north eastern region will have to maintain net owned funds of Rs. 1 Crore by March 31, 2013 and Rs. 2 Crore by March 31, 2014.
- 3) Income generation activities should constitute at least 70% of the total loans of the MFI so that the remaining 30% can be allocated for other

- purpose such as housing repairs, education, medical and other emergencies.
- 16) REVISED ECB POLICY UNDER AUTOMATIC ROUTE (DEC 2011)
 Considering the specific needs of the micro finance sector, the existing ECB policy has been reviewed in consultation with the Government of India and it has been decided that hence forth MFIs may be permitted to raise ECB up to USD 10 million or equivalent during a financial year for permitted end-uses, under the Automatic Route.

MFIs registered as societies, trusts and co-operatives and engaged in micro finance should have a satisfactory borrowing relationship for at least 3 years with a scheduled commercial bank authorized to deal in foreign exchange; and would require a certificate of due diligence on `fit and proper' status of the Board/Committee of Management of the borrowing entity from the designated Authorized Dealer (AD) bank. ECB funds should be routed through normal banking channels. NBFC-MFIs will be permitted to avail of ECBs from multilateral institutions, such as IFC, ADB etc./ regional financial institutions/international banks / foreign equity holders and overseas organizations. Companies registered under Section 25 of the Companies Act and engaged in micro finance will be permitted to avail of ECBs from international banks, multilateral financial institutions, export credit agencies, foreign equity holders, overseas organizations and individuals. Other MFIs will be permitted to avail of ECBs from international banks, multilateral financial institutions, export credit agencies, overseas organizations and individuals.

3. MICROFINANCE BILL

The microfinance sector (Development and Regulation) Bill-2007 was introduced in Lok Sabha on March 20, 2007 as a first step in trying to regulate the sector. The preamble to the Microfinance Sector Development and Regulation Bill-2007 sets the objective, "to provide for promotion, development and orderly growth of the microfinancial sector in rural and urban areas to facilitate universal access to

integrated financial services by the population not having banking facility and thereby securing prosperity of such areas and regulation of Micro Finance Organisations (MFO) not being regulated by any law for the time being in force and for matters connected therewith or incidental thereto".[1] The bill has atleast four positive features. (i) The bill permits MFOs to accept savings from members subject to their meeting certain conditions. An MFO which has been in existence for atleast three years having net own funds of atleast Rs. 0.5 million and satisfactory management can obtain registration from NABARD and therefore offer saving services. The non-availability of savings has been a major gap in the services provided by the sector. (ii) The Bill provides for mandatory registration and periodic report submission by all MFOs seeking to accept deposits. (iii) It provides for inspection of MFOs by the regulatory authorities in case of complaints of harmful practices (iv) The bill does not introduce interest rate caps which could have been damaging for the sector.

In order to address the key issues, the necessary steps were taken to modify the bill appropriately and adequately in 2011. Consequently a new Microfinance Institutions Development and Regulations Bill was enacted and was released on May 22, 2012 after many changes to consider the most recent RBI regulation.

3.1. Micro Finance Institutions (Development and Regulations) Bill 2011

The Micro Finance Institutions (Development and Regulations) Bill 2012 is an updated version of an earlier Bill drafted in 2007. The Bill addresses all legal forms of microfinance institutions, providing a comprehensive legislation for the sector, New regulation includes:-

- i) Designation of RBI as the sole regulator for all microfinance institutions. Micro credit facilities not exceeding Rs. 5 Lakh in aggregate or with RBI specification Rs. 10 Lakh to each individual.
- ii) Central Govt. will create a micro finance Development Council with officers from different ministries and departments for the development of MFI's.

- iii) Central Govt. will also form state Micro Finance Councils to coordinate the activities of District Micro Finance Committees.
- iv) Bill requires that all MFI should obtain a certificate of registry from RBI after having net owned funds of Rs. 5 Lakh.
- v) Each MFI will create a reserve fund by appropriating the fixed percentage (specified by RBI) from net profit.
- vi) MFI will provide an annual balance sheet and profit and loss account for audit to the RBI. Return of MFI will give details about any change in corporate structure, such as a shut down, amalgamation, takeover etc.
- vii) RBI can issue the directions to MFI regarding extent of assets deployed in Micro finance activities, ceilings on loans, limit of annual percentage, rate charged, limit on the margin etc.
- viii) RBI will create the Micro-Finance Development Fund to provide loans grants and other micro credit facilities to any MFI.
- ix) RBI is responsible for redressal of grievances for beneficiaries of micro finance services.
- x) RBI can impose a penalty upto Rs. 5 Lakh for any contravention of the Bill's provisions and No civil court can challenge.
 Bill gives the central govt. authority to delegate certain RBI powers to the NABARD or any other central Govt. agency. The central Govt. has the power to exempt certain MFI's from the provisions of the bill. The designation of RBI as the sole regulator would be a positive step forward for the Micro Finance sector.
- 4. NABARD As a Regulator of Microfinance Services
 NABARD as a national level apex institution has been playing a proactive role in providing refinance to cooperative banks, RRB's,
 scheduled Primary Urban Cooperative Banks (PUCBS) and
 Agricultural Development Finance Companies (ADFCs) for
 supplementing them resources for credit flow to the agriculture and
 rural sector. NABARD has also provided loans to State Governments
 for their infrastructure projects under Rural Infrastructure
 Development Fund (RIDF).

NABARD'S Policies for Micro Finance Activities and Regulation

The term "micro-finance" has been given a working definition by the Task Force on Supportive Policy and Regulatory Framework for Micro-Finance set up by NABARD in November 1998 as: "provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi-urban and urban areas for enabling them to raise their income levels and improve living standards". It is, however, understood that the MFIs provide other non-credit services as well such as capacity building, training, marketing of the products of the SHGs, micro-insurance, etc.

NABARD has adopted CAMELSC approach (Capital, Asset Quality, Management, Earnings, Liquidity, Systems and Compliance) with regard to inspection process and supervisory rating of RRBs and Cooperative Banks. NABARD, apart from making suitable recommendations to RBI for licensing and regulatory action and providing inputs from time to time, has evolved and implemented suitable supervisory best practices pertaining to RRBs and Cooperative Banks.

Rural Credit and Micro-Finance monitoring committee framed by NABARD:

NABARD has designed a very thorough grading system for NGO. The agreement between the NGOs and NABARD stipulates that the NGO should set up a project monitoring and implementation committee, to coordinate their SHG promotion activity with the banks, and also to enable NABARD to monitor progress.

SHG, Bank linkage programe

In 1991-92 a pilot project for linking about 500 SHG with banks was launched by NABARD on the basis of recommendations of S.K. Kalia Committee after extensive consultations with Reserve Bank, commercial banks and non Governmental Organisations (NGOs). On the recommendation of the NABARD, RBI advised that the banks financing of SHGs would be considered as a part of their lending to weaker sections. Further, it was decided that NABARD would continue to provide refinance to banks under the linkage projects at the rates stipulated from time to time. NABARD has taken an initiative to increase an access to credit for the poor,

particularly SC/ST, although more subsidisation as well as extension to all ages in its various schemes has been covered.

For selecting SHG's NABARD had followed the following Criteria:

- a) The group should be in existence for at least 6 months.
- b) The group should have actively promoted the savings habit.
- c) Groups could be formal (registered) or informal (unregistered)
- d) Membership of the group could be between 10 to 25 persons.

The pilot project envisaged linking of only 500 SHGs to the banks. By the end of March 1993, 225 SHGs were actually linked. The figure reached to 625 in 1994 and 836 by the end of 2001 respectively. The pilot project was a success. Under the SHG Bank linkage programe of NABARD, about 560 financial institutions, cooperative, RRBs and Commercial Banks have participated across the country. Under SBL programme the financial institutions have financed about 1,000,000 SHGs. NABARD provides refinance to these financial institutions for on lending to SHGs. NABARD is playing an indispensable role in the field of microfinance.

Conclusion

Inclusive growth always received special emphasis in the Indian policy making. Government of India ,Reserve Bank of India and NABARD have taken several initiatives to expand access to financial systems to the poor. Some of the salient measures are nationalisation of banks, prescription of priority sector lending, differential interest rate schemes for the weaker sections, development of credit institutions such as Regional Rural Banks, etc. Despite the policy efforts, gap remains in the availability of financial services in rural areas. Recognizing the need for better governance practices, and in the absence of formal regulation, several MFIs came together to constitute the previously-mentioned Micro Finance Institution Network (MFIN). MFIN is a self-regulatory organization created by 44 NBFC-MFIs in India, who share an interest in protecting and building the integrity of the sector. This was in response to controversies such as multiple lending and lack of transparency by MFIs. MFIN has already taken some steps such as building a credit bureau, creating task forces for transparency and establishing a code of conduct.

References

A financial inclusion approach to microfinance regulation. MCRIL. 2011. Url: http://www.m-cril.com/BackEnd/ModulesFiles/Publication/M-CRIL's-Supplementary-on-the-Malegam-Committee-Report.pdf

Andhra Pradesh 2010: Global Implications of the Crisis in Indian Microfinance. CGAP. November 2010. Url: http://www.cgap.org/ gm/document-1.9.48945/FN67.pdf

Andhra Pradesh Ordinance 2010. URL: http://indiamicrofinance.com/wp-content/uploads/2010/10/Andhra-MFI-Ordinance.pdf

Bank loans to Microfinance Institutions (MFIs) – Priority Sector Status, Reserve Bank of India, May 2011. Url: http://www.rbi.org.in/scripts/BS_CircularIndexDisplay.aspx?Id=6381

Chasnow, Michael, Doug Johnson. Equity Investment in Microfinance: A Guide for Practitioners. Centre for Microfinance. May 2009. Url: http://www.microfinancegateway.org/gm/document-1.9.36877/42.pdf

Helms, Brigit, and Xavier Reille. "Interest Rate Ceilings and Microfinance: The Story So Far." Occasional Paper 9. CGAP. September 2004.

Manual on Financial and Banking Statistics, Box6.2, Chapter VI, Reserve Bank of India. Url: http://rbidocs.rbi.org.in/rdocs/ Publications/PDFs/78928.pdf

Micro Finance Institutions (Development and Regulations) Bill, 2011. Url:http://finmin.nic.in/the_ministry/dept_fin_services/micro_finance_institution_bill_2011.pdf

NABARD's Annual Reports.

Position Paper on the Regulation of MF Services, June, 2008 - World Savings Bank Institute (WSBI) 22. Reserve Bank of India, Report on Non Banking Finance Companies, 2003-04.

Publications on Promotion, Supervision and Regulation in MFIs under NABARD-GTZ Technical Collaboration on Rural Finance

RBI's Progress and Trends in Banking - 2009

Report of NABARD's Internal Working Group on Development and Regulation of MFOs-2007.

Sane, Renuka, Susan Thomas. The role of government in India?s

FATHER OF PUNJABI NOVEL: BHAI VIR SINGH

Dr. Gurwinder Singh*

The fictions (prose) of Bhai Vir Singh, which are called Novels, are: Sundri, Bijay Singh, Satwant Kaur & Baba Naudh Singh, but Bhai Vir Singh has no where indicated that he has written any novel. Sundri is the first fiction. Why and how it was written? He replies to this question as under:-

"The news of Sundri and other conditions of Khalsa, which have been mentioned in this book, were collected from Panth Parkash, Khalsa history and by listening to many historians and old men and women, and those were woven together, have been written. The object of writing this book is that the Sikhs should strongly follow their religion, by reading the history/news of their predecessors and should act properly in their worldly affairs and also in the meditation of God. They should get rid of bad customs, and there should be progress of religion, and the Sikhs should love their good principles of their Sikhs religion; and they should organize themselves, without any prejudice against other communities, Sikhs do not have too much enemity or too much attachment with any one, rather they should strictly follow the saying of the Guru.

"that all human beings are equal."

It is found that the object of Bhai Vir Singh was not writing of Novels, but to present such a creation, which should present the true picture of great scarifies of Sikhs, cruelty of the rulers, pitiable condition of the people, character of Sikhs and the community life of Khalsa.

The title of the book "Satwant Kaur" after giving the quotation from Gurbani", "Kahe Nanak gur bandhan kaatey bishurut aane milaya" meaning – "Nanak says that the Guru removed all hurdles and brought in touch those who had betrayed "Him", writes:- "The life story of Satwant Kaur, a Sikh girl, who followed the religion by bearing the unbearable cruelty with bravery and

patience. The whole story of Satwant Kaur, thrown out of her house, bearing so many cruel acts, coming back from Kabul and meeting her parents, is the explanation of the Shalok given in the begining of the novel.

Bal chutkiyo bandhan pare kachhu na hoot upaaye. Kahu nanak abb ott har gaj jiyo hooho sahaaye.

Nanak says – When you become powerless and there is no, remedy take protection of God, who is all powerful.

The author writes in the introduction/preface of 'Bijay Singh' that the object of writing the book is not selfish and neither any show of education. It is a small effort for construction of destroyed Panthak building like an attempt to repair damaged bridge of Ram Chandar with earth by squirrels. Rather the effort to write this book is smaller than that of squirrels and the service in lesser than her, as zero in Automatic has got the shape, but it has no value. However, if with the grace of Kalgidhar, digit 1 is added with zero, than zero is also priced.

Like Sundri, the clarifications and explanation of historical events, has been hear given in the foot notes of this book, with references to Panth Parkash, Mohd Latif's history of Punjab & historians Karam Singh, Griffen and Cunningham etc.

The beautiful example of Punjabi fiction (prose) in Janam Sakhian was before Bhai Vir Singh. The writers of Janam Sakhian, while stating the historical personality of Guru Nanak, did not hesitate to include the parts of fiction in their writings. Contrary to it, Bhai Vir Singh in Sundri, Bijay Singh and Satwant Kaur etc. has embedded purely imaginary characters with wisdom in the context of historical events and has confirmed this shape with historical factors that the general public has taken these creations as part of history, but the critics in their view point, can include Sundri, Bijay Singh and Satwant Kaur etc novels in the category of historical romance.

If the evaluation of novels of Bhai Vir Singh is made in the background of political and social conditions of that time, then very meaningful results can be derived.

Bhai Vir Singh was born in 1872, when Singh Sabha Lehar was established. By that time, the English had fully occupied Punjab. The movement for propagating Christianity was in full swing. In repercussion, Brahmosmaj, Arya Smaj and Sanatan Dharam Sabha in Hindus; Aligarh wahabi and Ahmedia movement etc. in Muslims were quite active. Although their aim as to protect the followers of their own religions from the invasion of Christianity, yet instead of rallying unitedly against the missionary propaganda, they started fighting among themselves. The languages were also divided alongwith religions.

Having been brought up in religious environment at home and being strong within the surroundings of preachings of Sikhism by Singh Sabha Movement, at the end of 19th century, when Bhai Vir Singh entered in the field of literature. He adopted religious or Sikh preachings as his mission, which he strictly followed till the end of his life.

Bhai Sahib felt that after the death of Maharaja Ranjit Singh, the Sikhs, having lost the empire suddenly, have gone into low spirits. Their shining glory has gone down and they were overcome by own whims. The life style given by Gurus and unity among Sikhs had eloped. Therefore, Othere was a great necessity to bring about national life style, unity, religious sentiments, Gurbani, Naam and affection for the Gurus among the Sikhs.

He chose the shape of Novel for achievement of this object. Bhai Vir Singh has made full efforts to highlight the glory of old sikh history, explaining the principles of Sikhism and the importance of Sikh way of life, in his novels. In his first novels, Bhai Vir Singh has derived very meaningful and useful results by reliving the past in the present life. The background of these novels is Punjabi of 19th century. This time of the downfale of Mughal rule was the time of categorization, lead conditions and cruelty. Subedar Zakaria Khan, Yahya Khan and Meer Mannu, appointed by Central Govt. of Delhi brought hail of cruelty over the Sikhs. The invasions of Nadar Shah Abdali and Ahmed Shah fulfilled the deficiency in cruelty. The hard hit by Lakhpat Rai and Meer Manu is unexplainable.

There is lot of mention about these historical facts in the novels for Bhai Singh.

This folk song from 'Sundri' novel is very much appealing....

Nanad bharjaai cheena chhardiyan,

Foujan mughlan diyan chariyan.....

Baap hamaaria dig piya, veer piya gash kha

Kant hamaara hass piya, karsaan hor viyaah...

Mughal giya si paaviye. Pichhon gori chikhan banaa

Jllan laggi si bhanrri, utton veer gaya aa....

In the novel Satwant Kaur Satwant Kaur' the saying: Mannu saadi datri assi Mannu de sooye, jiyoon-jiyoon sooye vaddiye, doon sawaaye hooey, has been used as an historical truth.

Where Bhai Vir Singh, while presenting ideal Sikh characters in his first three novels, condemns the weaknesses of the present Sikhs, appeals for becoming ideal Sikhs, in 'Baba Naudh Singh', After condemning the bad custom/practices during English rule, has presented the picture of an ideal person, in the form of a story, which is a person of the dreams of Bhai Sahab or the ideal person as per the object of Gurus, about which it can be said." Farishte se behatar hai insaan banana magar iss mein lagti hai mehnat jayaada.

On the one hand, the writer, while keeping a village in the background, highlighted the activism of the present religious movements, preached the religious ideals so that the doubts created about Sikh religion are removed and on the other hand, he stated the bad results of western culture, excesses of Police, worse conditions of courts, deficiencies of education system, village reforms and urban administration etc. In the views of Bhai Vir Singh, if persons like Baba Naudh Singh come to live on the earth, then this earth would become heaven. Baba Naudh Singh is the ideal (Gurmukh) Sikh of imagination of Bhai Vir Singh.

The novels of Bhai Veer Singh have been woven loosely. Their character building is weak. There is the tinge of detective novels, and at many places, the dialogue are long and boring. But these deficiencies are natural in the founder of any language, but still his contribution is too much, in

the field of Punjabi novels. Without any doubt he is the father of Punjabi Novels Sundri is the first original novel of Punjabi. Before Nanak Singh, Bhai Vir Singh was the most popular Novelist. These novels have contributed much in creating the largest number of readers in Punjabi. These novels have also contributed a lot in the development of modern Punjab I prose (fiction). These contain the beautiful and enjoyable description of natural sceneries. Their environment is hundred percent Punjabi.

References and Books

- 1. Punjabi Novel : Survey of Mulankan. Edited by Dr. Karnail Singh Thind, Guru Nanak Dev University Amritsar, 1974
- 2. Punjabi Galapkar, Written by Dr. Gurcharan Singh.
- 3. Punjabi Novel de Lachan Te Jhukaw written by Surinder Singh.
- 4. Sundri (Bhai Vir Singh)
- 5. Bijay Singh (Bhai Vir Singh)
- 6. Satwant Kaur (Bhai Vir Singh)
- 7. Baba Naudh Singh (Bhai Vir Singh)

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–ਸੰਪਾਦਕ

Email: sadbhavnasamaj@gmail.com Contact: 09872544066, 08728000763